Bridge Rectifiers

Заказ г.Минск www.tiristor.by email: minsk17@tut.by
viber и тел.+375447584780 www.fotorele.net

Bridge Rectifier Features:

- Current: 0.5A to 50A
- Isolated Base for Direct Mounting on Heat Sink
- UL Recognized for Industrial Equipment E347215
- RoHS Compliant
- Terminals: Fast-on, Screw, Solderable Pin for PCB

Bridge Rectifier Applications:

- AC to DC Converter
- AC Adapter
- Battery Charger
- Motor controller / Automotive System
- Switching Mode Power Supply

三泰科技有限公司
Suntan Technology Company Limited
E-mail : info@suntan.com.hk URL : www.suntan.com.hk Tel : (852) 8202 8782 Fax : (852) 8208 6248

Bridge Rectifiers

Bridge Rectifier Types:

- WOB Package Silicon Bridge Rectifiers
- KBX Package Silicon Passivated Bridge Rectifiers
- GBX Package Silicon Passivated Bridge Rectifiers
- Single Phase Silicon Passivated Bridge Rectifiers
- Single Phase Glass Passivated Bridge Rectifiers
- Silicon Passivated Table Bridge Rectifier
- Mini Package Glass Passivated Rectifiers
- Three Phase Bridge Rectifiers

Su Brand Bridge Rectifier Product List :

Vrrm / Type No / Io	50V	100V	200V	400V	600V	800V	1000V	Package
0.5	\	\	MB2S	MB4S	MB6S	MB8S	MB10S	MBS
0.8	\	\	ABS2	ABS4	ABS6	ABS8	ABS10	ABS
1.0	DB101	DB102	DB103	DB104	DB105	DB106	DB107	DB
	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	DBS
1.5	DB151	DB152	DB153	DB154	DB155	DB156	DB157	DB
	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	DBS
2.0	2W005	2W01	2W02	2W04	2W06	2W08	2W10	WOB
	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	KBP
3.0	KBP3005	KBP301	KBP302	KBP304	KBP306	KBP308	KBP310	KBP
	D3UB05	D3UB10	D3UB20	D3UB40	D3UB60	D3UB80	D3UB100	D3K
	KBPC1005	KBPC101	KBPC102	KBPC104	KBPC106	KBPC108	KBPC110	KBPC1
4.0	KBL4005	KBL401	KBL402	KBL404	KBL406	KBL408	KBPL410	KBL
	KBU4005	KBU401	KBU402	KBU404	KBU406	KBU408	KBU410	KBU
	GBU4005	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	GBU
	KBJ4005	KBJ401	KBJ402	KBJ404	KBJ406	KBJ408	KBJ410	KBJ4
6.0	KBU6005	KBU601	KBU602	KBU604	KBU606	KBU608	KBU610	KBU
	GBU6005	GBU601	GBU602	GBU604	GBU606	GBU608	GBU610	GBU
	GBJ6005	GBJ601	GBJ602	GBJ604	GBJ606	GBJ608	GBJ610	GBJ6
	KBPC6005	KBPC601	KBPC602	KBPC604	KBPC606	KBPC608	KBPC610	KBPC6
8.0	KBU8005	KBU801	KBU802	KBU804	KBU806	KBU808	KBU810	KBU
	GBU8005	GBU801	GBU802	GBU804	GBU806	GBU808	GBU810	GBU
	KBPC8005	KBPC801	KBPC802	KBPC804	KBPC806	KBPC808	KBPC810	KBPC8
10.0	KBU10005	KBU1001	KBU1002	KBU1004	KBU1006	KBU1008	KBU1010	KBU
	GBU10005	GBU1001	GBU1002	GBU1004	GBU1006	GBU1008	GBU1010	GBU
	GBJ10005	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010	KBJ4
	KBPC10005	KBPC1001	KBPC1002	KBPC1004	KBPC1006	KBPC1008	KBPC1010	KBPC8
15.0	KBU15005	KBU1501	KBU1502	KBU1504	KBU1506	KBU1508	KBU1510	KBU
	GBU15005	GBU1501	GBU1502	GBU1504	GBU1506	GBU1508	GBU1510	GBU
	GBJ15005	GBJ1501	GBJ1502	GBJ1504	GBJ1506	GBJ1508	GBJ1510	KBJ6
	KBPC15005	KBPC1501	KBPC1502	KBPC1504	KBPC1506	KBPC1508	KBPC1510	KBPC25
	KBPC15005W	KBPC1501W	KBPC1502W	KBPC1504W	KBPC1506W	KBPC1508W	KBPC1510W	KBPC-W
	BR15005	BR1501	BR1502	BR1504	BR1506	BR1508	BR1510	BR
	BR35005W	BR1501W	BR1502W	BR1504W	BR1506W	BR1508W	BR1510W	BR-W
	GBPC15005	GBPC1501	GBPC1502	GBPC1504	GBPC1506	GBPC1508	GBPC1510	GBPC
	GBPC15005W	GBPC1501W	GBPC1502W	GBPC1504W	GBPC1506W	GBPC1508W	GBPC1510W	GBPC-W
20.0	GBJ2005	GBJ2001	GBJ2002	GBJ2004	GBJ2006	GBJ2008	GBJ2010	KBJ6
25.0	KBU25005	KBU2501	KBU2502	KBU2504	KBU2506	KBU2508	KBU2510	KBU
	GBJ25005	GBJ2501	GBJ2502	GBJ2504	GBJ2506	GBJ2508	GBJ2510	KBJ6
	KBPC25005	KBPC2501	KBPC2502	KBPC2504	KBPC2506	KBPC2508	KBPC2510	KBPC25
	KBPC25005W	KBPC2501W	KBPC2502W	KBPC2504W	KBPC2506W	KBPC2508W	KBPC2510W	KBPC-W
	BR25005	BR2501	BR2502	BR2504	BR2506	BR2508	BR2510	BR
	BR25005W	BR2501W	BR2502W	BR2504W	BR2506W	BR2508W	BR2510W	BR-W
	GBPC25005	GBPC2501	GBPC2502	GBPC2504	GBPC2506	GBPC2508	GBPC2510	GBPC
	GBPC25005W	GBPC2501W	GBPC2502W	GBPC2504W	GBPC2506W	GBPC2508W	GBPC2510W	GBPC-W
	S25VB10	S25VB20	S25VB40	S25VB60	S25VB80	S25VB100	S25VB10	S25VB
	SKBPC25005	SKBPC2501	SKBPC2502	SKBPC2504	SKBPC2506	SKBPC2508	SKBPC2510	SKBPC
35.0	KBPC3005	KBPC3501	KBPC3502	KBPC3504	KBPC3506	KBPC3508	KBPC3510	KBPC25
	KBPC35005W	KBPC3501W	KBPC3502W	KBPC3504W	KBPC3506W	KBPC3508W	KBPC3510W	KBPC-W
	GBPC35005	GBPC3501	GBPC3502	GBPC3504	GBPC3506	GBPC3508	GBPC3510	GBPC
	GBPC35005W	GBPC3501W	GBPC3502W	GBPC3504W	GBPC3506W	GBPC3508W	GBPC3510W	GBPC-W
	BR35005L	BR3501L	BR3502L	BR3504L	BR3506L	BR3508L	BR3510L	BR-L
	SKBPC35005	SKBPC3501	SKBPC3502	SKBPC3504	SKBPC3506	SKBPC3508	SKBPC3510	SKBPC
50.0	KBPC5005	KBPC5001	KBPC5002	KBPC5004	KBPC5006	KBPC5008	KBPC5010	KBPC25
	KBPC5005W	KBPC5001W	KBPC5002W	KBPC5004W	KBPC5006W	KBPC5008W	KBPC5010W	KBPC-W
	BR50005	BR5001	BR5002	BR5004	BR5006	BR5008	BR5010	BR
	BR50005W	BR5001W	BR5002W	BR5004W	BR5006W	BR5008W	BR5010W	BR-W

QR код

Выпрямитель, Минск

Мост диодный однофазный

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мост диодный на сварочный аппарат

фото

-  *ABS10*
-  *MB10S*
-  *DB107*
-  *DB107S*
-  *KBP210*

-  *RS207*
-  *KBL410*
-  *GBU410*
-  *W10*
-  *GBJ610*
-  *KBJ610*
-  *KBU610*
-  *BR2510W*
-  *BR2510*
-  *SKBPC2516*
-  *SKBPC3516*
-  *KBPC2510W*
-  *KBPC2510*

-  *KBPC3510W*
-  *KBPC3510*

Su Bridge Rectifiers List: UL No.E347215

1. (MB1S-MB10S)*Single Phase 0.8 AMPS. Glass Passivated Bridge Rectifiers*
2. (MB1F-MB10F)*Single Phase 1.0 AMPS. Glass Passivated Bridge Rectifiers*
3. (ABS1-ABS10)*Single Phase 1.0 AMPS. Glass Passivated Bridge Rectifiers*
4. (DB101-DB107)*Single Phase 1.0 AMPS. Glass Passivated Bridge Rectifiers*
5. (DB101S-DB107S)*Single Phase 1.0 AMPS. Glass Passivated Bridge Rectifiers*
6. (W005-W10)*Single Phase 1.5 AMPS. Glass Passivated Bridge Rectifiers*
7. (DB151-DB157)*Single Phase 1.5 AMPS. Glass Passivated Bridge Rectifiers*
8. (DB151S-DB157S)*Single Phase 1.5 AMPS. Glass Passivated Bridge Rectifiers*
9. (RS201-RS207)*Single Phase 2.0 AMPS. Glass Passivated Bridge Rectifiers*
10. (KBP2005-KBP210)*Single Phase 2.0 AMPS. Glass Passivated Bridge Rectifiers*
11. (KBL4005-KBL410)*Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers*
12. (KBU6005-KBU610)*Single Phase 6.0 AMPS. Glass Passivated Bridge Rectifiers*
13. (GBU4005-GBU410)*Single Phase 4.0 AMPS. Glass Passivated Bridge Rectifiers*
14. (GBU6005-GBU610)*Single Phase 6.0 AMPS. Glass Passivated Bridge Rectifiers*
15. (GBU8005-GBU810)*Single Phase 8.0 AMPS. Glass Passivated Bridge Rectifiers*
16. (GBU10005-GBU1010)*Single Phase 10.0 AMPS. Glass Passivated Bridge Rectifiers*
17. (GBU15005-GBU1510)*Single Phase 15.0 AMPS. Glass Passivated Bridge Rectifiers*
18. (KBJ6005-KBJ610)*Single Phase 6.0 AMPS. Glass Passivated Bridge Rectifiers*
19. (GBJ6005-GBJ610)*Single Phase 6.0 AMPS. Glass Passivated Bridge Rectifiers*
20. (GBJ801-GBJ810)*Single Phase 8.0 AMPS. Glass Passivated Bridge Rectifiers*
21. (GBJ10005-GBJ1010)*Single Phase 10.0 AMPS. Glass Passivated Bridge Rectifiers*
22. (GBJ15005-GBJ1510)*Single Phase 15.0 AMPS. Glass Passivated Bridge Rectifiers*
23. (GBJ20005-GBJ2010)*Single Phase 20.0 AMPS. Glass Passivated Bridge Rectifiers*
24. (GBJ25005-GBJ2510)*Single Phase 25.0 AMPS. Glass Passivated Bridge Rectifiers*
25. (GBJ35005-GBJ3510)*Single Phase 35.0 AMPS. Glass Passivated Bridge Rectifiers*
26. (KBPC6005-KBPC610)*Single Phase 6.0 AMPS. Glass Passivated Bridge Rectifiers*
27. (KBPC8005-KBPC810)*Single Phase 8.0 AMPS. Glass Passivated Bridge Rectifiers*
28. (KBPC10005-KBPC1010)*Single Phase 10.0 AMPS. Glass Passivated Bridge Rectifiers*
29. (KBPC15005-KBPC1510)*Single Phase 15.0 AMPS. Glass Passivated Bridge Rectifiers*
30. (KBPC25005-KBPC2510)*Single Phase 25.0 AMPS. Glass Passivated Bridge Rectifiers*
31. (KBPC35005-KBPC3510)*Single Phase 35.0 AMPS. Glass Passivated Bridge Rectifiers*
32. (KBPC50005-KBPC5010)*Single Phase 50.0 AMPS. Glass Passivated Bridge Rectifiers*
33. (KBPC25005W-KBPC2510W)*Single Phase 25.0 AMPS. Glass Passivated Bridge Rectifiers*
34. (KBPC35005W-KBPC3510W)*Single Phase 35.0 AMPS. Glass Passivated Bridge Rectifiers*
35. (KBPC50005W-KBPC5010W)*Single Phase 50.0 AMPS. Glass Passivated Bridge Rectifiers*
36. (BR25005-BR2510)*Single Phase 25.0 AMPS. Glass Passivated Bridge Rectifiers*
37. (BR25005W-BR2510W)*Single Phase 25.0 AMPS. Glass Passivated Bridge Rectifiers*
38. (GBPC15005-GBPC1510)*Single Phase 15.0 AMPS. Glass Passivated Bridge Rectifiers*
39. (GBPC25005-GBPC2510)*Single Phase 25.0 AMPS. Glass Passivated Bridge Rectifiers*
40. (GBPC35005-GBPC3510)*Single Phase 35.0 AMPS. Glass Passivated Bridge Rectifiers*

41. (GBPC50005-GBPC5010)*Single Phase 50.0 AMPS. Glass Passivated Bridge Rectifiers*
42. (GBPC15005W-GBPC1510W)*Single Phase 15.0 AMPS. Glass Passivated Bridge Rectifiers*
43. (GBPC25005W-GBPC2510W)*Single Phase 25.0 AMPS. Glass Passivated Bridge Rectifiers*
44. (GBPC35005W-GBPC3510W)*Single Phase 35.0 AMPS. Glass Passivated Bridge Rectifiers*
45. (GBPC50005W-GBPC5010W)*Single Phase 50.0 AMPS. Glass Passivated Bridge Rectifiers*
46. (SKBPC1504-SKBPC1516)*Three Phase 15.0 AMPS. Glass Passivated Bridge Rectifiers*
47. (SKBPC25005~SKBPC2516)*Three Phase 25.0 AMPS. Glass Passivated Bridge Rectifiers*
48. (SKBPC35005~SKBPC3516)*Three Phase 35.0 AMPS. Glass Passivated Bridge Rectifiers*
49. (SKBPC5006-SKBPC5016)*Three Phase 50.0 AMPS. Glass Passivated Bridge Rectifiers*
50. (S25VB005-S25VB100)*Single Phase 25.0 AMPS. Glass Passivated Bridge Rectifiers*
51. (S35VB005-S35VB100)*Single Phase 35.0 AMPS. Glass Passivated Bridge Rectifiers*
52. (S50VB005-S50VB100)*Single Phase 50.0 AMPS. Glass Passivated Bridge Rectifiers*

Suntan suntan,
2w005, 2w10, kbu10005, kbu1010, kbj4005, kbj410, br50005, br5010
mb1m, mb10m, kbu15005, kbu1510, kbj8005, kbj810, br15005w, br1510w
kbp3005, kbp310, kbu25005, kbu2506, kbj10005, kbj1010, br35005w, br3510w
gbp2005, gbp210, kbu25008, kbu2510, kbj15005, kbj1506, br50005w, br5010w
gbp3005, gbp310, kbu35005, kbu3506, kbj1508, kbj1510, br15005l, br1510l
kbl601, kbl610, kbu3508, kbu3510, kbpc1005, kbpc110, br25005l, br2510l
kbu4005, kbu410, gbu20005, gbu2010, br15005, br1510, br35005l, br3510l
kbu8005, kbu810, gbu25005, gbu2510 , br35005, br3510, br50005l, br5010l
db201, db207, kbpc15005, kbpc1510, gbj50005, gbj5010, d2kb05 thru d2kb10
db201s, db207s, kbpc15005w, kbpc1510w, mt3506, mt3516, d3kb05 thru d3kb10
gbl4005, gbl410, kbpc3005, kbpc310 , mt5006, mt5016, d4kb05 thru d4kb10

Suntan® Su®

ABS1 THRU ABS10

SURFACE MOUNT FAST SWITCHING RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere

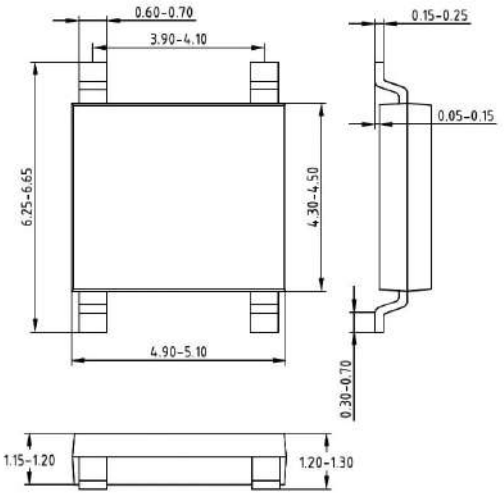
FEATURES

- ◆Glass passivated chip junction.
- ◆Ideal for surface mounted applications.
- ◆Low leakage.
- ◆High forward surge current capability.
- ◆High temperature soldering guaranteed: 260℃/10 seconds at terminals.

Mechanical Data

- ◆Case: Molded plastic body.
- ◆Epoxy: UL94V-0 rate flame retardant.
- ◆Polarity: Molded on body.
- ◆Lead: Plated terminals solderable per MIL-STD-202E method 208C.
- ◆Weight: 0.003 ounce, 0.1 gram.

ABS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	ABS1	ABS2	ABS3	ABS4	ABS6	ABS8	ABS10	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current, 0.06 ” (1.5mm) lead length at T_L=90℃ (Note 2)	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Rating for Fusing (t＜8.3ms)	I^2t	10							A^2s
Maximum Instantaneous Forward Voltage drop Per Bridge element 1.0A	V_F	1.1							V
Maximum DC Reverse Current at T_A=25℃	I_R	5							μA
at Rated DC Blocking voltage T_A=125℃		0.5							mA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	40							℃/W
Operating and Storage Temperature Range	T_J , T_{STG}	-55 to +150							℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

2. Unit mounted on P.C.B. with5.72mm×7.22mm copper pads.

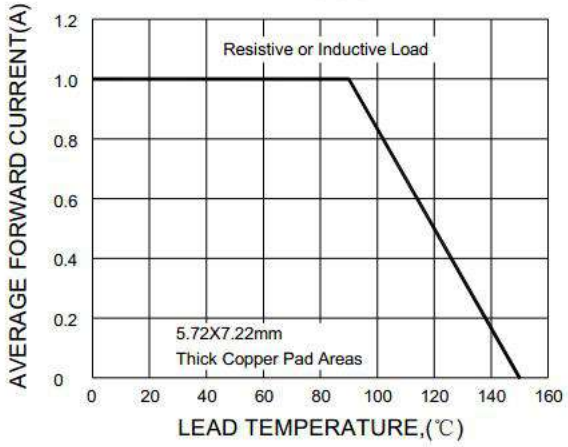
ABS1 THRU ABS10

SURFACE MOUNT FAST SWITCHING RECTIFIER

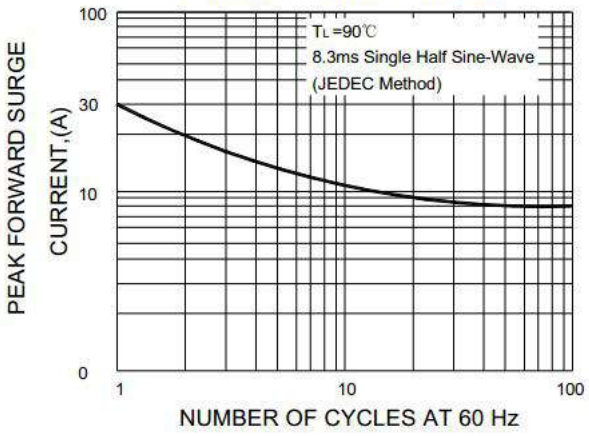
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere

RATING AND CHARACTERISTIC CURVES ABS1 THRU ABS10

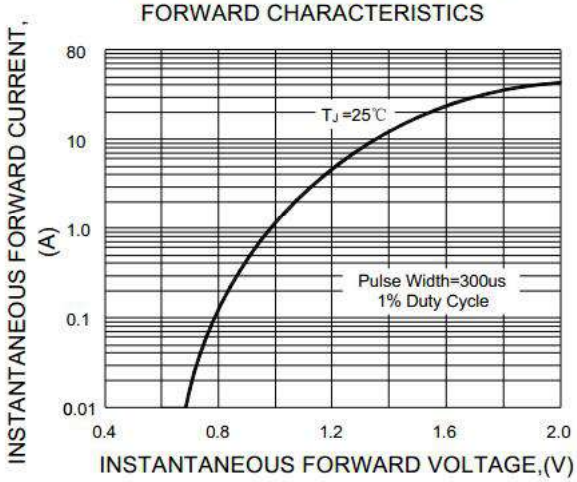
F1G.1-FORWARD CURRENT DERATING CURVE



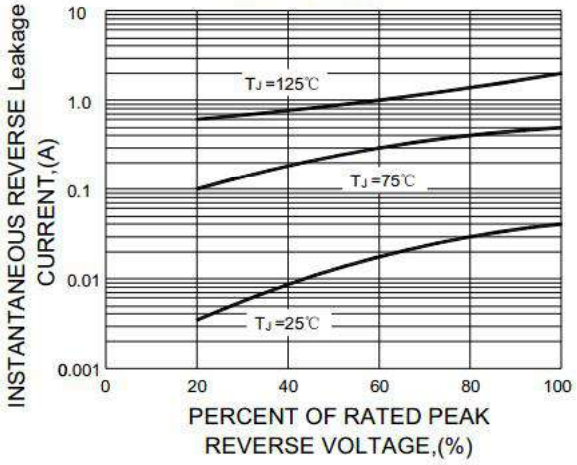
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



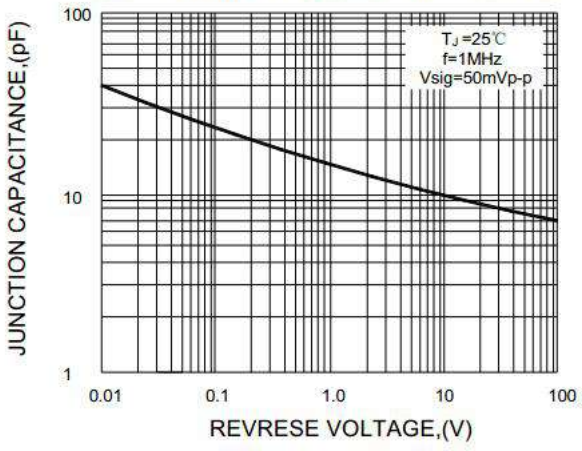
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



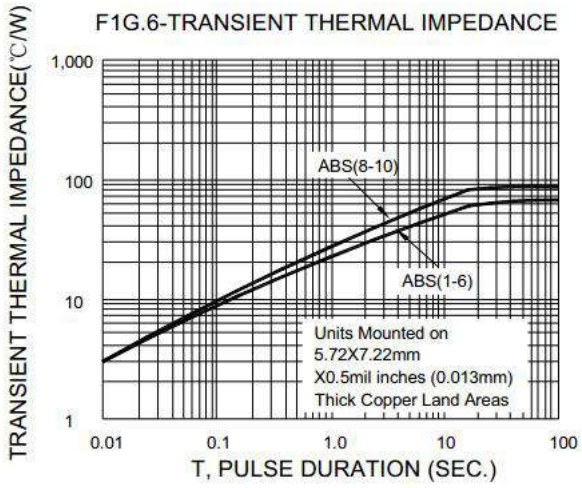
F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE



F1G.6-TRANSIENT THERMAL IMPEDANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

BR25005 THRU BR2510

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25.0 Ampere

FEATURES

◆High forward surge current capability.

◆Low thermal resistance.

◆High isolation voltage from case to lugs.

◆High temperature soldering guaranteed:

260℃/10 second, at 5 lbs. (2.3kg) tension.

Mechanical Data

◆Case : Molded plastic with Heatsink internally moun

in the bridge encapsulation.

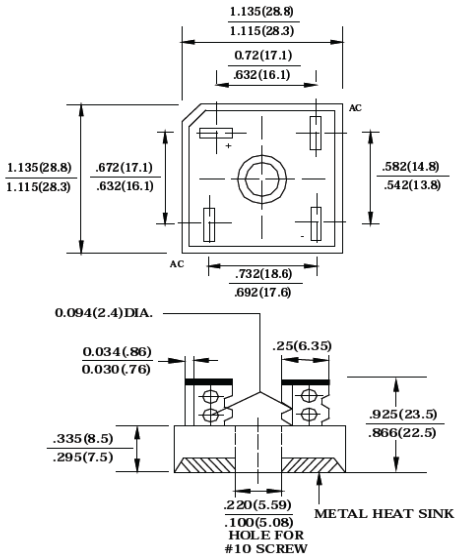
◆Terminal: Plated 0.25" (6.35mm) lug.

◆Polarity: Polarity symbols marked on case.

◆Mounting: Thru hole for #10 screw, 20 in,- lbs. Torque Max.

◆Weight:1.02 ounce, 29gram.

BR 35



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	BR25005	BR2501	BR2502	BR2504	BR2506	BR2508	BR2510	UNIT
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current, at T_C=55℃(Note1, 2)		$I_{(AV)}$	25							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	300							Amps
Rating for Fusing(t<8.3ms)		I^2T	373							A^2S
Maximum Instantaneous Forward Voltage at 12.5A		V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T_A = 25℃	I_R	5.0							μAmps
	T_A=150℃		0.5							mAmps
Isolation Voltage from case to lug		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1，2)		$R_{\theta JC}$	2.0							℃/W
Operating Temperature Range		T_J	-65 to +150							℃
Storage Temperature Range		T_{stg}	-65 to +150							℃

Note: 1.Unit mounted on 5 " × 4 " × 3 " thick (12.8mm × 10.2mm × 7.3mm) Al. plate.

2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

Заказ г.Минск www.tiristor.by email: minsk17@tut.by viber и тел.+375447584780 www.fotorele.net

BR25005 THRU BR2510

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25.0 Ampere

RATING AND CHARACTERISTIC CURVES BR25005 THRU BR2510

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

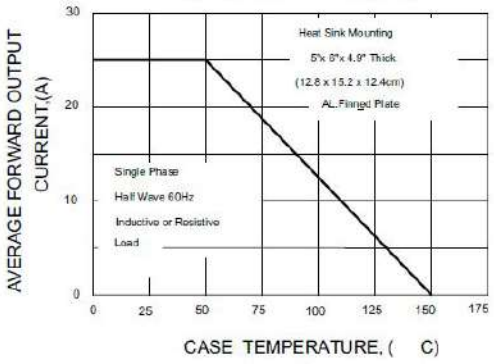


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

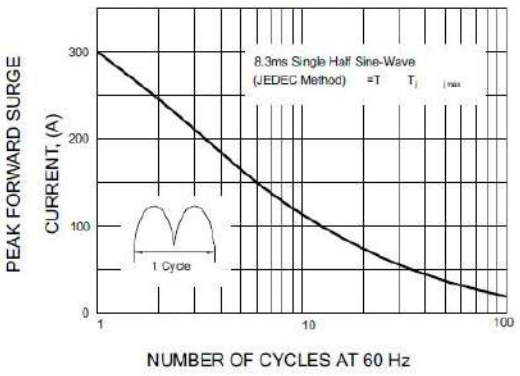


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

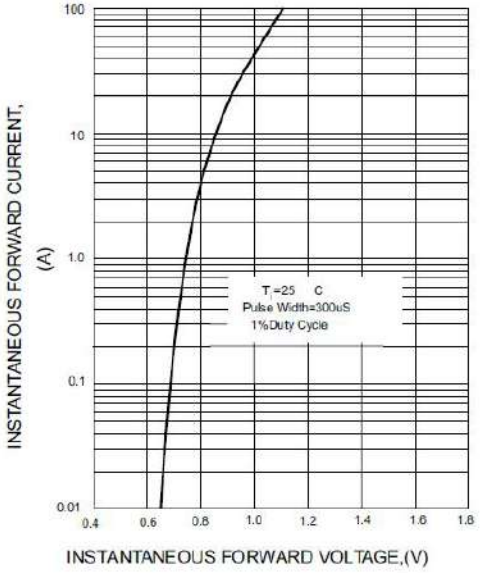


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

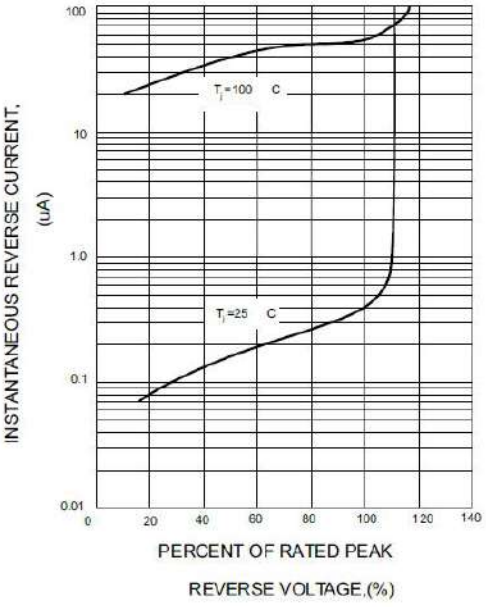


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

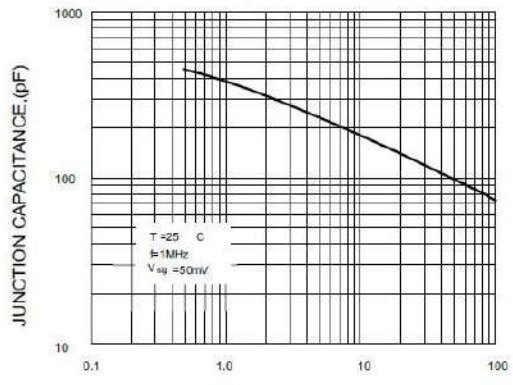
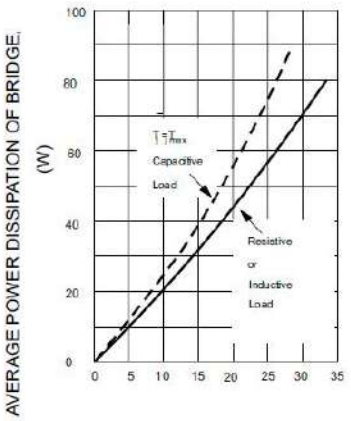


FIG.6-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

BR25005W THRU BR2510W

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25.0 Ampere

FEATURES

- ◆High forward surge current capability.
- ◆Low thermal resistance.
- ◆High isolation voltage from case to lugs.
- ◆High temperature soldering guaranteed:

260℃/10 second, at 5 lbs. (2.3kg) tension.

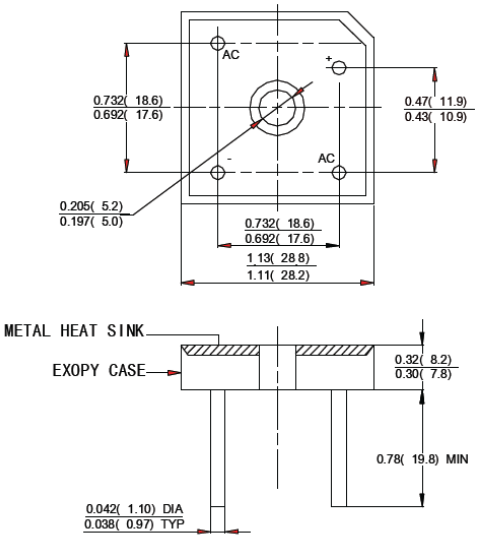
Mechanical Data

- ◆Case: Molded plastic with Heatsink internally moun

in the bridge encapsulation

- ◆Terminal: Plated 0.25" (6.35mm) lug.
- ◆Polarity: Polarity symbols marked on case.
- ◆Mounting: Thru hole for #10 screw, 20 in,- lbs. Torque Max.
- ◆Weight:1.02 ounce, 29gram.

BR-W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	BR 25005W	BR 2501W	BR 2502W	BR 2504W	BR 2506W	BR 2508W	BR 2510W	UNIT
Maximum Repetitive Peak Revere Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at T_C=55℃ (Note1, 2)		$I_{(AV)}$	25							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	300							Amps
Rating for Fusing(t<8.3ms)		I^2T	373							A^2s
Maximum Instantaneous Forward Voltage at12.5A		V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	5.0							μAmps
	T_A=150℃		0.5							mAmps
Isolation Voltage from case to lug		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)		$R_{\theta JL}$	2.0							℃/W
Operating Temperature Range		T_J	-65 to +150							℃
Storage Temperature Range		T_{stg}	-65 to +150							℃

Note: 1.Unit mounted on 9 ” × 3.5 ” × 4.6 ” thick (23 × 9 × 11.8mm) Al. finned plate.

2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screws.

BR25005W THRU BR2510W

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25.0 Ampere

RATING AND CHARACTERISTIC CURVES BR25005W THRU BR2510W

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

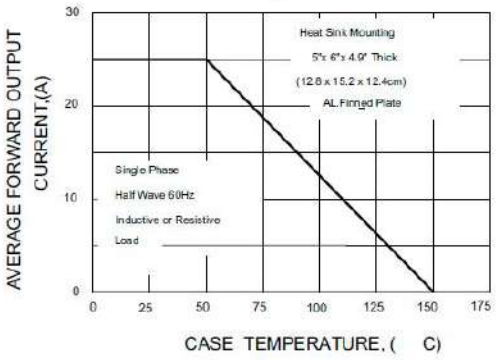


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

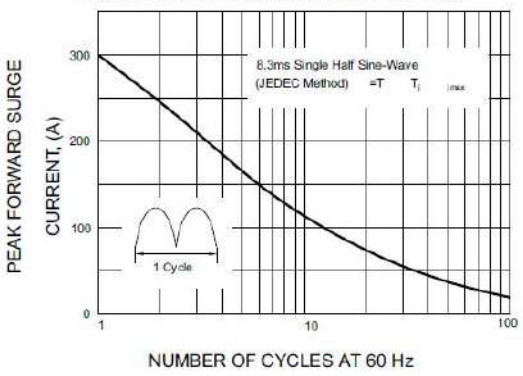


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

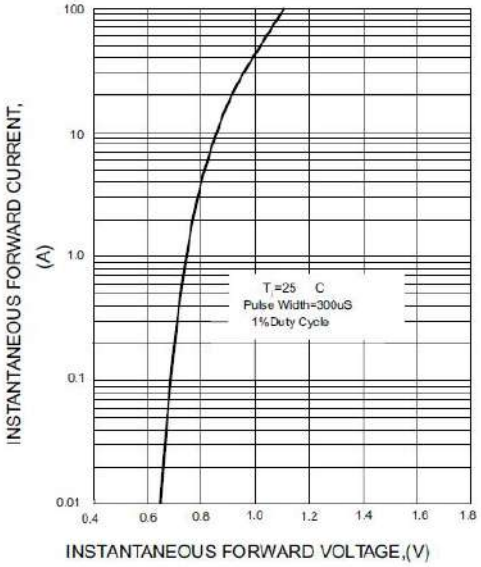


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

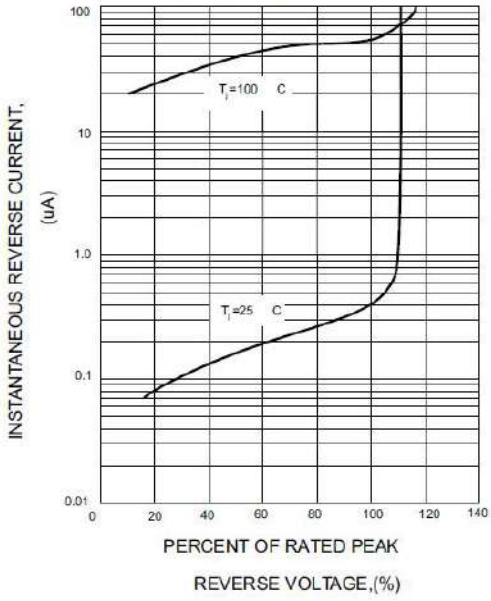


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

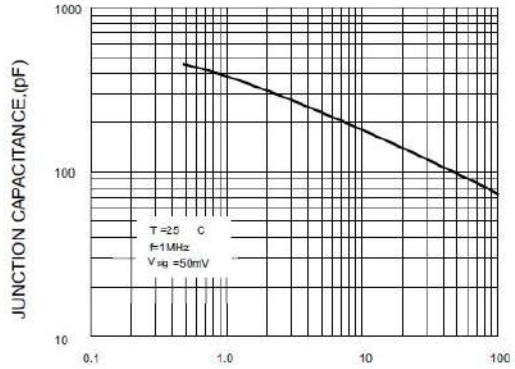
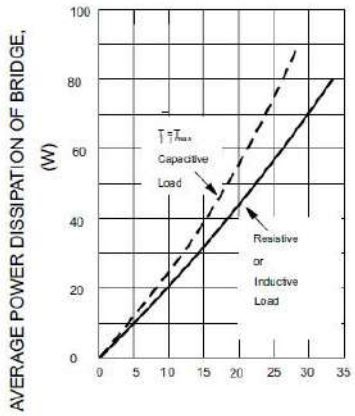


FIG.6-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

DB101S THRU DB107S

SINGLE-PHASE GLASS PASSIVATED SILICON SURFACE MOUNT BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere

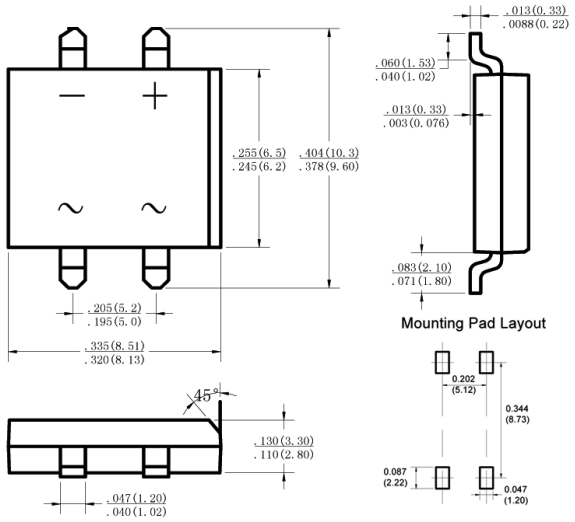
FEATURES

- ◆Plastic material has Underwriters Laboratory
- ◆Flammability Classification 94V-0
- ◆High surge overload rating of 50 Amperes peak
- ◆Ideal for printed circuit board
- ◆Glass passivated chip junction

Mechanical Data

- ◆Case: Molded plastic, DBS
- ◆Epoxy: UL 94V-O rate flame retardant
- ◆Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- ◆Mounting position: Any
- ◆Weight: 0.02ounce, 0.4gram

DBS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	UNIT
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at T_A=40℃ (Note 2)		$I_{(AV)}$	1.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	30							Amps
Maximum Forward Voltage at 1.0A DC and 25℃		V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage	T_A = 25℃	I_R	5.0							uA
	T_A = 125℃		500							
Typical Junction Capacitance (Note 1)		C_J	25							pF
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	40							℃/W
Typical Thermal Resistance (Note 2)		$R_{\theta JL}$	15							℃/W
Operating and Storage Temperature Range		T_J,T_{stg}	-55 to +150							℃

Note: 1- Measured at 1 MHZ and applied reverse voltage of 4.0 VDC.

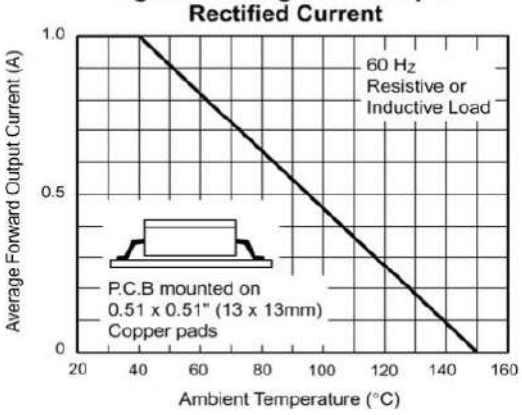
2- Units mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads.

DB101S THRU DB107S

SINGLE-PHASE GLASS PASSIVATED SILICON SURFACE MOUNT BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere

RATING AND CHARACTERISTIC CURVES DB101S THRU DB107S

Fig. 1 - Derating Curve Output Rectified Current



F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

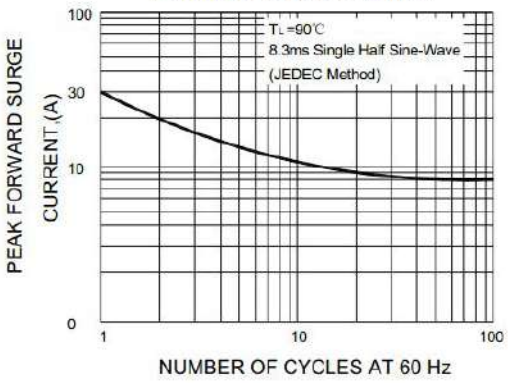


Fig. 3 - Typical Forward Characteristics Per Leg

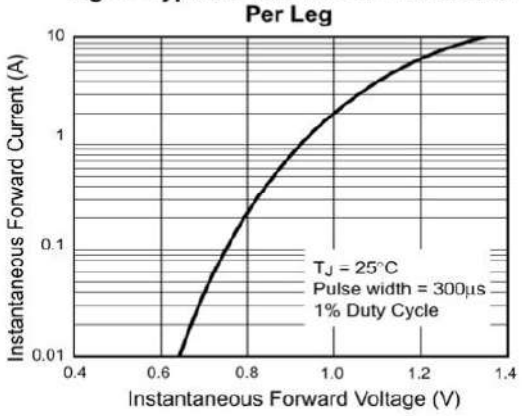


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

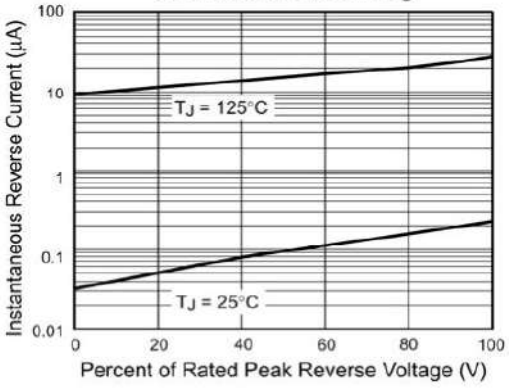


Fig. 5 - Typical Junction Capacitance Per Leg

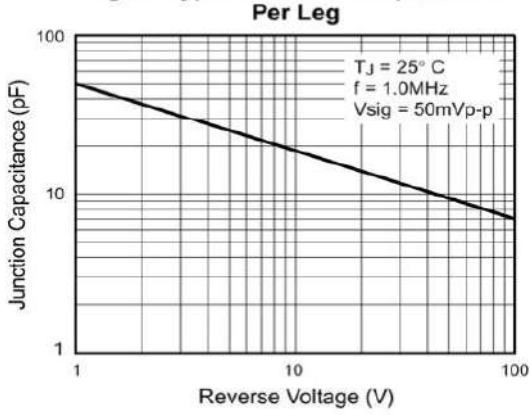
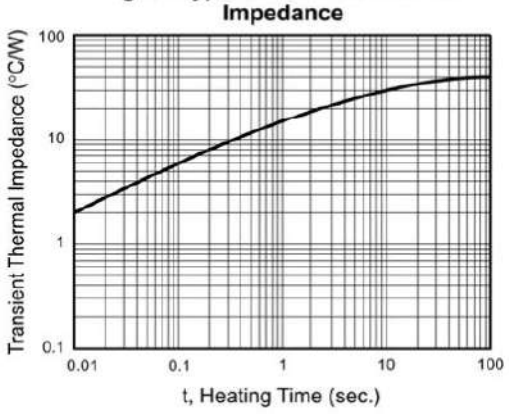


Fig. 6 - Typical Transient Thermal Impedance



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

DB101 THRU DB107

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere

FEATURES

◆Plastic material has Underwriters Laboratory Flammability Classification 94V-0.

◆High surge overload rating of 50 Amperes peak.

◆Ideal for printed circuit board.

◆Glass passivated chip junction.

Mechanical Data

◆Case: Molded plastic, DB.

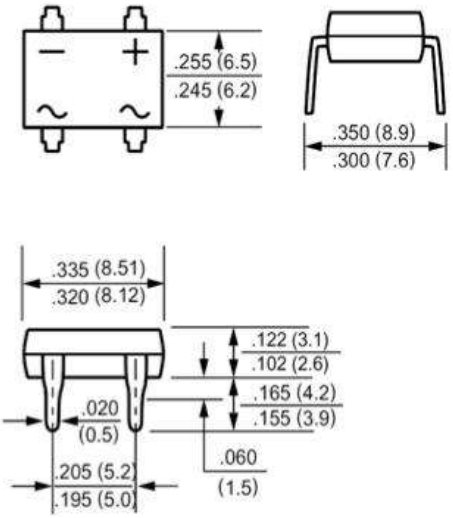
◆Epoxy: UL 94V-O rate flame retardant.

◆Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed.

◆Mounting position: Any.

◆Weight: 0.02ounce, 0.4gram.

DB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	DB101	DB102	DB103	DB104	DB105	DB106	DB107	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_A=40℃	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Maximum forward Voltage at 1.0A DC and 25℃	V_F	1.1							V
Maximum DC Reverse Current at T_A=25℃ at Rated DC Blocking voltage T_A=125℃	I_R	5.0 500							μA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	40							℃/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15							℃/W
Operating and Storage Temperature Range	T_J , T_{STG}	-55 to +150							℃

Note: 1.Measured at 1.0MHz and applied reversed voltage of 4.0 VDC.

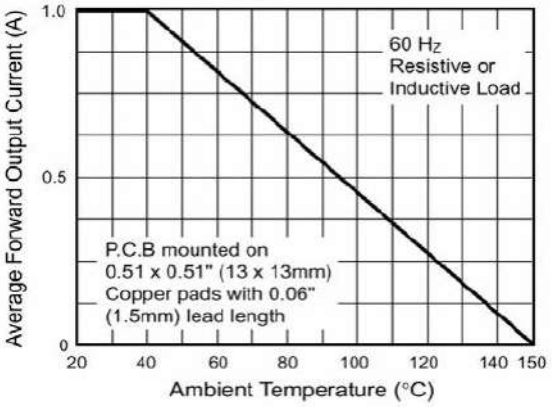
2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads.

DB101 THRU DB107

SINGLE-PHASE GLASS PASSIVATED SILICON SURFACE MOUNT BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere

RATING AND CHARACTERISTIC CURVES DB101 THRU DB107

Fig. 1 - Derating Curve Output Rectified Current



F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

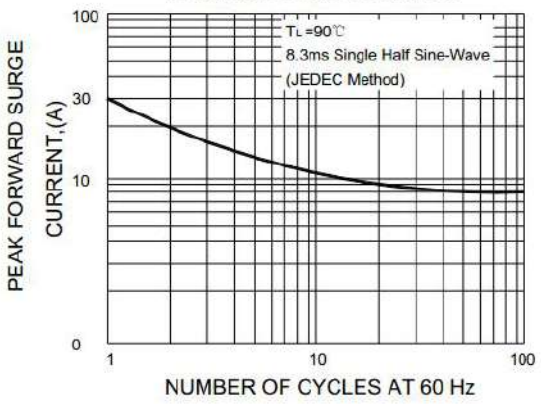


Fig. 3 - Typical Forward Characteristics Per Leg

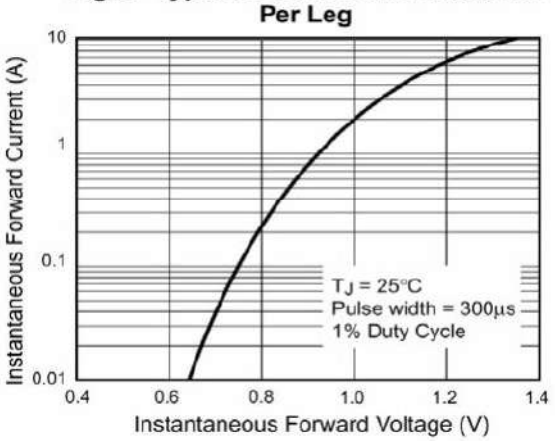


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

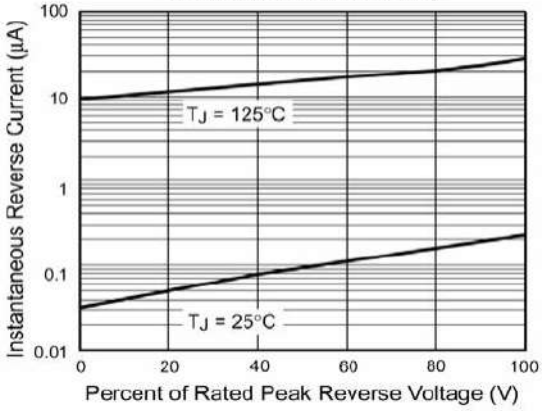


Fig. 5 - Typical Junction Capacitance Per Leg

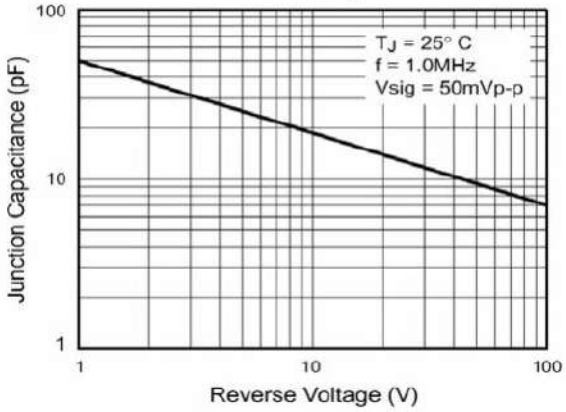
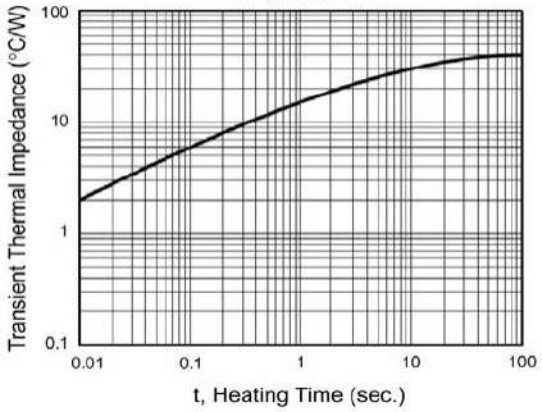


Fig. 6 - Typical Transient Thermal Impedance



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

DB151 THRU DB157

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.5 Ampere

FEATURES

◆Plastic material has Underwriters Laboratory Flammability Classification 94V-0.

◆High surge overload rating of 50 Amperes peak.

◆Ideal for printed circuit board.

◆Glass passivated chip junction.

Mechanical Data

◆Case: Molded plastic, DB.

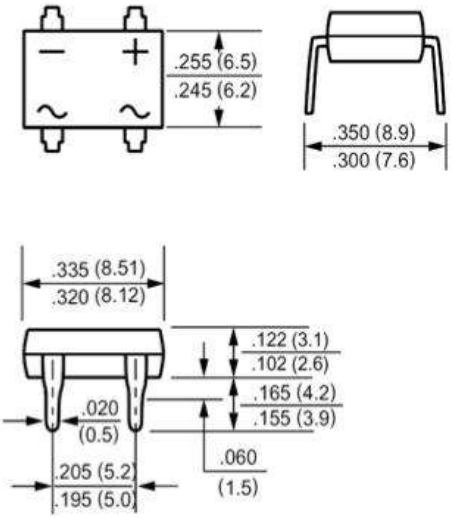
◆Epoxy: UL 94V-O rate flame retardant.

◆Terminals: Leads solderable per MIL-STD-2, method 208 guaranteed.

◆Mounting position: Any.

◆Weight: 0.02ounce, 0.4gram.

DB



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	DB151	DB152	DB153	DB154	DB155	DB156	DB157	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_A=40℃	$I_{(AV)}$	1.5							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							A
Maximum forward Voltage at 1.0A DC and 25℃	V_F	1.1							V
Maximum DC Reverse Current at T_A=25℃ at Rated DC Blocking voltage T_A=125℃	I_R	5.0 500							μA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	40							℃/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15							℃/W
Operating and Storage Temperature Range	T_J , T_{STG}	-55 to +150							℃

Note: 1.Measured at 1.0MHz and applied reversed voltage of 4.0 VDC.

2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads.

DB151 THRU DB157

SINGLE-PHASE GLASS PASSIVATED SILICON SURFACE MOUNT BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.5 Ampere

RATING AND CHARACTERISTIC CURVES DB151 THRU DB157

Fig. 1 - Derating Curve Output Rectified Current

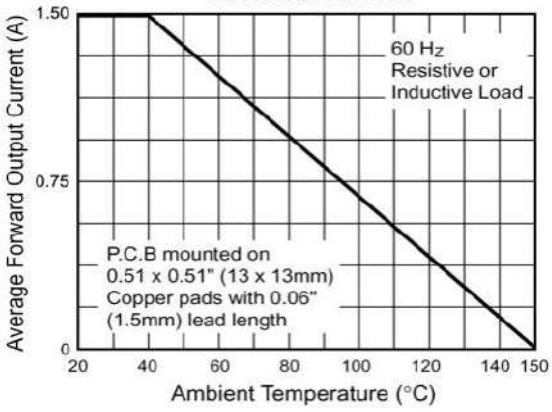


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

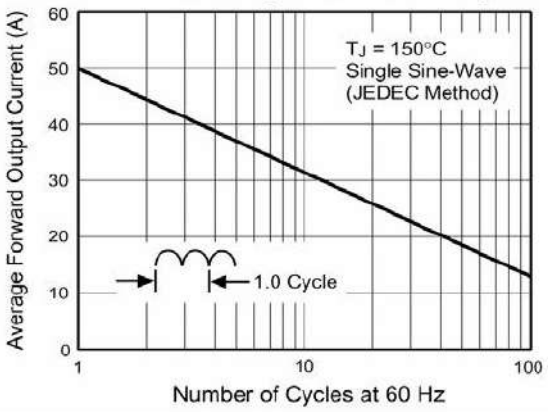


Fig. 3 - Typical Forward Characteristics Per Leg

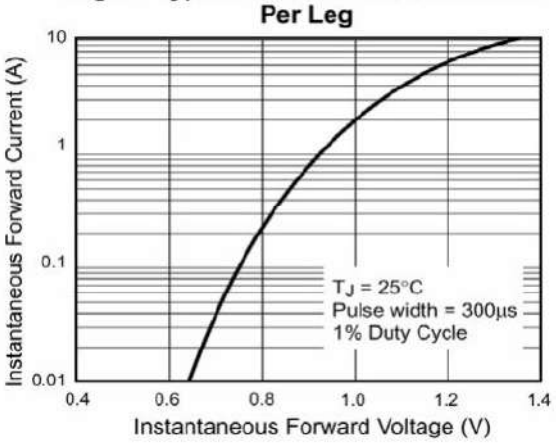


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

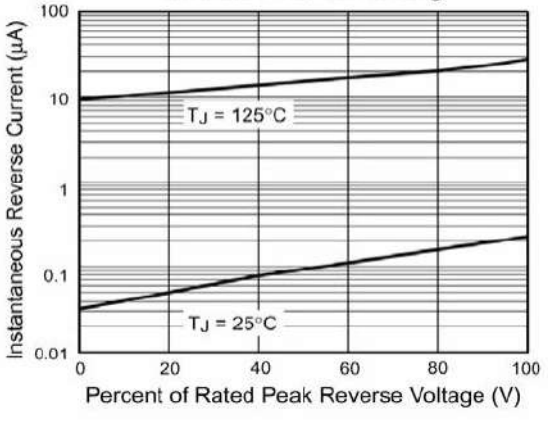


Fig. 5 - Typical Junction Capacitance Per Leg

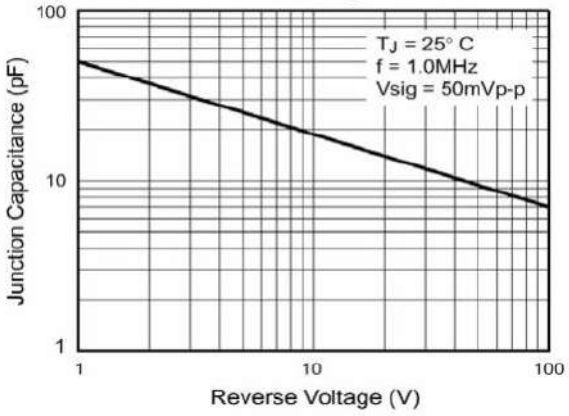
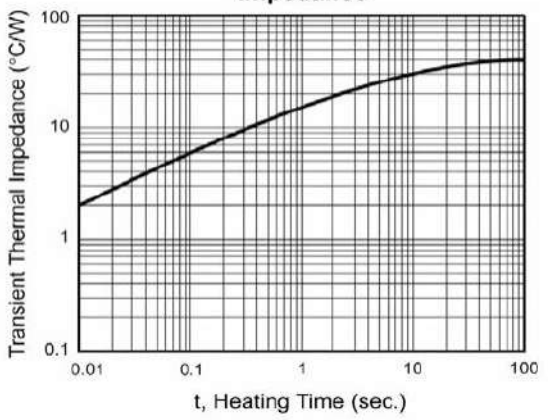


Fig. 6 - Typical Transient Thermal Impedance



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

Заказ г.Минск www.tiristor.by email: minsk17@tut.by viber и тел.+375447584780 www.fotorele.net

DB151S THRU DB157S

SINGLE-PHASE GLASS PASSIVATED SILICON SURFACE MOUNT BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.5 Ampere

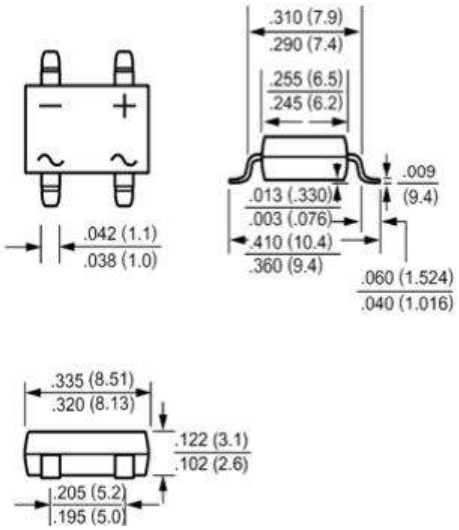
FEATURES

- ◆Glass passivated chip junction.
- ◆High surge overload rating of 50 Amperes peak.
- ◆Ideal for printed circuit board.
- ◆High temperature soldering guaranteed: 260°C for 10 seconds.

Mechanical Data

- ◆Case: Molded plastic, DB-S.
- ◆Epoxy: UL 94V-O rate flame retardant.
- ◆Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed.
- ◆Mounting position: Any.
- ◆Weight: 0.02ounce, 0.4gram.

DB-S



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	DB151S	DB152S	DB153S	DB154S	DB155S	DB156S	DB157S	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_A=40℃ (Note 2)	$I_{(AV)}$	1.5							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							A
Maximum forward Voltage at 1.5A DC and 25℃	V_F	1.1							V
Maximum DC Reverse Current at T_A=25℃ at Rated DC Blocking voltage T_A=125℃	I_R	5.0 500							μA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	40							℃/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15							℃/W
Operating and Storage Temperature Range	T_J , T_{STG}	-55 to +150							℃

Note: 1.Measured at 1.0MHz and applied reversed voltage of 4.0 VDC.

2. Units mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads.

DB151S THRU DB157S

SINGLE-PHASE GLASS PASSIVATED SILICON SURFACE MOUNT BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.5 Ampere

RATING AND CHARACTERISTIC CURVES DB151S THRU DB157S

Fig. 1 - Derating Curve Output Rectified Current

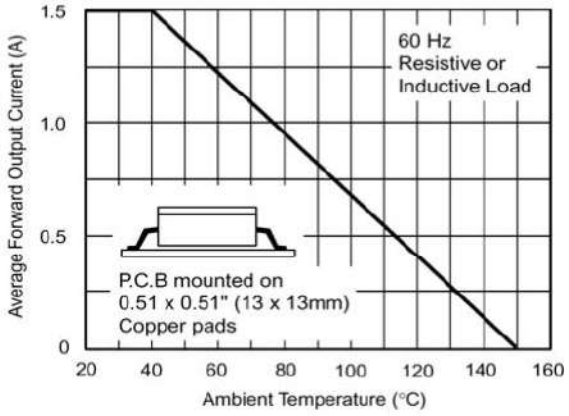


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

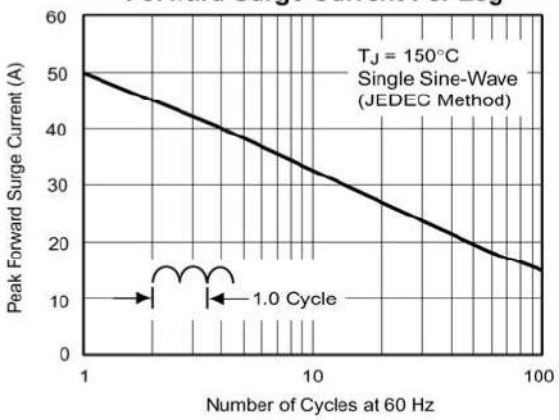


Fig. 3 - Typical Forward Characteristics Per Leg

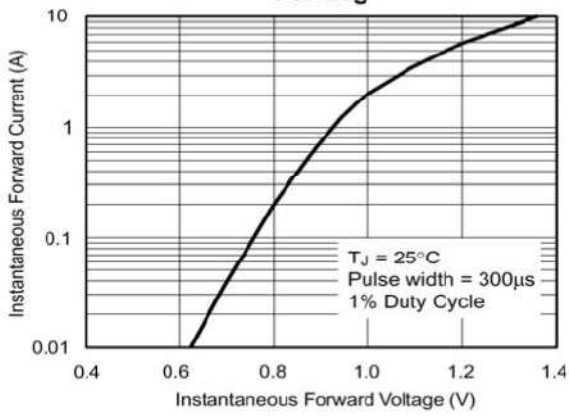


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

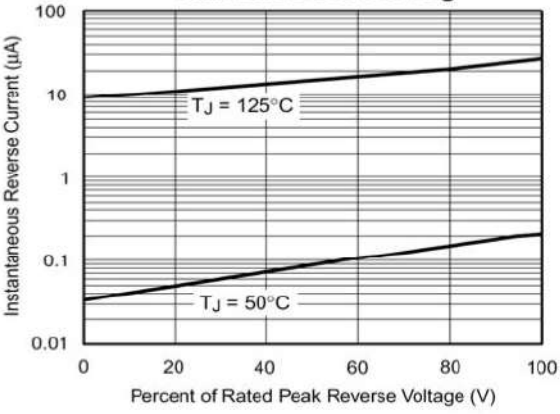


Fig. 5 - Typical Junction Capacitance Per Leg

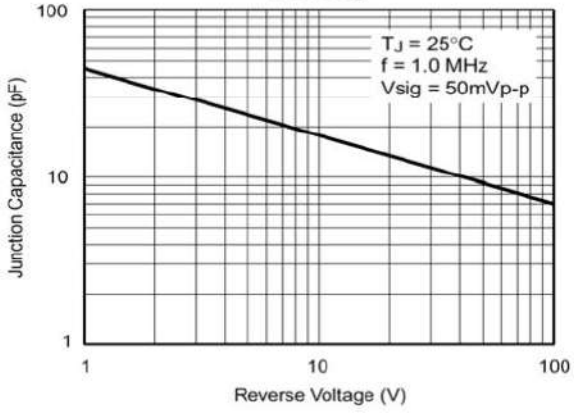
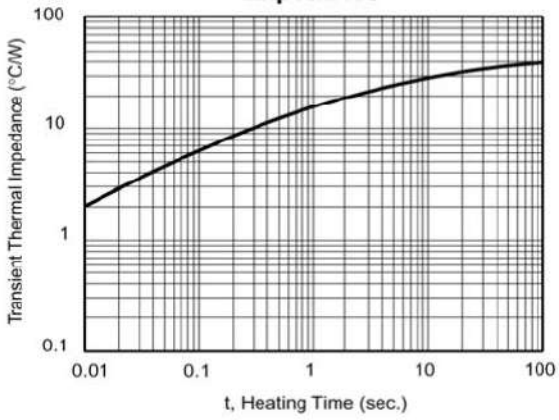


Fig. 6 - Typical Transient Thermal Impedance



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

GBJ601 THRU GBJ610

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 6.0 Ampere

FEATURES

◆Rating to 1000V PRV.

◆Ideal for printed circuit board.

◆Low forward voltage drop, high current capability.

◆Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

◆The plastic material has UL flammability classification 94V-0.

◆Electrically isolated base-1500 Volts

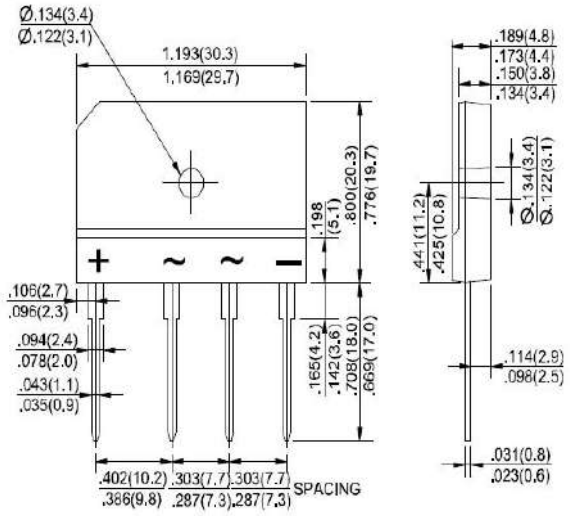
Mechanical Data

◆Polarity: Symbols molded on body.

◆Weight:0.26 ounces, 7.0 grams.

◆Mounting position: Any.

GBJ



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBJ601	GBJ602	GBJ604	GBJ606	GBJ608	GBJ610	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	6.0 2.8						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	180						A
Maximum forward Voltage at 3.0A DC	V_F	1.0						V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500						μA
I^2t Rating for fusing(t<8.3ms)	I^2t	120						A^2S
Typical Junction Capacitance per element(Note 1)	C_J	55						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.5						℃/W
Operating Temperature Range	T_J	-55to +150						℃
Storage Temperature Range	T_{STG}	-55to +150						℃

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.

2. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

GBJ601 THRU GBJ610

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 6.0 Ampere

RATING AND CHARACTERISTIC CURVES GBJ601 THRU GBJ610

FIG.1-FORWARD CURRENT DERATING CURVE

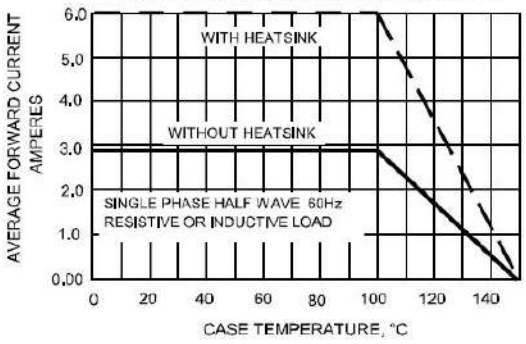


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

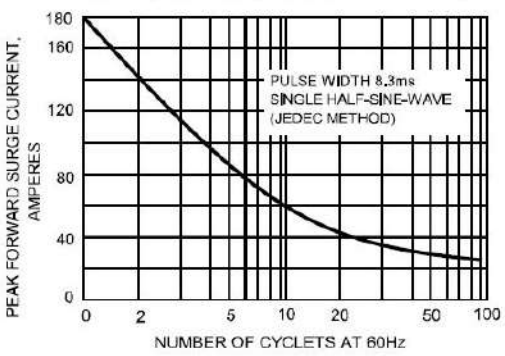


FIG.3-TYPICAL JUNCTION CAPACITANCE

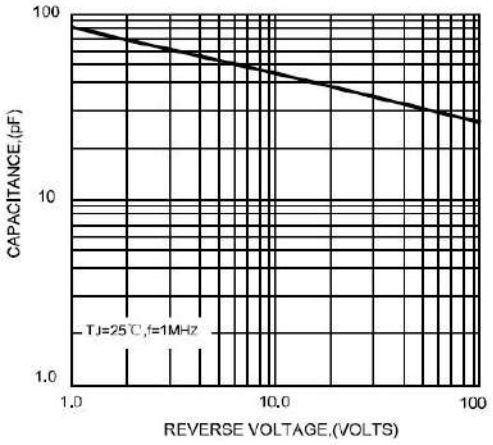


FIG.4-TYPICAL FORWARD CHARACTERISTICS

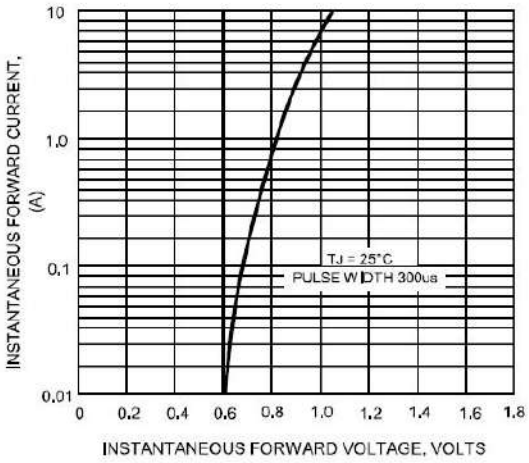
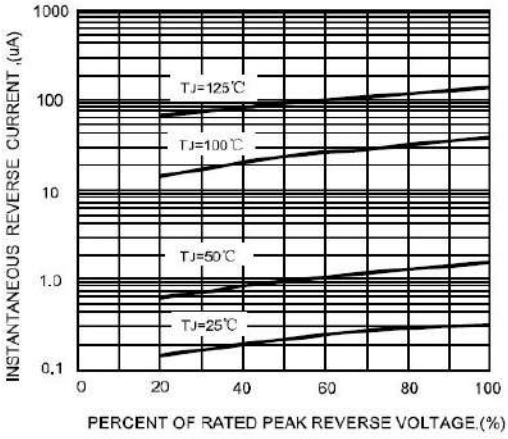


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

GBJ801 THRU GBJ810

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 8.0 Ampere

FEATURES

◆Rating to 1000V PRV.

◆Ideal for printed circuit board.

◆Low forward voltage drop, high current capability.

◆Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

◆The plastic material has UL flammability classification 94V-0.

◆Electrically isolated base-1500 Volts

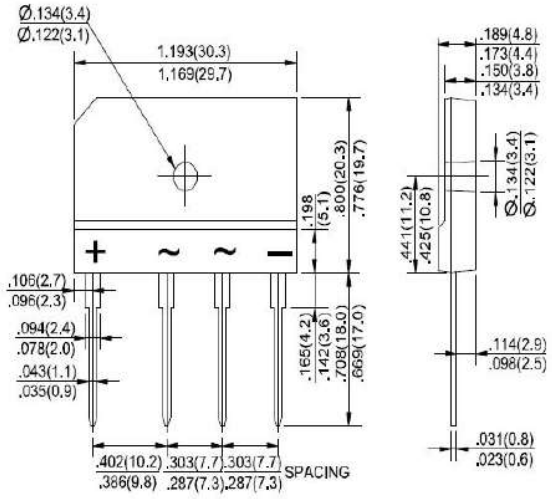
Mechanical Data

◆Polarity: Symbols molded on body.

◆Weight: 0.26 ounces, 7.0 grams.

◆Mounting position: Any.

GBJ



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBJ801	GBJ802	GBJ804	GBJ806	GBJ808	GBJ810	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	8.0 2.9						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	180						A
Maximum forward Voltage at 3.0A DC	V_F	1.0						V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500						μA
I^2t Rating for fusing(t<8.3ms)	I^2t	120						A^2S
Typical Junction Capacitance per element(Note 1)	C_J	55						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0						℃/W
Operating Temperature Range	T_J	-55 to +150						℃
Storage Temperature Range	T_{STG}	-55 to +150						℃

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
2. Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.

GBJ801 THRU GBJ810

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 8.0 Ampere

RATING AND CHARACTERISTIC CURVES GBJ801 THRU GBJ810

FIG.1 - FORWARD CURRENT DERATING CURVE

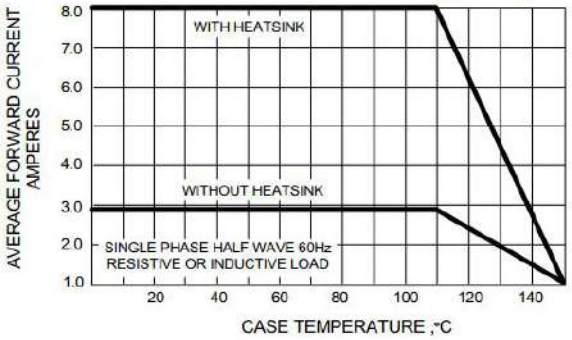


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

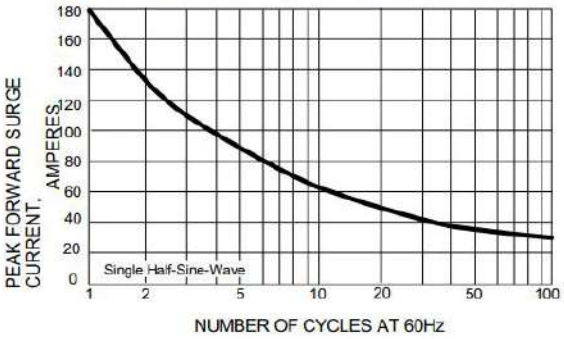


FIG.3 - TYPICAL JUNCTION CAPACITANCE

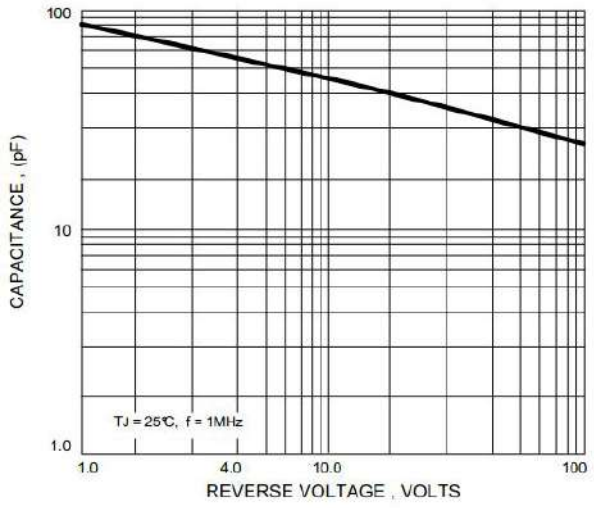


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

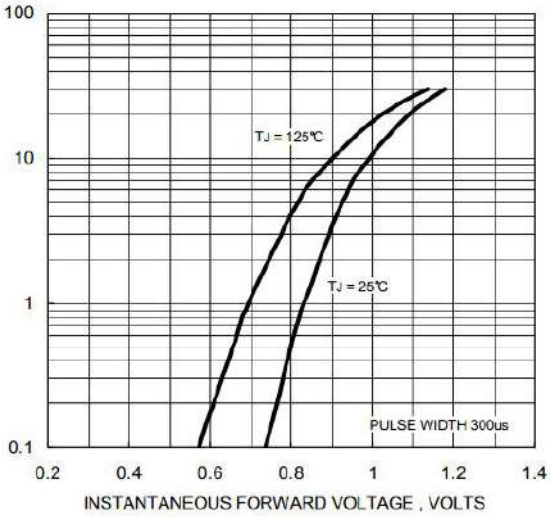
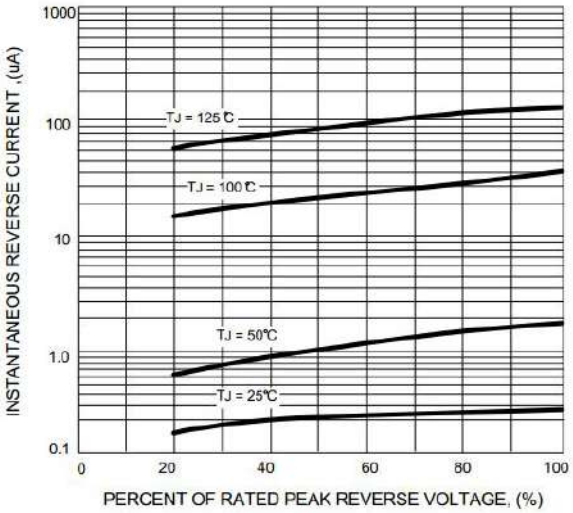


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

GBJ1001 THRU GBJ1010

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 10 Ampere

FEATURES

◆Rating to 1000V PRV.

◆Ideal for printed circuit board.

◆Low forward voltage drop, high current capability.

◆Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

◆The plastic material has UL flammability classification 94V-0.

◆Electrically isolated base-1500 Volts

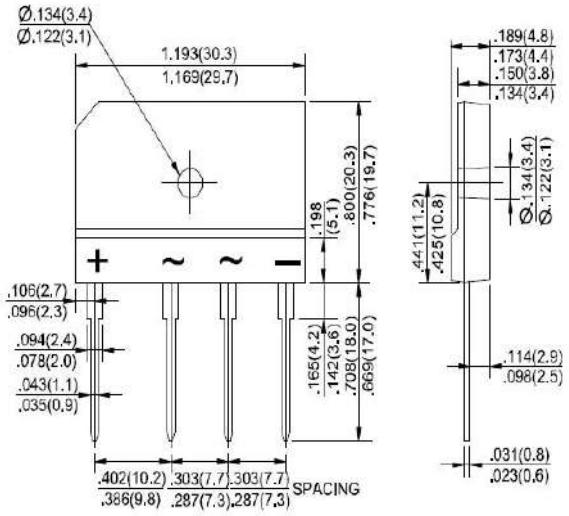
Mechanical Data

◆Polarity: Symbols molded on body.

◆Weight: 0.26 ounces, 7.0 grams.

◆Mounting position: Any.

GBJ



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBJ1001	GBJ1002	GBJ1004	GBJ1006	GBJ1008	GBJ1010	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	10.0 3.0						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	200						A
Maximum forward Voltage at 5.0A DC	V_F	1.0						V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500						μA
I^2t Rating for fusing(t<8.3ms)	I^2t	166						A^2S
Typical Junction Capacitance per element(Note 1)	C_J	55						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.4						℃/W
Operating Temperature Range	T_J	-55 to +150						℃
Storage Temperature Range	T_{STG}	-55 to +150						℃

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
2. Device mounted on 150mm x 150mm x 1.6mm Cu Plate Heatsink.

GBJ1001 THRU GBJ1010

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 10 Ampere

RATING AND CHARACTERISTIC CURVES GBJ1001 THRU GBJ1010

FIG.1 - FORWARD CURRENT DERATING CURVE

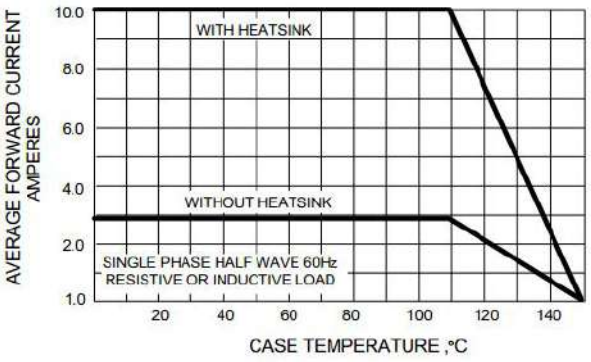


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

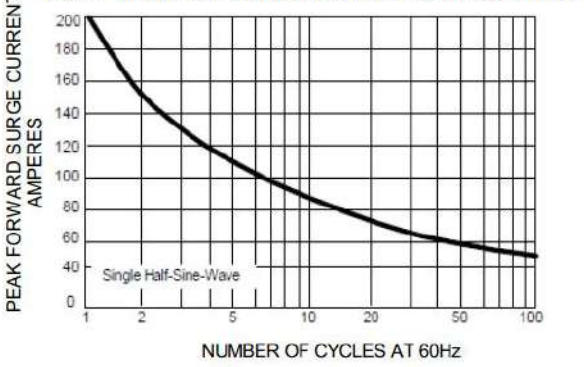


FIG.3 - TYPICAL JUNCTION CAPACITANCE

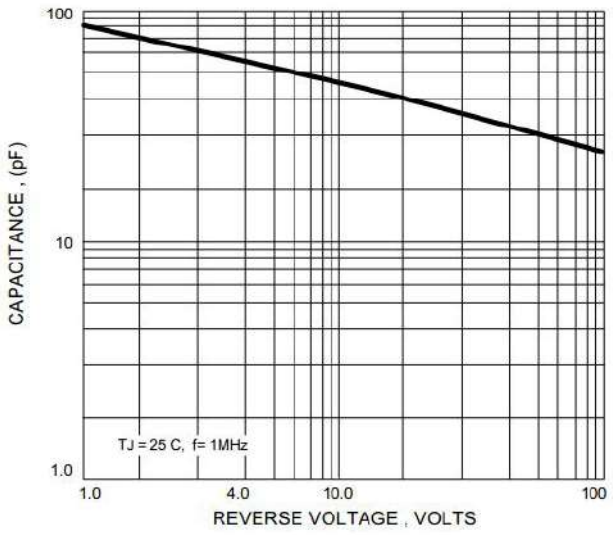


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

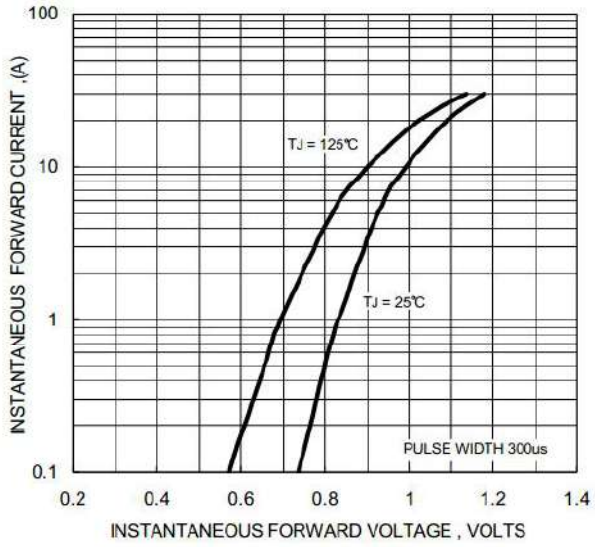
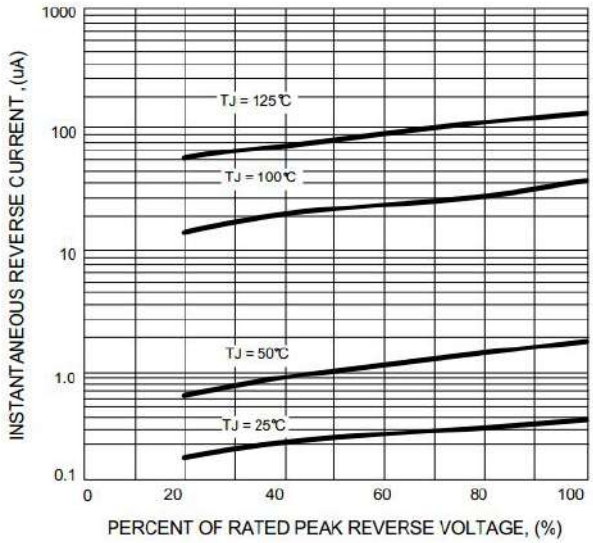


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

GBJ15005 THRU GBJ1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

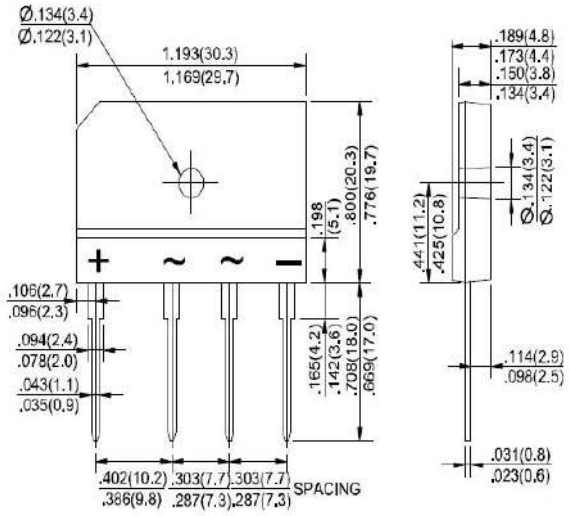
FEATURES

- ◆Rating to 1000V PRV.
- ◆Ideal for printed circuit board.
- ◆Low forward voltage drop, high current capability.
- ◆Reliable low cost construction utilizing molded plastic technique results in inexpensive product.
- ◆The plastic material has UL flammability classification 94V-0.
- ◆Electrically isolated base-1500 Volts

Mechanical Data

- ◆Polarity: Symbols molded on body.
- ◆Weight: 0.26 ounces, 7.0 grams.
- ◆Mounting position: Any.

GBJ



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBJ15005	GBJ1501	GBJ1502	GBJ1504	GBJ1506	GBJ1508	GBJ1510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	15.0 3.2							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	240							A
Maximum forward Voltage at 7.5A DC	V_F	1.05							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	240							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	0.8							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
2. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

GBJ15005 THRU GBJ1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

RATING AND CHARACTERISTIC CURVES GBJ15005 THRU GBJ1510

FIG.1 - FORWARD CURRENT DERATING CURVE

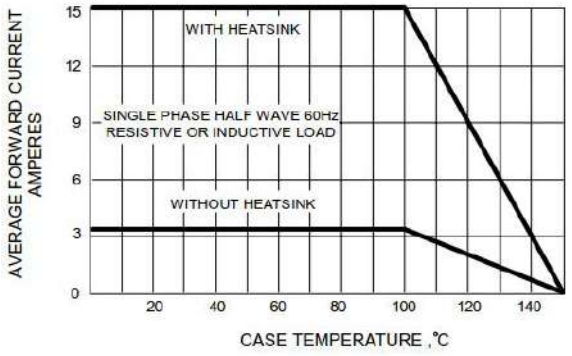


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

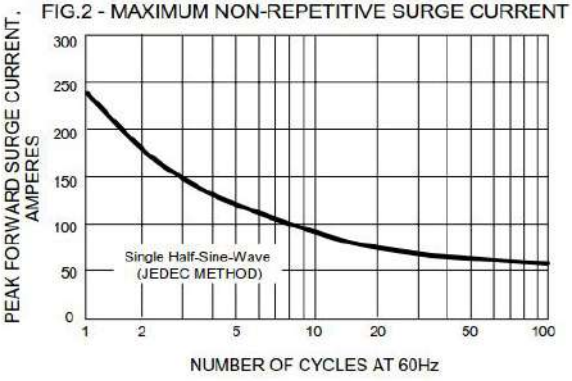


FIG.3 - TYPICAL JUNCTION CAPACITANCE

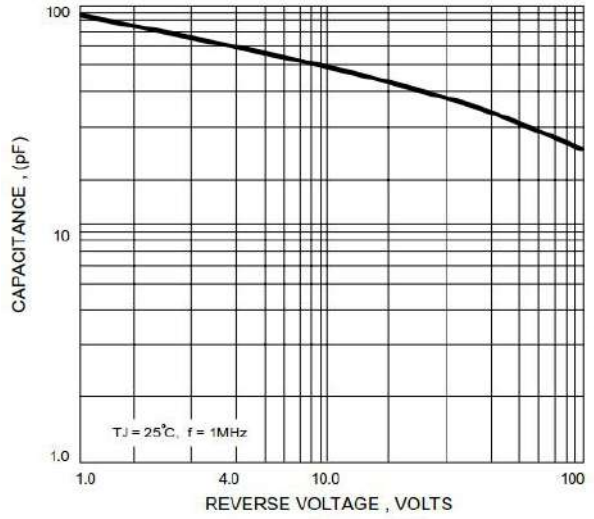


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

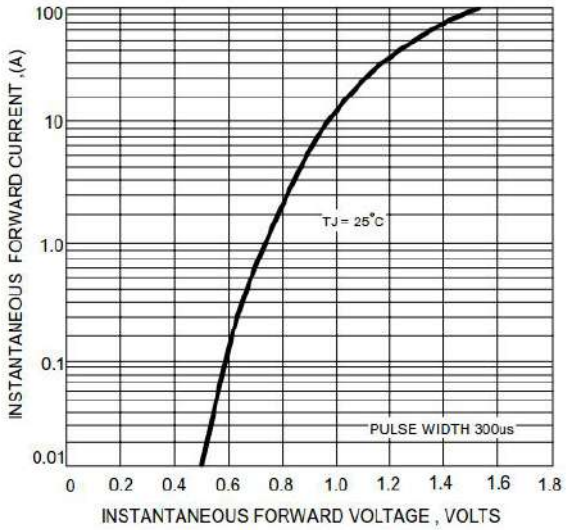
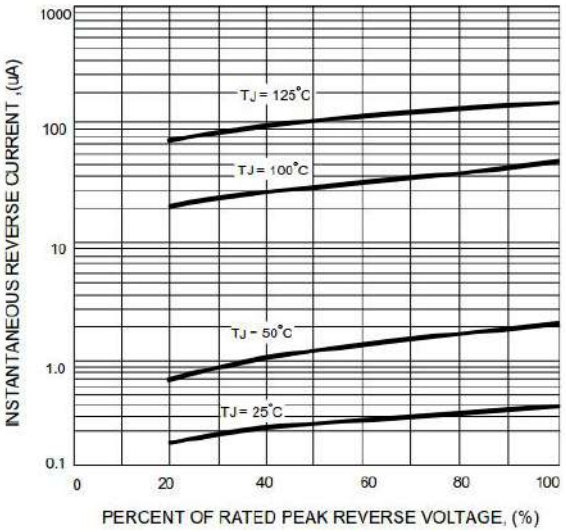


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

GBJ20005 THRU GBJ2010

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 20 Ampere

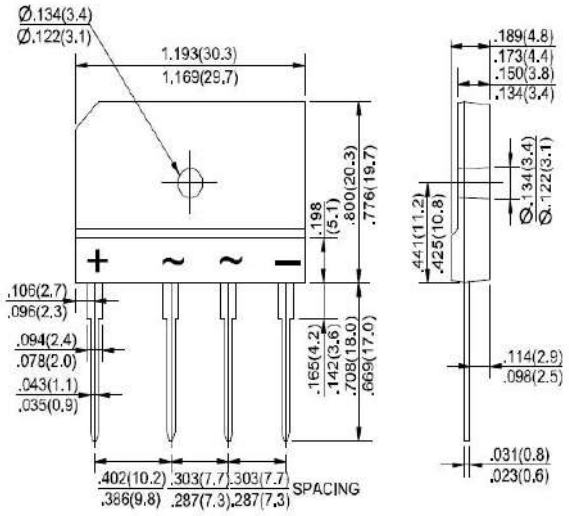
FEATURES

- ◆Rating to 1000V PRV.
- ◆Ideal for printed circuit board.
- ◆Low forward voltage drop, high current capability.
- ◆Reliable low cost construction utilizing molded plastic technique results in inexpensive product.
- ◆The plastic material has UL flammability classification 94V-0.
- ◆Electrically isolated base-1500 Volts

Mechanical Data

- ◆Polarity: Symbols molded on body.
- ◆Weight: 0.26 ounces, 7.0 grams.
- ◆Mounting position: Any.

GBJ



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBJ20005	GBJ2001	GBJ2002	GBJ2004	GBJ2006	GBJ2008	GBJ2010	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	20.0 3.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	260							A
Maximum forward Voltage at 10A DC	V_F	1.05							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	240							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	0.8							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
2. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

Заказ г.Минск www.tiristor.by email: minsk17@tut.by viber и тел.+375447584780 www.fotorele.net

GBJ20005 THRU GBJ2010

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 20 Ampere

RATING AND CHARACTERISTIC CURVES GBJ20005 THRU GBJ2010

FIG.1-FORWARD CURRENT DERATING CURVE

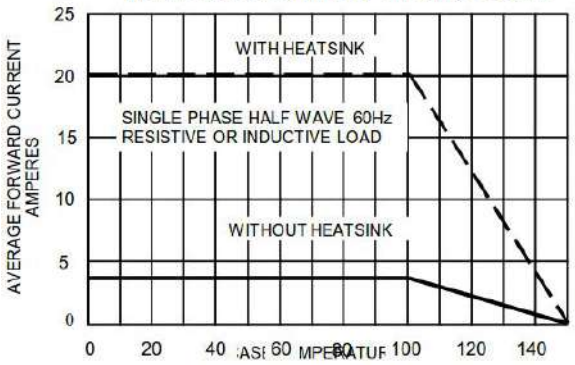


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

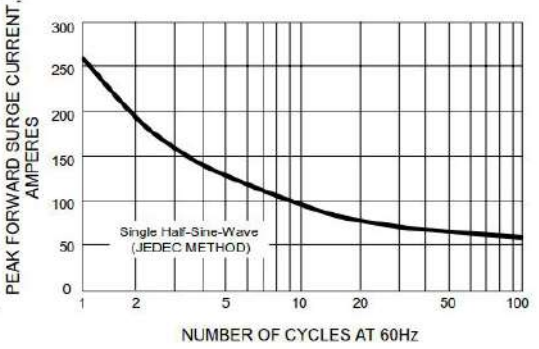


FIG.3 - TYPICAL JUNCTION CAPACITANCE

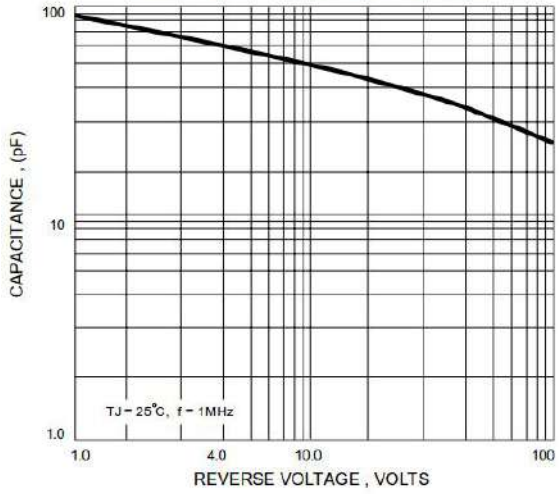


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

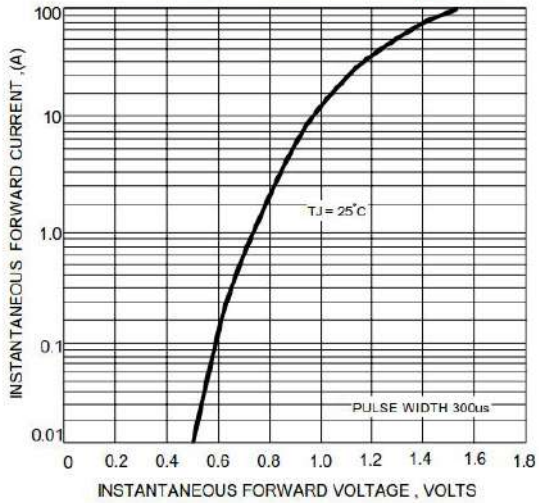
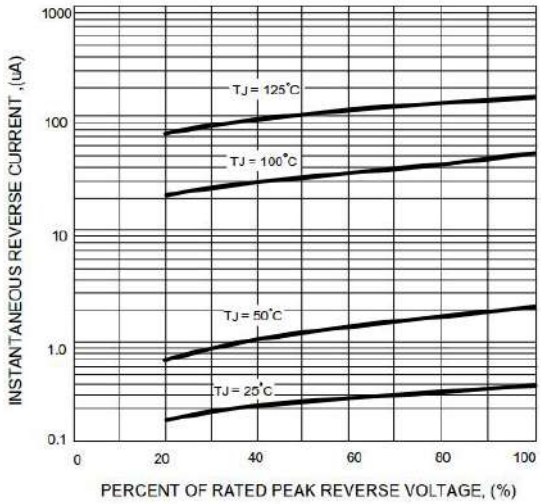


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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Suntan® Su®

GBJ2501 THRU GBJ2510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 25 Ampere

FEATURES

◆Rating to 1000V PRV.

◆Ideal for printed circuit board.

◆Low forward voltage drop, high current capability.

◆Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

◆The plastic material has UL flammability classification 94V-0.

◆Electrically isolated base-1500 Volts

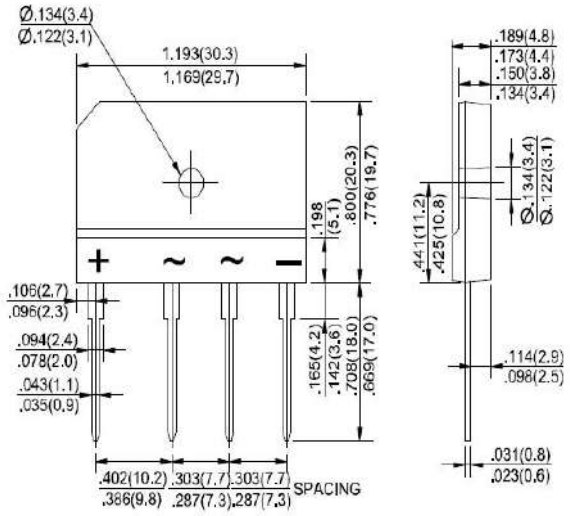
Mechanical Data

◆Polarity: Symbols molded on body.

◆Weight: 0.26 ounces, 7.0 grams.

◆Mounting position: Any.

GBJ



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBJ2501	GBJ202	GBJ2504	GBJ2506	GBJ2508	GBJ2510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	25.0 4.2						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	300						A
Maximum forward Voltage at 12.5A DC	V_F	1.0						V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500						μA
I^2t Rating for fusing(t<8.3ms)	I^2t	510						A^2S
Typical Junction Capacitance per element(Note 1)	C_J	85						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.0						℃/W
Operating Temperature Range	T_J	-55 to +150						℃
Storage Temperature Range	T_{STG}	-55 to +150						℃

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
2. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

GBJ2501 THRU GBJ2510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 25 Ampere

RATING AND CHARACTERISTIC CURVES GBJ2501 THRU GBJ2510

FIG.1-FORWARD CURRENT DERATING CURVE

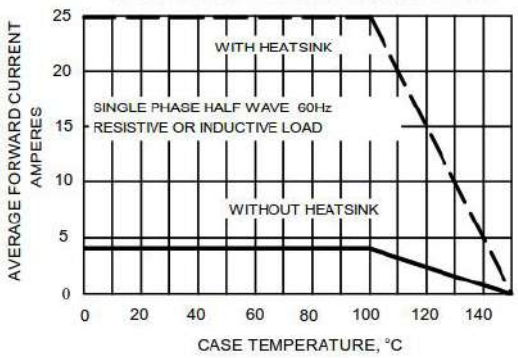


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

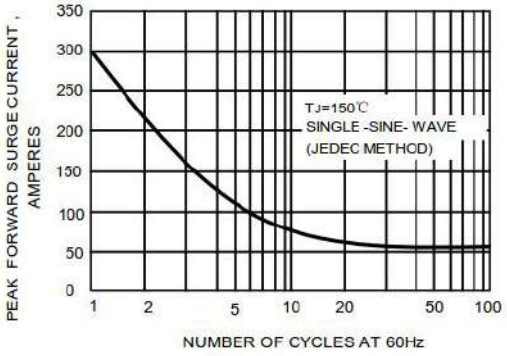


FIG.3-TYPICAL JUNCTION CAPACITANCE

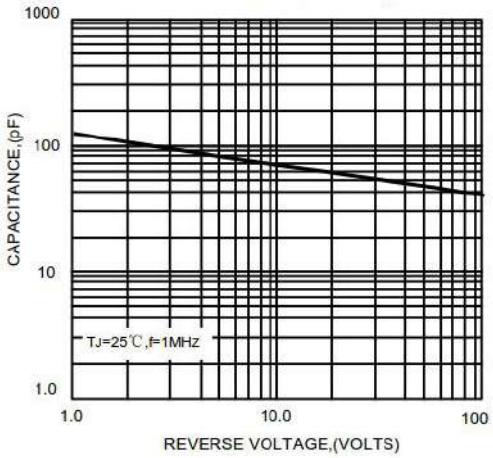


FIG.4-TYPICAL FORWARD CHARACTERISTICS

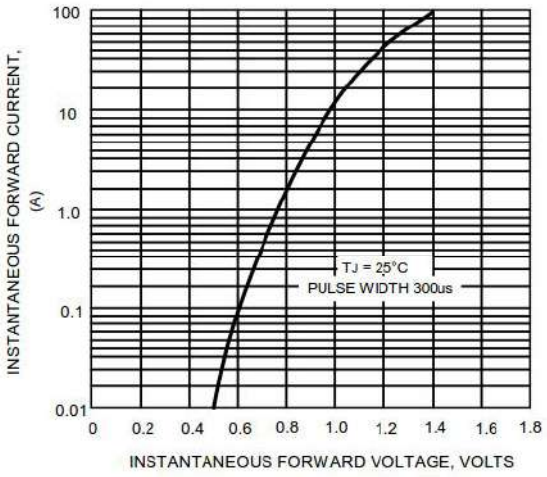
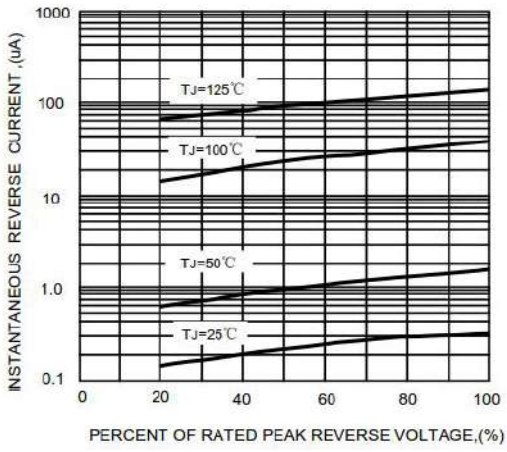


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

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GBJ3501 THRU GBJ3510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 35 Ampere

FEATURES

◆Rating to 1000V PRV.

◆Ideal for printed circuit board.

◆Low forward voltage drop, high current capability.

◆Reliable low cost construction utilizing molded plastic technique results in inexpensive product.

◆The plastic material has UL flammability classification 94V-0.

◆Electrically isolated base-1500 Volts

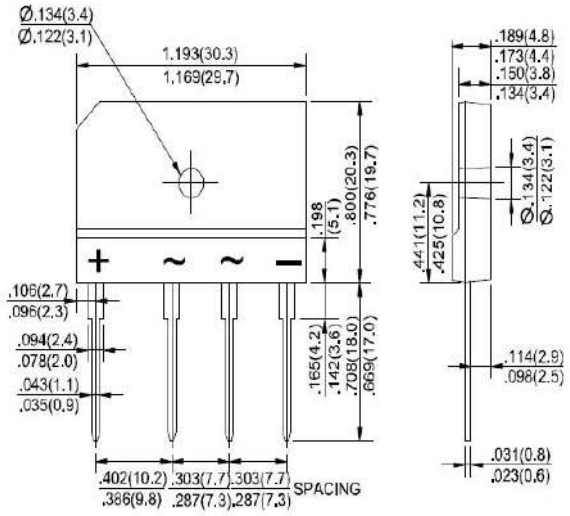
Mechanical Data

◆Polarity: Symbols molded on body.

◆Weight: 0.26 ounces, 7.0 grams.

◆Mounting position: Any.

GBJ



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBJ35005	GBJ3501	GBJ3502	GBJ3504	GBJ3506	GBJ3508	GBJ3510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2)Rectified Current @ TC=110 ℃ (without heatsink)	$I_{(AV)}$	35.0 5.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD)	I_{FSM}	400							A
Maximum forward Voltage at 17.5A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	10.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	510							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	85							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	0.6							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
2. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

GBJ3501 THRU GBJ3510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 35 Ampere

RATING AND CHARACTERISTIC CURVES GBJ3501 THRU GBJ3510

FIG.1-FORWARD CURRENT DERATING CURVE

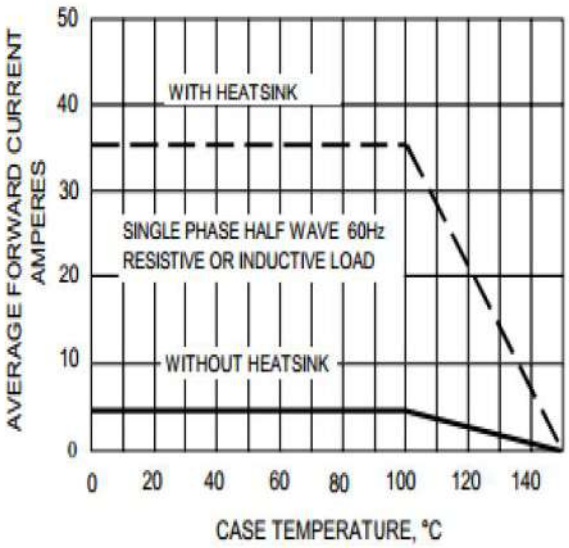


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

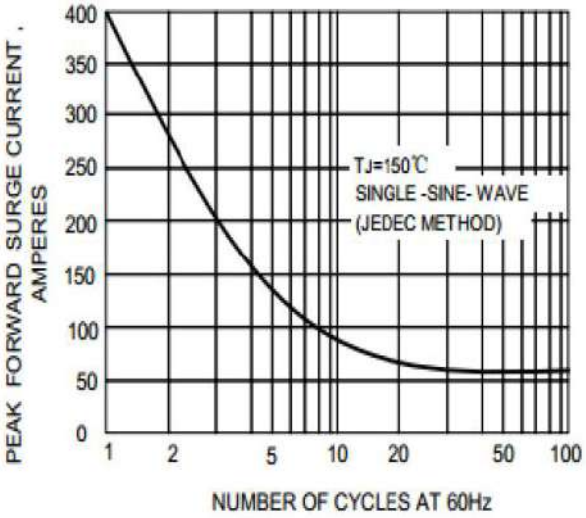


FIG.3-TYPICAL REVERSE CHARACTERISTICS

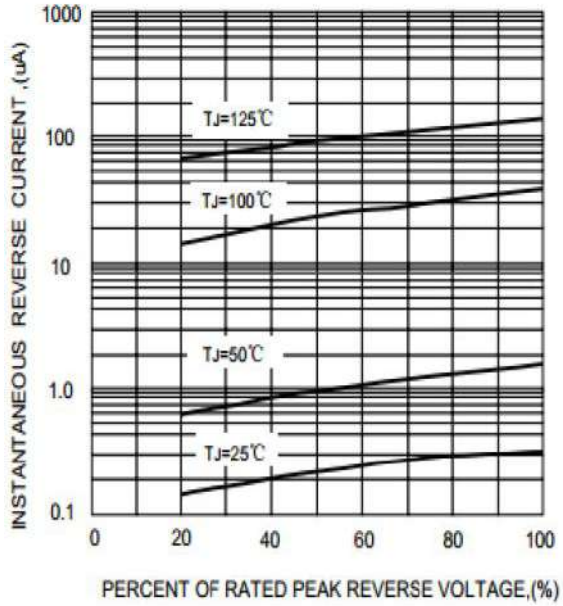
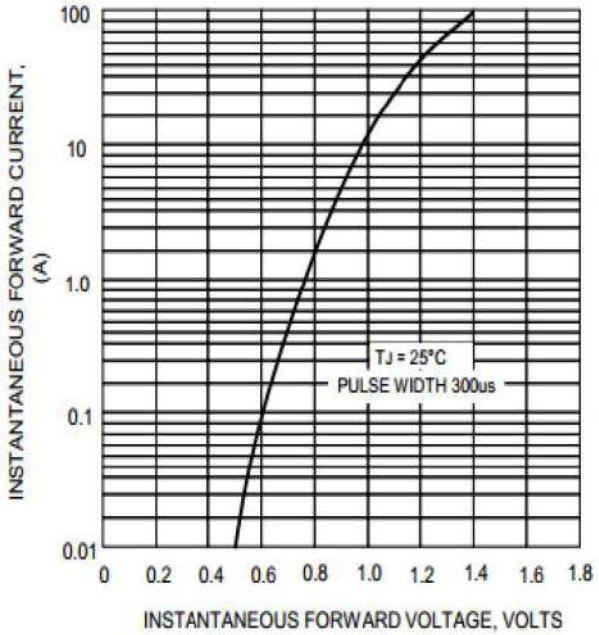


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

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GBPC15005 THRU GBPC1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

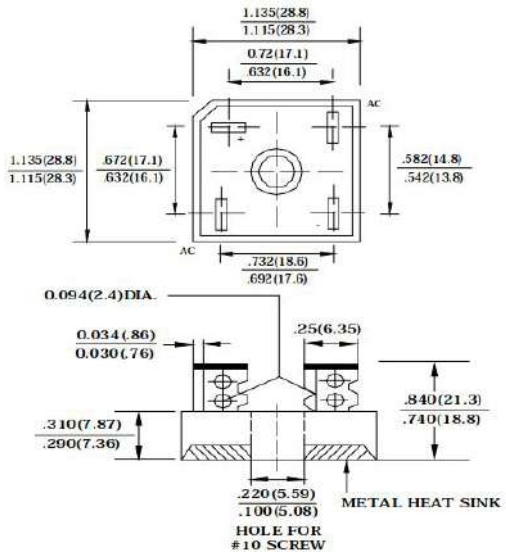
FEATURES

- ◆Rating to 1000V PRV.
- ◆High efficiency.
- ◆Glass passivated chip junction.
- ◆Electrically isolated metal case for maximum heat dissipation.
- ◆The plastic material has UL flammability classification 94V-0.
- ◆Electrically isolated base-2500 Volts

Mechanical Data

- ◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation.
- ◆Polarity: As marked on Body.
- ◆Mounting : Hole for # 10 screw.
- ◆Weight : 0.55 ounces , 15.6 grams (terminal).

GBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBPC 15005	GBPC 1501	GBPC 1502	GBPC 1504	GBPC 1506	GBPC 1508	GBPC 1510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	15.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	300							A
Maximum forward Voltage at 7.5A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	374							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	300							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.9							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note : 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
2. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

GBPC15005 THRU GBPC1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

RATING AND CHARACTERISTIC CURVES GBPC15005 THRU GBPC1510

FIG.1 - FORWARD CURRENT DERATING CURVE

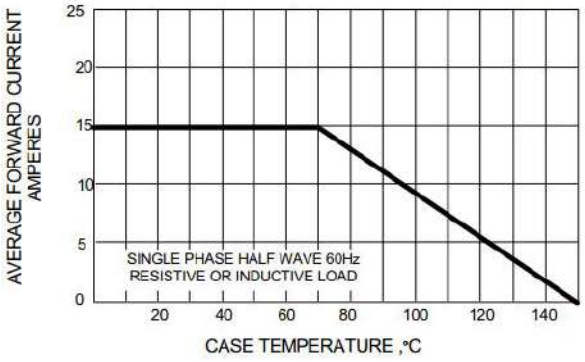


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

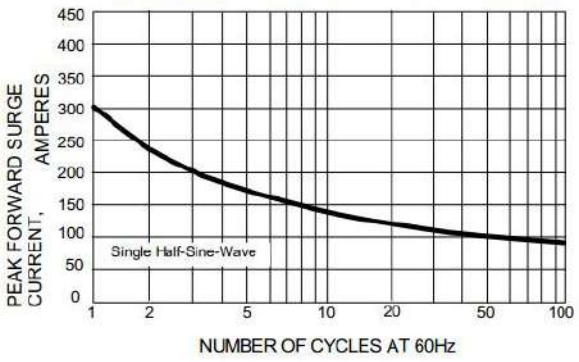


FIG.3 - TYPICAL JUNCTION CAPACITANCE

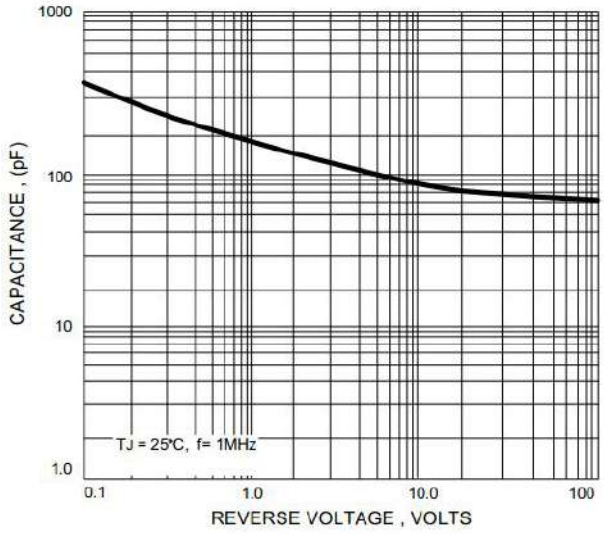


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

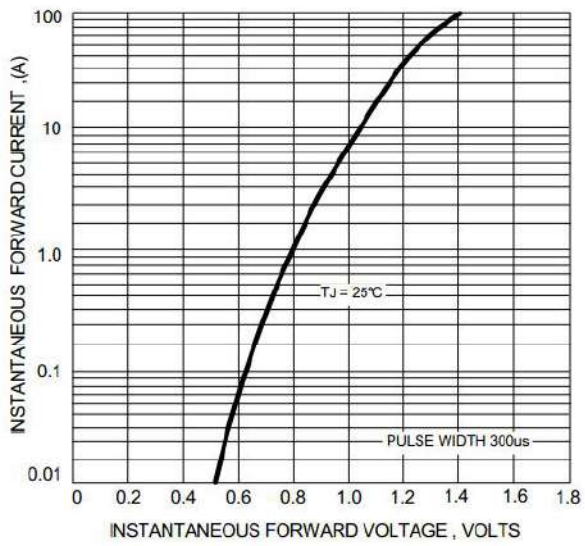
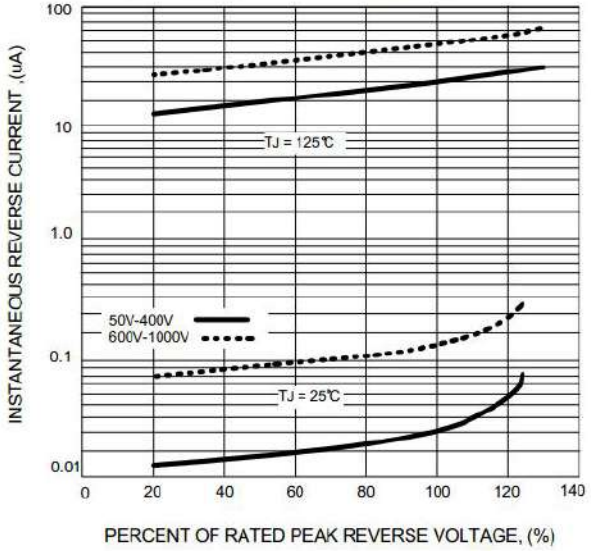


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

GBPC15005W THRU GBPC1510W

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

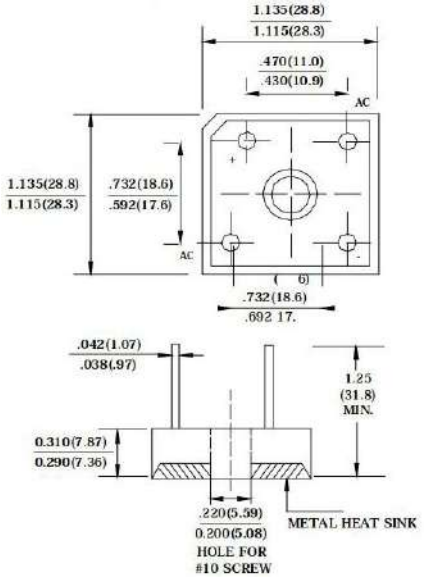
FEATURES

- ◆Rating to 1000V PRV.
- ◆High efficiency.
- ◆Glass passivated chip junction.
- ◆Electrically isolated metal case for maximum heat dissipation.
- ◆The plastic material has UL flammability classification 94V-0.
- ◆Electrically isolated base-2500 Volts

Mechanical Data

- ◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation.
- ◆Polarity: As marked on Body.
- ◆Mounting : Hole for # 10 screw.
- ◆Weight : 0.47 ounces , 13.4 grams (wire).

GBPC-W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBPC 15005W	GBPC 1501W	GBPC 1502W	GBPC 1504W	GBPC 1506W	GBPC 1508W	GBPC 1510W	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	15.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	300							A
Maximum forward Voltage at 7.5A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	374							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	110							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.9							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
2. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

GBPC15005W THRU GBPC1510W

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

RATING AND CHARACTERISTIC CURVES GBPC15005W THRU GBPC1510W

FIG.1 - FORWARD CURRENT DERATING CURVE

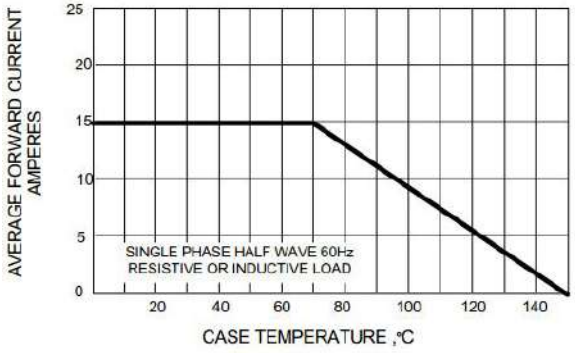


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

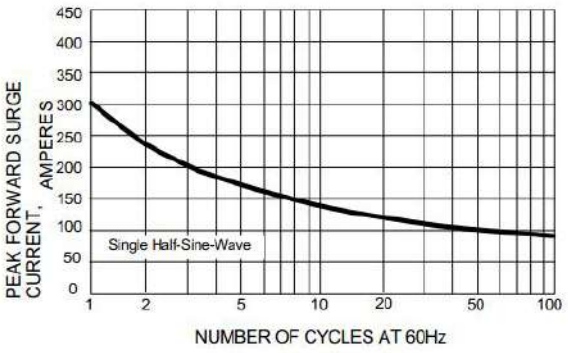


FIG.3 - TYPICAL JUNCTION CAPACITANCE

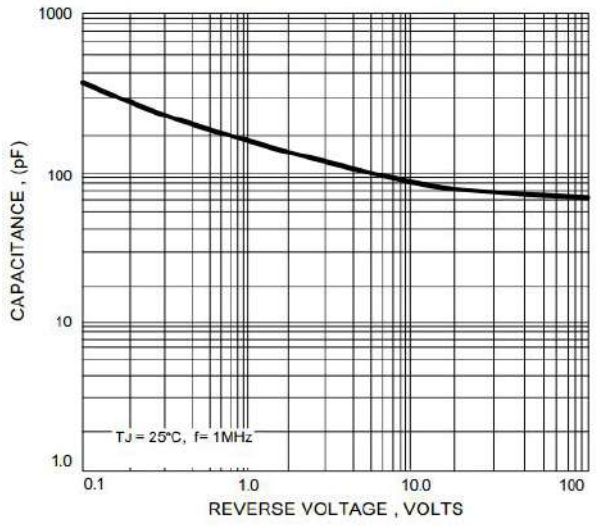


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

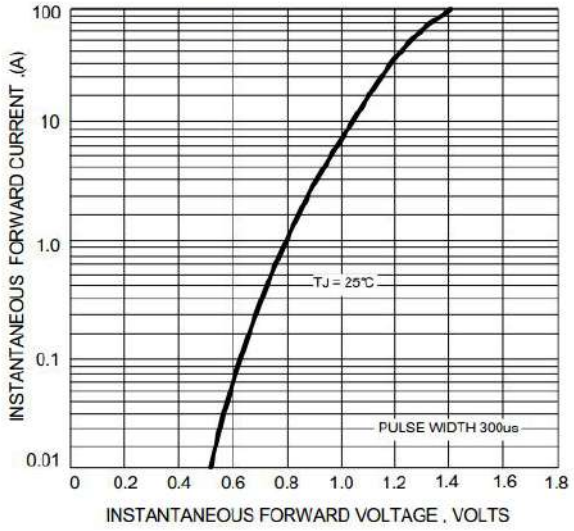
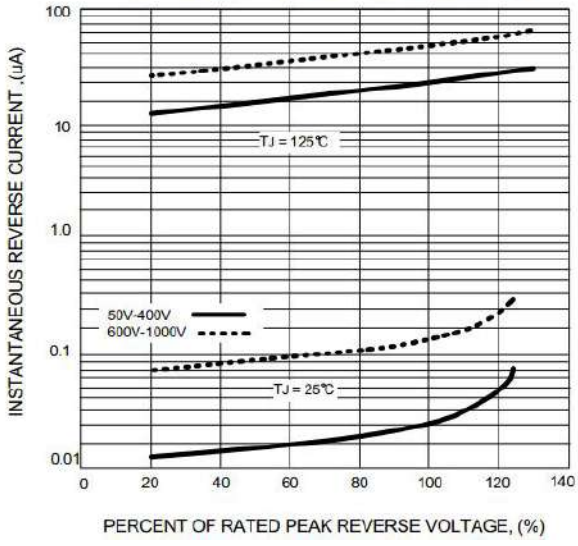


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

GBPC25005 THRU GBPC2510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 25 Ampere

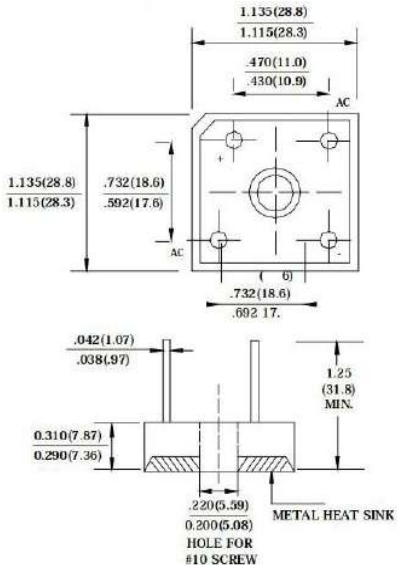
FEATURES

- ◆Rating to 1000V PRV.
- ◆High efficiency.
- ◆Glass passivated chip junction.
- ◆Electrically isolated metal case for maximum heat dissipation.
- ◆The plastic material has UL flammability classification 94V-0.
- ◆Electrically isolated base-2500 Volts

Mechanical Data

- ◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation.
- ◆Polarity: As marked on Body.
- ◆Mounting : Hole for # 10 screw.
- ◆Weight : 0.55 ounces , 15.6 grams (terminal).

GBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBPC 25005	GBPC 2501	GBPC 2502	GBPC 2504	GBPC 2506	GBPC 2508	GBPC 2510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	25.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	300							A
Maximum forward Voltage at 12.5A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	375							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	300							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.9							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
2.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
3 Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

GBPC25005 THRU GBPC2510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 25 Ampere

RATING AND CHARACTERISTIC CURVES GBPC25005 THRU GBPC2510

FIG.1 - FORWARD CURRENT DERATING CURVE

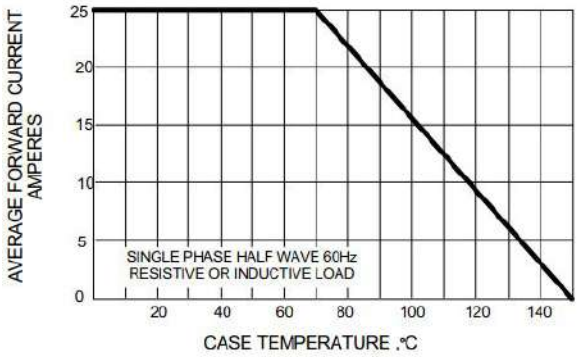


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

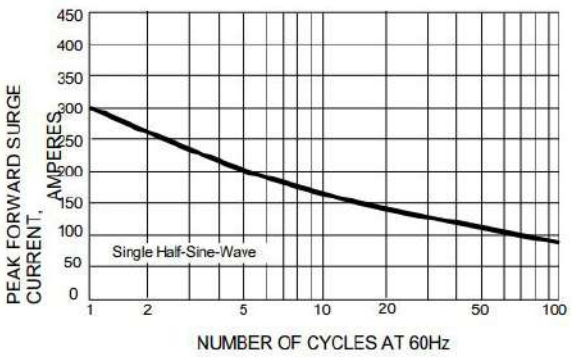


FIG.3 - TYPICAL JUNCTION CAPACITANCE

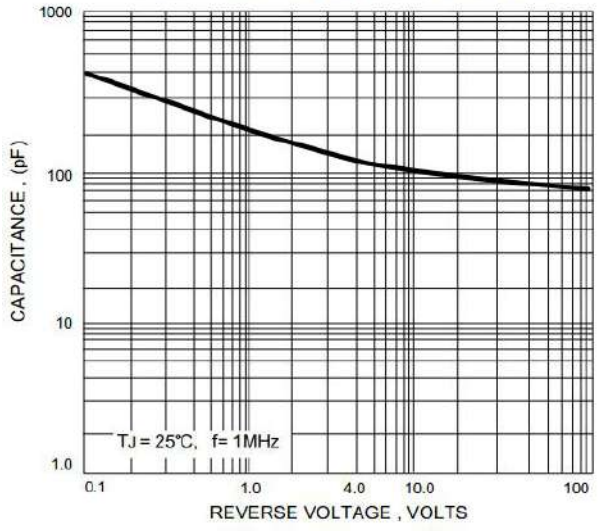


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

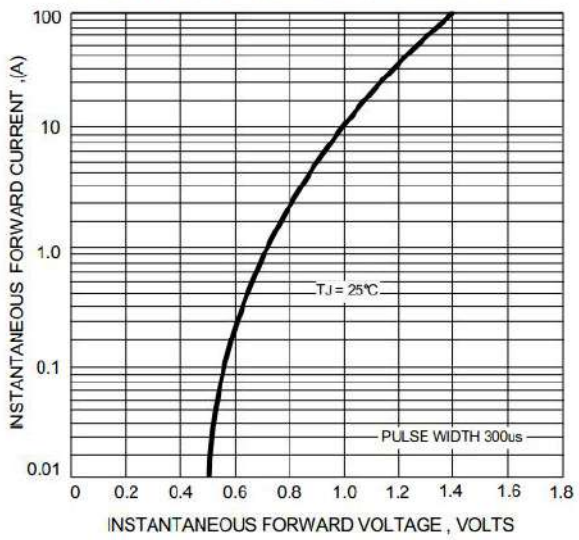
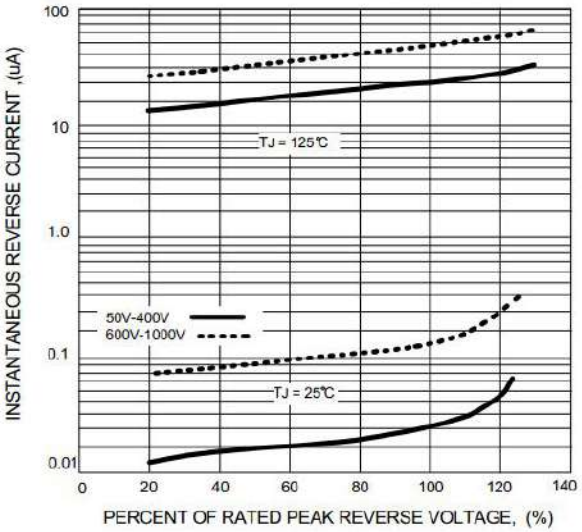


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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Suntan® Su®

GBPC25005W THRU GBPC2510W

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 25 Ampere

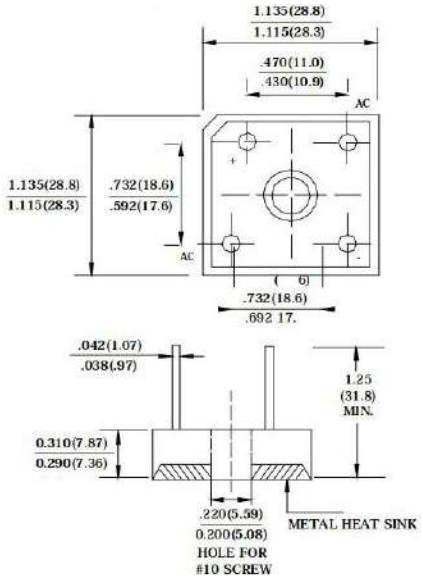
FEATURES

- ◆Rating to 1000V PRV.
- ◆High efficiency.
- ◆Glass passivated chip junction.
- ◆Electrically isolated metal case for maximum heat dissipation.
- ◆The plastic material has UL flammability classification 94V-0.
- ◆Electrically isolated base-2500 Volts

Mechanical Data

- ◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation.
- ◆Polarity: As marked on Body.
- ◆Mounting : Hole for # 10 screw.
- ◆Weight :0.47 ounces , 13.4 grams (wire).

GBPC-W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBPC 25005W	GBPC 2501W	GBPC 2502W	GBPC 2504W	GBPC 2506W	GBPC 2508W	GBPC 2510W	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	25.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	300							A
Maximum forward Voltage at 12.5A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	508							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	130							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.9							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
2.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

GBPC25005W THRU GBPC2510W

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 25 Ampere

RATING AND CHARACTERISTIC CURVES GBPC25005W THRU GBPC2510W

FIG.1 - FORWARD CURRENT DERATING CURVE

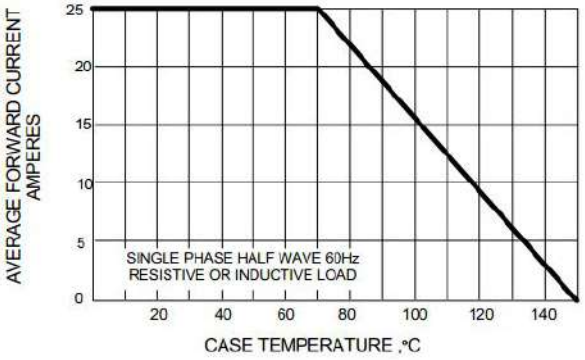


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

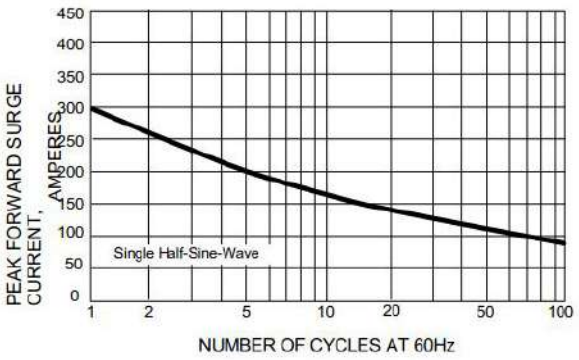


FIG.3 - TYPICAL JUNCTION CAPACITANCE

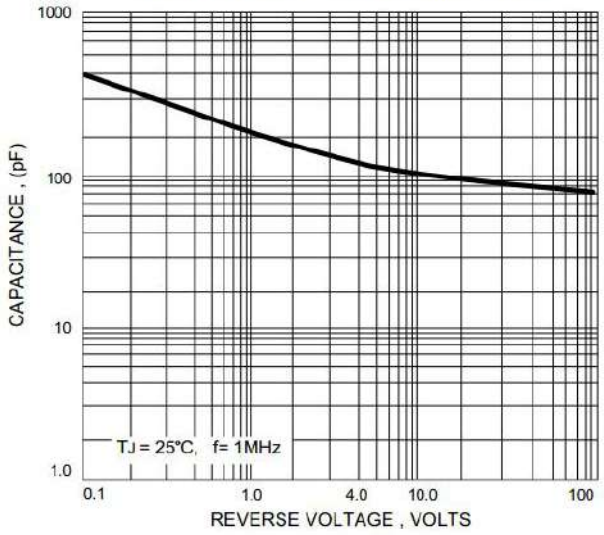


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

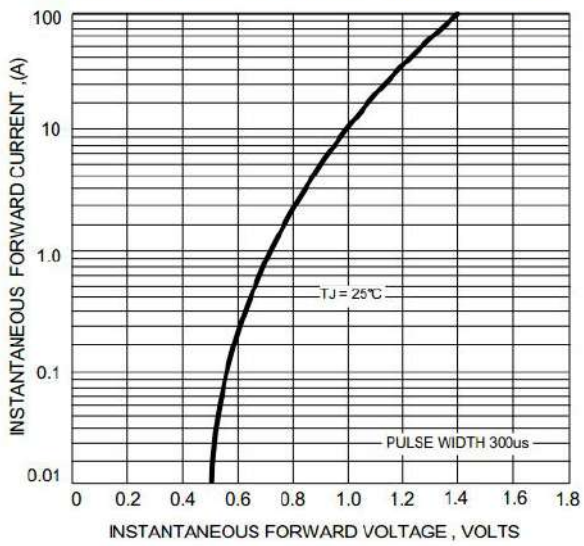
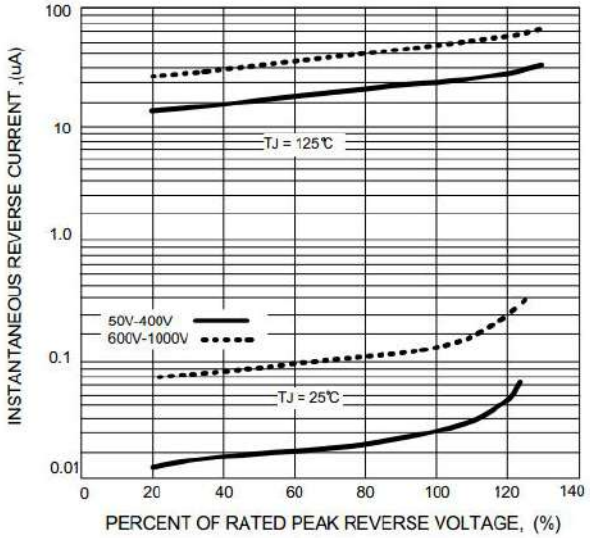


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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Suntan® Su®

GBPC35005 THRU GBPC3510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 35 Ampere

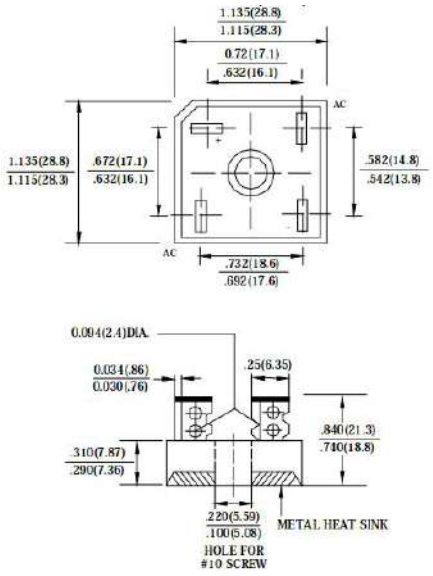
FEATURES

- ◆Rating to 1000V PRV.
- ◆High efficiency.
- ◆Glass passivated chip junction.
- ◆Electrically isolated metal case for maximum heat dissipation.
- ◆The plastic material has UL flammability classification 94V-0.
- ◆Electrically isolated base-2500 Volts

Mechanical Data

- ◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation.
- ◆Polarity: As marked on Body.
- ◆Mounting : Hole for # 10 screw.
- ◆Weight : 0.55 ounces , 15.6 grams (terminal) .

GBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBPC 35005	GBPC 3501	GBPC 3502	GBPC 3504	GBPC 3506	GBPC 3508	GBPC 3510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	35.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	400							A
Maximum forward Voltage at 17.5A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	660							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	300							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.4							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note : 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
2.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

GBPC35005 THRU GBPC3510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 35 Ampere

RATING AND CHARACTERISTIC CURVES GBPC35005 THRU GBPC3510

FIG.1 - FORWARD CURRENT DERATING CURVE

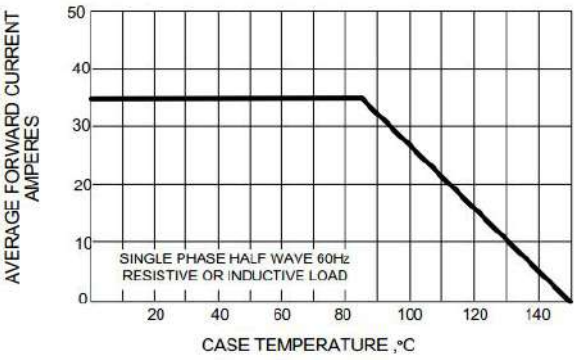


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

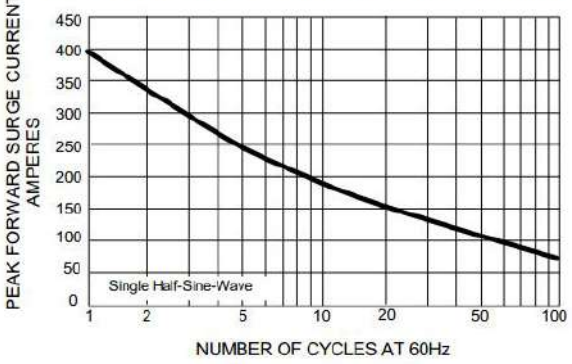


FIG.3 - TYPICAL JUNCTION CAPACITANCE

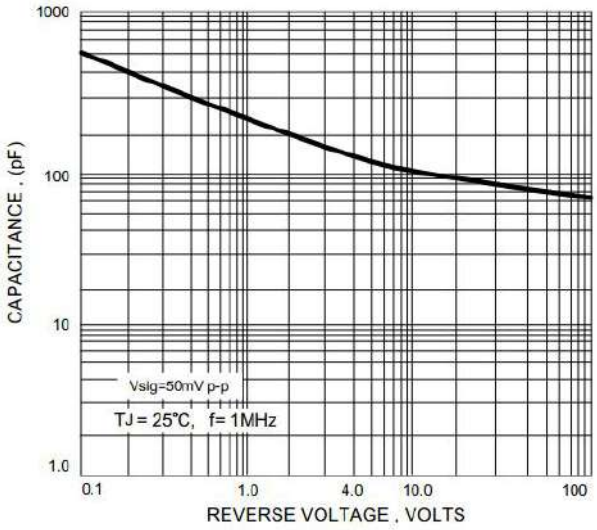


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

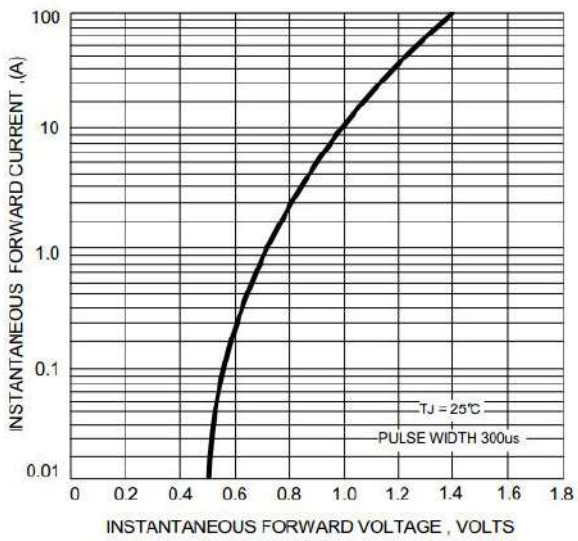
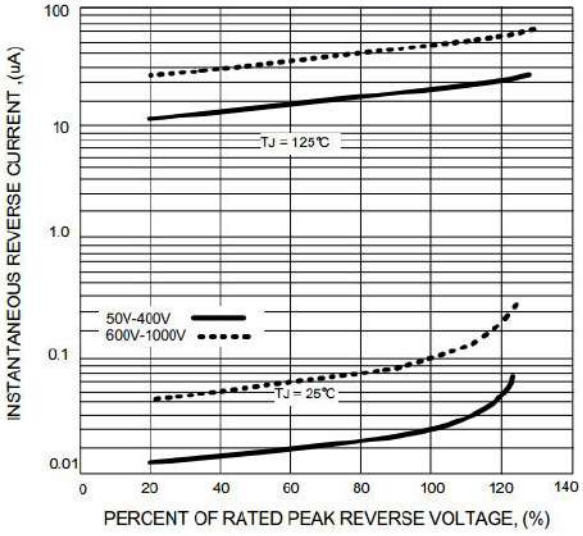


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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Suntan® Su®

GBPC35005W THRU GBPC3510W

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 35 Ampere

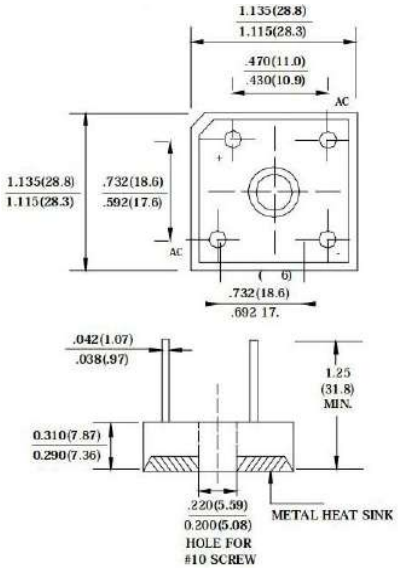
FEATURES

- ◆Rating to 1000V PRV.
- ◆High efficiency.
- ◆Glass passivated chip junction.
- ◆Electrically isolated metal case for maximum heat dissipation.
- ◆The plastic material has UL flammability classification 94V-0.
- ◆Electrically isolated base-2500 Volts

Mechanical Data

- ◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation.
- ◆Polarity: As marked on Body.
- ◆Mounting : Hole for # 10 screw.
- ◆Weight : 0.47 ounces , 13.4 grams (wire) .

GBPC-W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBPC 35005W	GBPC 3501W	GBPC 3502W	GBPC 3504W	GBPC 3506W	GBPC 3508W	GBPC 3510W	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	35.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	400							A
Maximum forward Voltage at 17.5A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	660							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	150							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.4							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note : 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
2.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

GBPC35005W THRU GBPC3510W

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 35 Ampere

RATING AND CHARACTERISTIC CURVES GBPC35005W THRU GBPC3510W

FIG.1 - FORWARD CURRENT DERATING CURVE

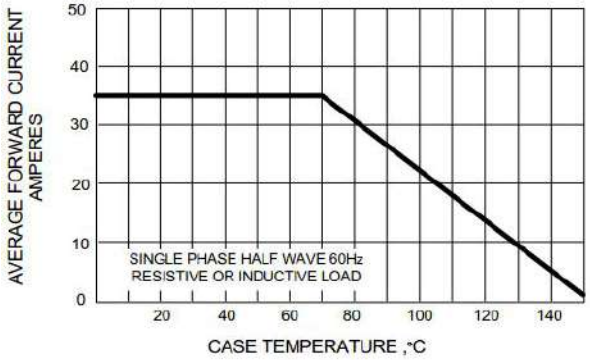


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

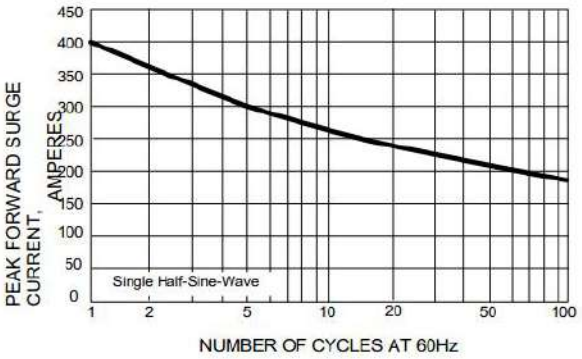


FIG.3 - TYPICAL JUNCTION CAPACITANCE

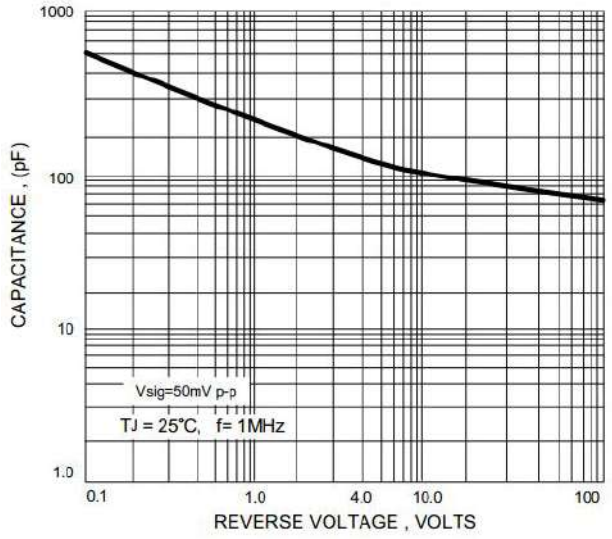


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

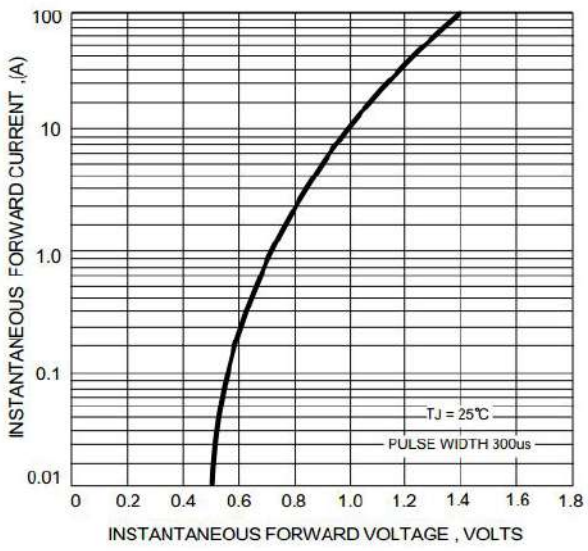
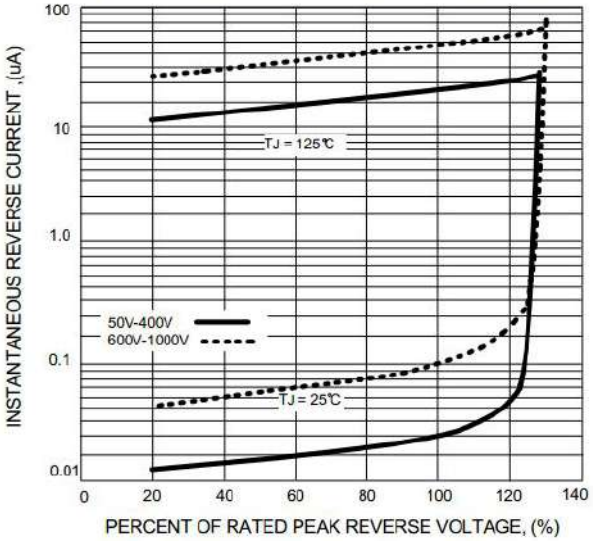


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

GBPC50005 THRU GBPC5010

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 50 Ampere

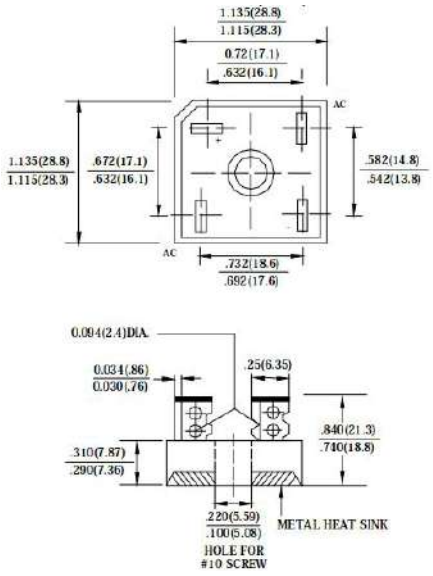
FEATURES

◆Rating to 1000V PRV.
◆High efficiency.
◆Glass passivated chip junction.
◆Electrically isolated metal case for maximum heat dissipation.
◆The plastic material has UL flammability classification 94V-0.
◆Electrically isolated base-2500 Volts

Mechanical Data

◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation.
◆Polarity: As marked on Body.
◆Mounting : Hole for # 10 screw.
◆Weight : 0.63 ounces , 18.0 grams (terminal)
0.51 ounces , 14.5 grams (wire).

GBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBPC 50005	GBPC 5001	GBPC 5002	GBPC 5004	GBPC 5006	GBPC 5008	GBPC 5010	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	50.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	450							A
Maximum forward Voltage at 25A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	800							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	150							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.4							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note : 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
2.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

GBPC50005 THRU GBPC5010

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 50 Ampere

RATING AND CHARACTERISTIC CURVES GBPC50005 THRU GBPC5010

FIG.1 - FORWARD CURRENT DERATING CURVE

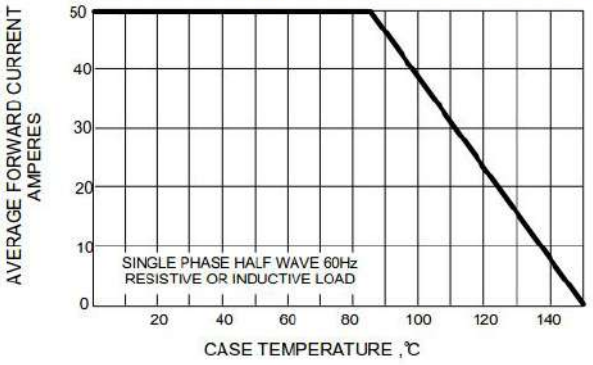


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

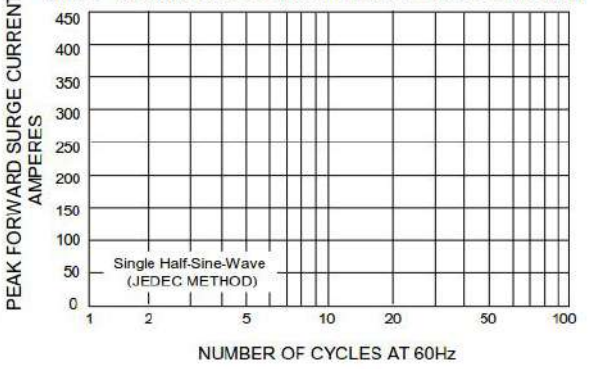


FIG.3 - TYPICAL JUNCTION CAPACITANCE

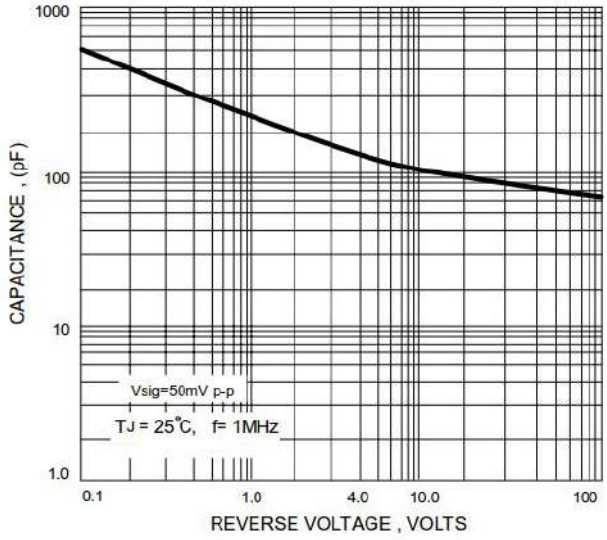


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

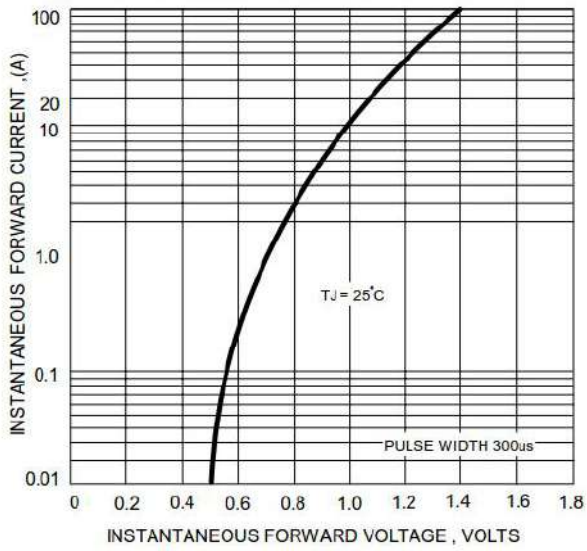
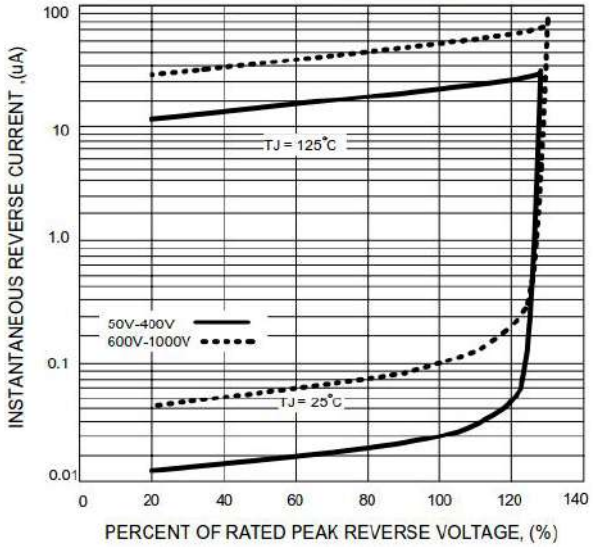


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

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GBPC50005W THRU GBPC5010W

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 50 Ampere

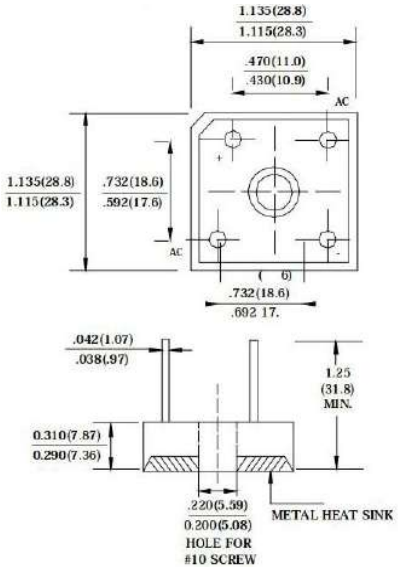
FEATURES

◆Rating to 1000V PRV.
◆High efficiency.
◆Glass passivated chip junction.
◆Electrically isolated metal case for maximum heat dissipation.
◆The plastic material has UL flammability classification 94V-0.
◆Electrically isolated base-2500 Volts

Mechanical Data

◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation.
◆Polarity: As marked on Body.
◆Mounting : Hole for # 10 screw.
◆Weight : 0.63 ounces , 18.0 grams (terminal)
0.51 ounces , 14.5 grams (wire).

GBPC-W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBPC 50005W	GBPC 5001W	GBPC 5002W	GBPC 5004W	GBPC 5006W	GBPC 5008W	GBPC 5010W	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=110℃(without heatsink)	$I_{(AV)}$	50.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	400							A
Maximum forward Voltage at 25A DC	V_F	1.1							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500							μA
I^2t Rating for fusing(t<8.3ms)	I^2t	800							A^2S
Typical Junction Capacitance per element(Note 1)	C_J	150							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.4							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note : 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms.
2.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.
3. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

GBPC50005W THRU GBPC5010W

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIER
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 50 Ampere

RATING AND CHARACTERISTIC CURVES GBPC50005W THRU GBPC5010W

FIG.1 - FORWARD CURRENT DERATING CURVE

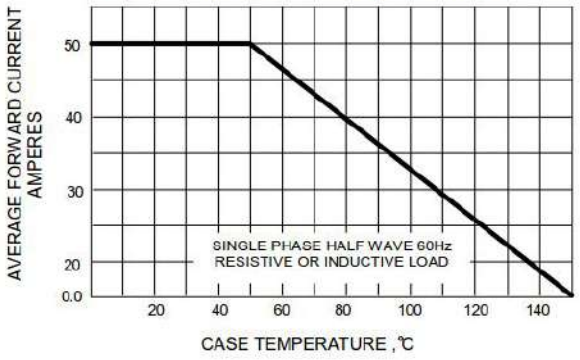


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

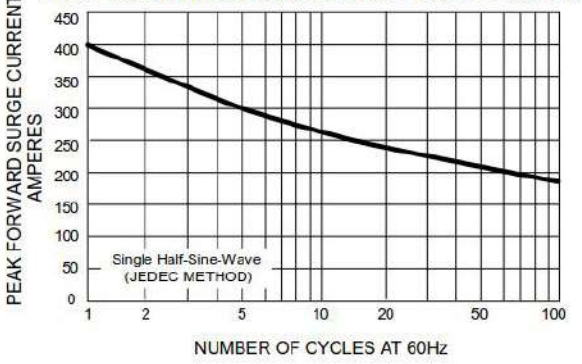


FIG.3 - TYPICAL JUNCTION CAPACITANCE

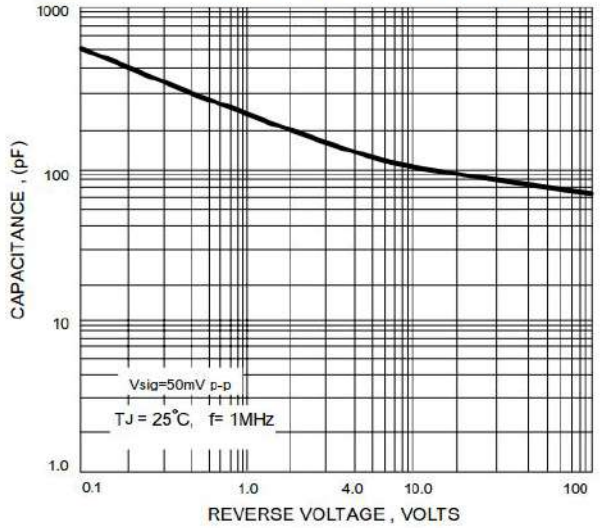


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

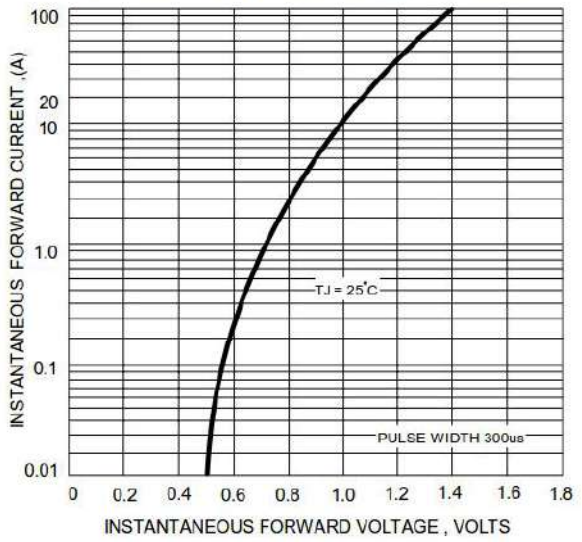
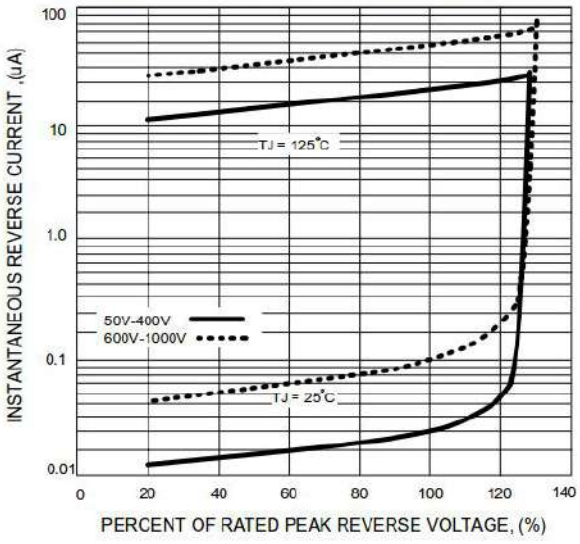


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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GBU401 THRU GBU410

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 4.0 Ampere

FEATURES

◆Rating to 1000V PRV.

◆Ideal for printed circuit board.

◆Reliable low cost construction utilizing molded plastic Technique.

◆The plastic material has UL flammability classification 94V-0.

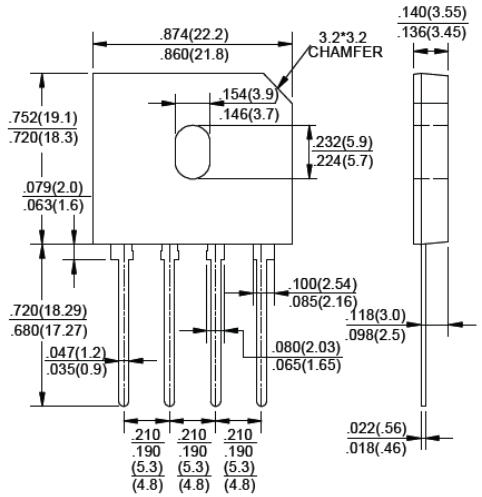
Mechanical Data

◆Polarity: As marked on Body.

◆Weight: 0.15 ounces, 4.0 grams.

◆Mounting position: Any.

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=100℃(without heatsink)	$I_{(AV)}$	4.0 2.4						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150						A
Maximum forward Voltage at 2.0A DC	V_F	1.0						V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500						μA
I^2t Rating for fusing(t<8.3ms)	I^2t	93						A^2S
Typical Junction Capacitance per element(Note 1)	C_J	40						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	3.0						℃/W
Operating Temperature Range	T_J	-55 to +150						℃
Storage Temperature Range	T_{STG}	-55 to +150						℃

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.

2. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

GBU401 THRU GBU410

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 4.0 Ampere

RATING AND CHARACTERISTIC CURVES GBU401 THRU GBU410

FIG.1-FORWARD CURRENT DERATING CURVE

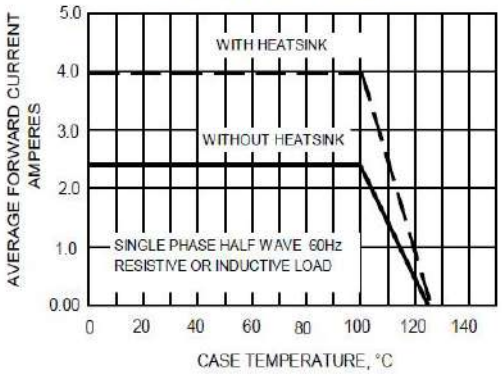


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

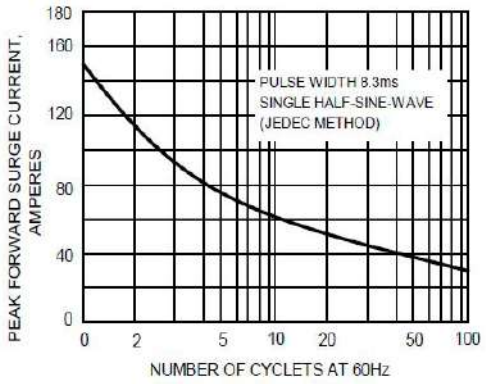


FIG.3-TYPICAL JUNCTION CAPACITANCE

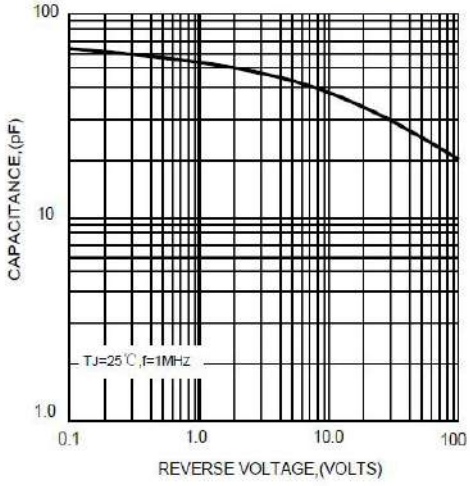


FIG.4-TYPICAL FORWARD CHARACTERISTICS

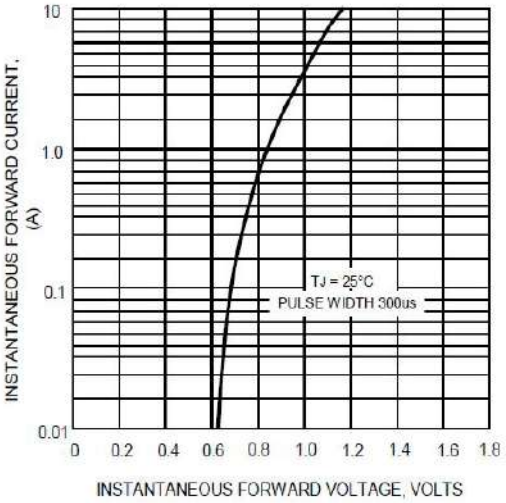
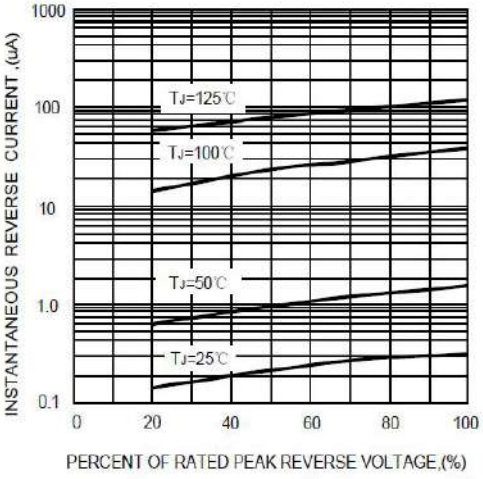


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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GBU401 THRU GBU410

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 4.0 Ampere

FEATURES

◆Rating to 1000V PRV.

◆Ideal for printed circuit board.

◆Reliable low cost construction utilizing molded plastic Technique.

◆The plastic material has UL flammability classification 94V-0.

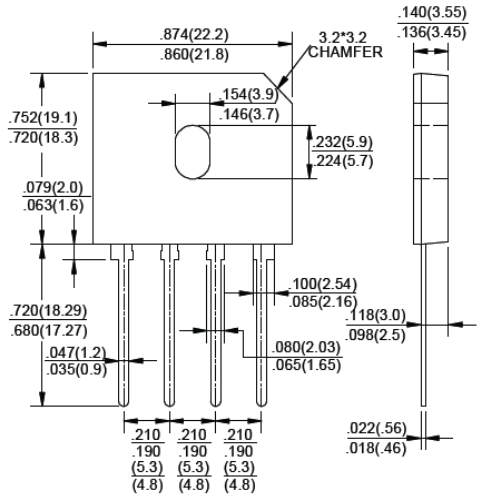
Mechanical Data

◆Polarity: As marked on Body.

◆Weight: 0.15 ounces, 4.0 grams.

◆Mounting position: Any.

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBU401	GBU402	GBU404	GBU406	GBU408	GBU410	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2) Rectified Current @ T_C=100℃(without heatsink)	$I_{(AV)}$	4.0 2.4						A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	150						A
Maximum forward Voltage at 2.0A DC	V_F	1.0						V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking voltage @T_J=125℃	I_R	5.0 500						μA
I^2t Rating for fusing(t<8.3ms)	I^2t	93						A^2S
Typical Junction Capacitance per element(Note 1)	C_J	40						pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	3.0						℃/W
Operating Temperature Range	T_J	-55 to +150						℃
Storage Temperature Range	T_{STG}	-55 to +150						℃

Note: 1.Measured at 1.0M Hz and applied reversed voltage of 4.0 VDC.

2. Device mounted on 50mm x 50mm x 1.6mm Cu Plate Heatsink.

GBU401 THRU GBU410

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 100 to 1000 Volts FORWARD CURRENT 4.0 Ampere

RATING AND CHARACTERISTIC CURVES GBU401 THRU GBU410

FIG.1-FORWARD CURRENT DERATING CURVE

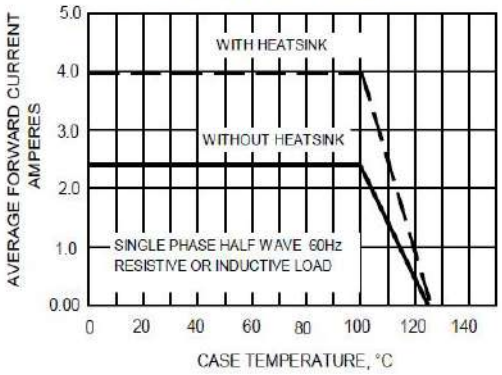


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

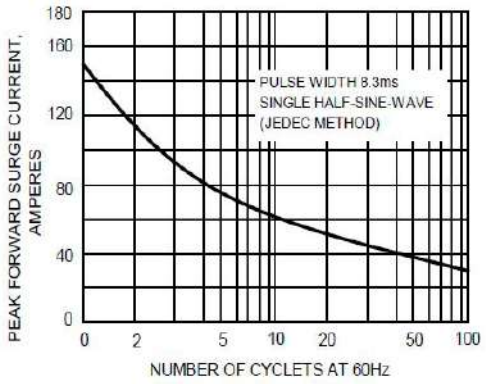


FIG.3-TYPICAL JUNCTION CAPACITANCE

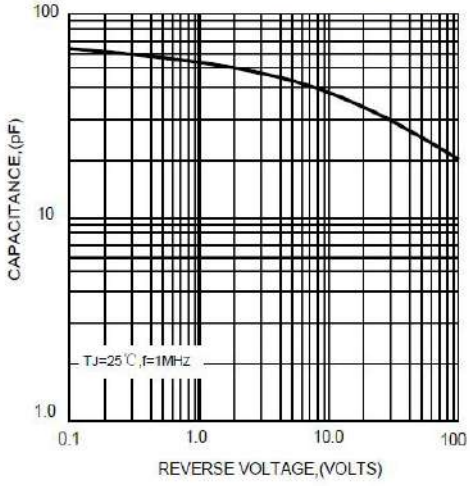


FIG.4-TYPICAL FORWARD CHARACTERISTICS

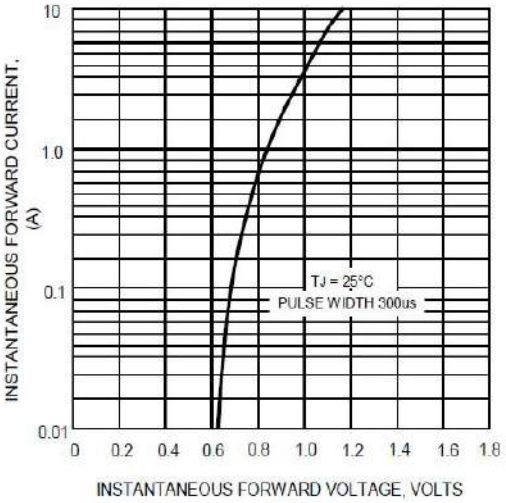
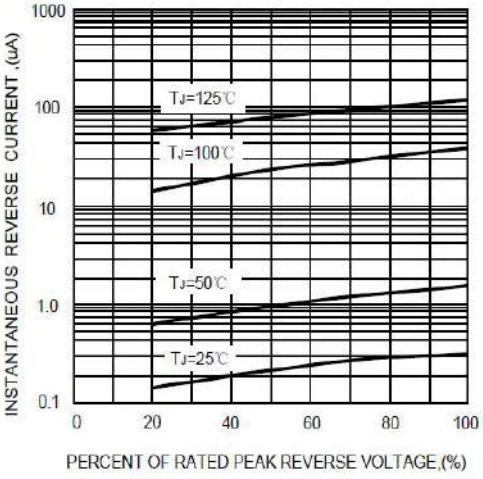


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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GBU6005 THRU GBU610

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 6.0 Ampere

FEATURES

◆Rating to 1000V PRV

◆Ideal for printed circuit board

◆Reliable low cost construction utilizing molded plastic Technique

◆The plastic material has UL flammability classification 94V-0

◆Electrically isolated base-1500 Volts

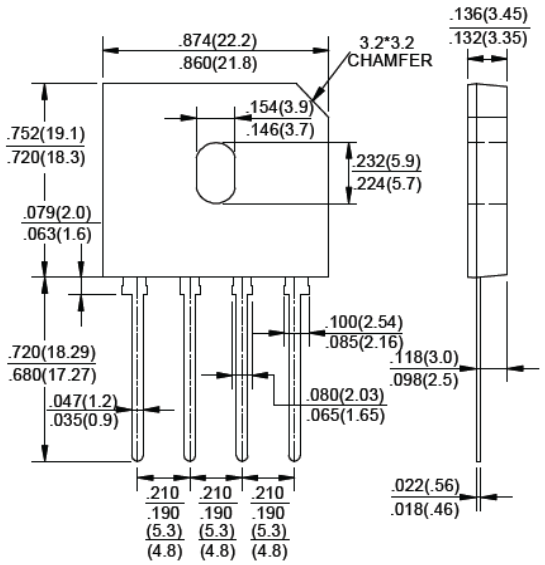
Mechanical Data

◆Polarity : As marked on Body

◆Weight : 0.15 ounces, 4.0 grams

◆Mounting position : Any

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current, @ T_C=100℃(without heatsink)	$I_{(AV)}$	6.0 2.8							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	175							A
Maximum Forward Voltage at 3.0A DC	V_F	1.0							V
Maximum DC Reverse Current @ T_J = 25℃ at Rated DC blocking voltage @ T_J = 125℃	I_R	5.0 500							μA
I^2t Rating for fusing (t < 8.3ms)	I^2t	127							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	45							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.2							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

GBU6005 THRU GBU610

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 6.0 Ampere

RATING AND CHARACTERISTIC CURVES GBU6005 THRU GBU610

FIG.1-FORWARD CURRENT DERATING CURVE

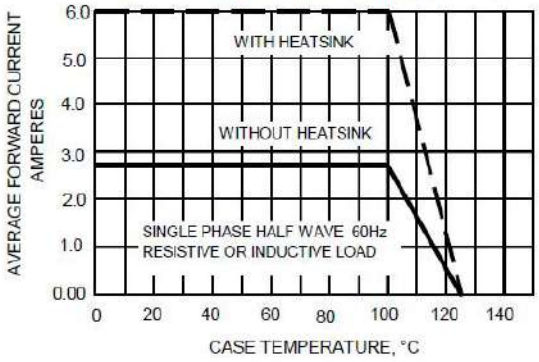


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

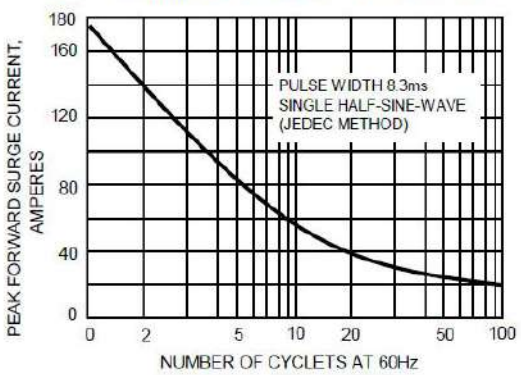


FIG.3-TYPICAL JUNCTION CAPACITANCE

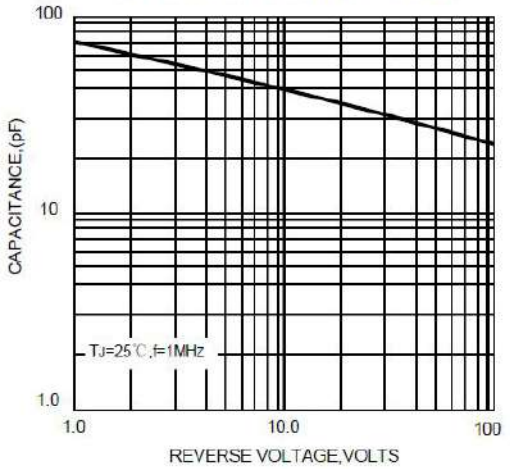


FIG.4-TYPICAL FORWARD CHARACTERISTICS

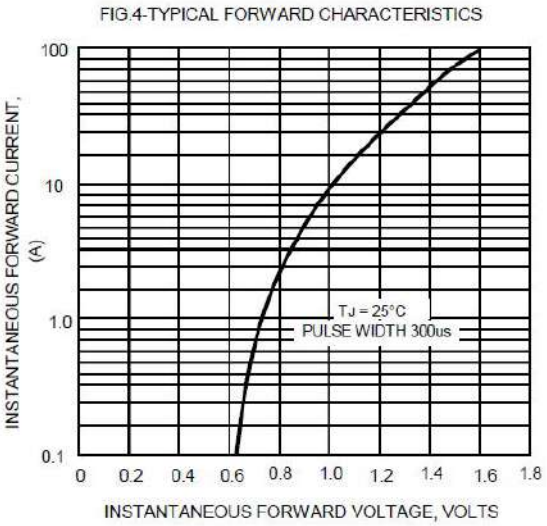
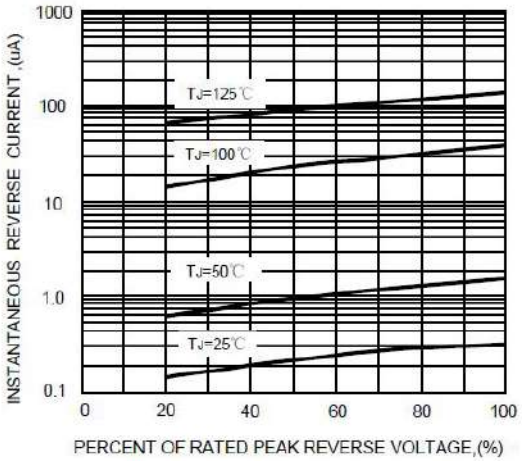


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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GBU6005 THRU GBU610

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 6.0 Ampere

FEATURES

◆Rating to 1000V PRV

◆Ideal for printed circuit board

◆Reliable low cost construction utilizing molded plastic Technique

◆The plastic material has UL flammability classification 94V-0

◆Electrically isolated base-1500 Volts

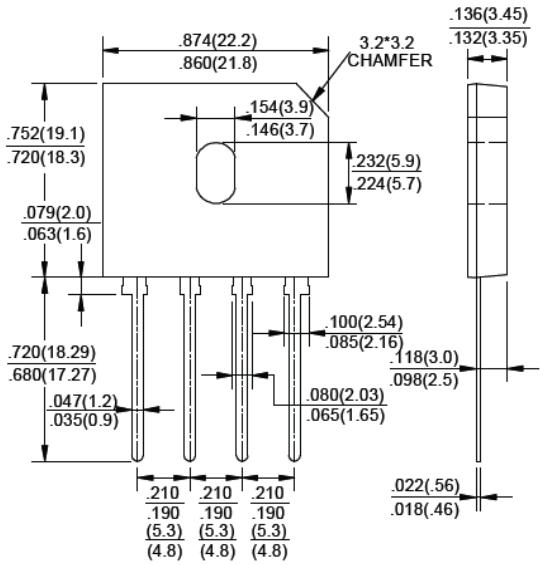
Mechanical Data

◆Polarity : As marked on Body

◆Weight : 0.15 ounces, 4.0 grams

◆Mounting position : Any

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current, @ T_C=100℃(without heatsink)	$I_{(AV)}$	6.0 2.8							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	175							A
Maximum Forward Voltage at 3.0A DC	V_F	1.0							V
Maximum DC Reverse Current @ T_J = 25℃ at Rated DC blocking voltage @ T_J = 125℃	I_R	5.0 500							μA
I^2t Rating for fusing (t < 8.3ms)	I^2t	127							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	45							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.2							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

GBU6005 THRU GBU610

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 6.0 Ampere

RATING AND CHARACTERISTIC CURVES GBU6005 THRU GBU610

FIG.1-FORWARD CURRENT DERATING CURVE

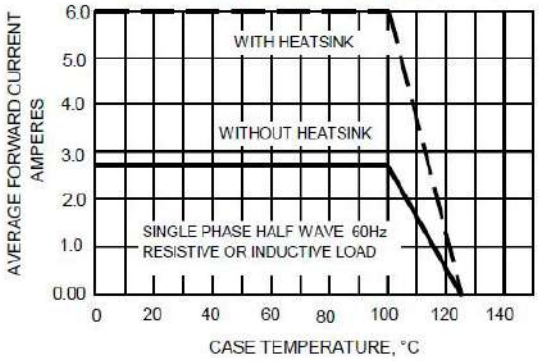


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

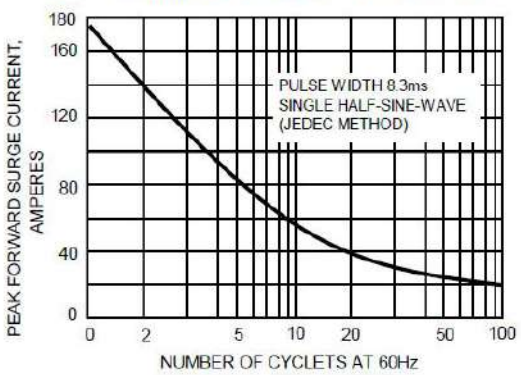


FIG.3-TYPICAL JUNCTION CAPACITANCE

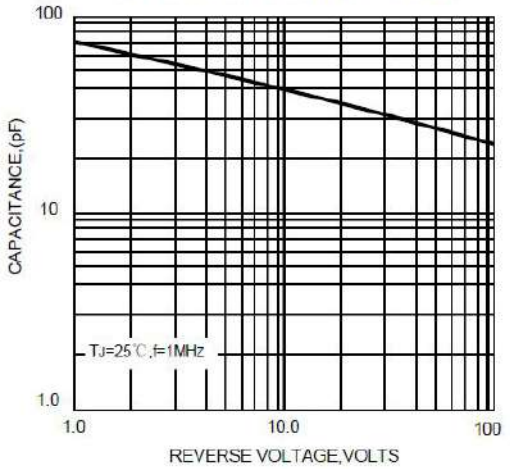


FIG.4-TYPICAL FORWARD CHARACTERISTICS

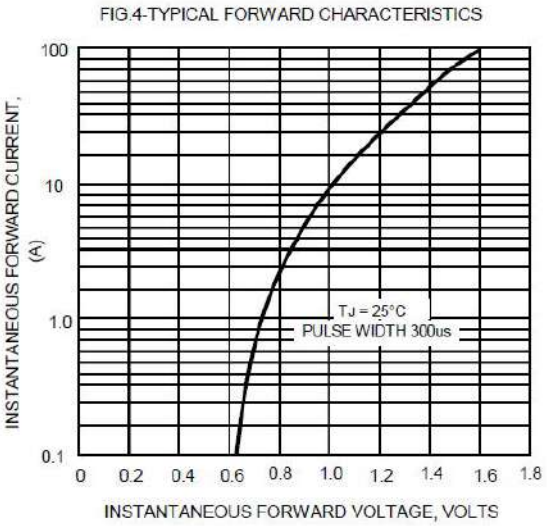
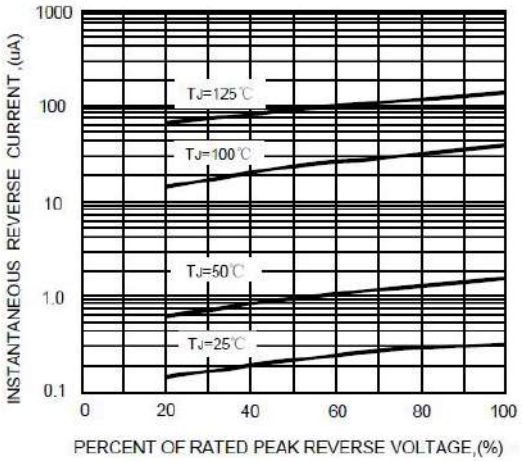


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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Suntan® Su®

GBU8005 THRU GBU810

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 8.0 Ampere

FEATURES

◆Rating to 1000V PRV

◆Ideal for printed circuit board

◆Reliable low cost construction utilizing molded plastic Technique

◆The plastic material has UL flammability classification 94V-0

◆Electrically isolated base-1500 Volts

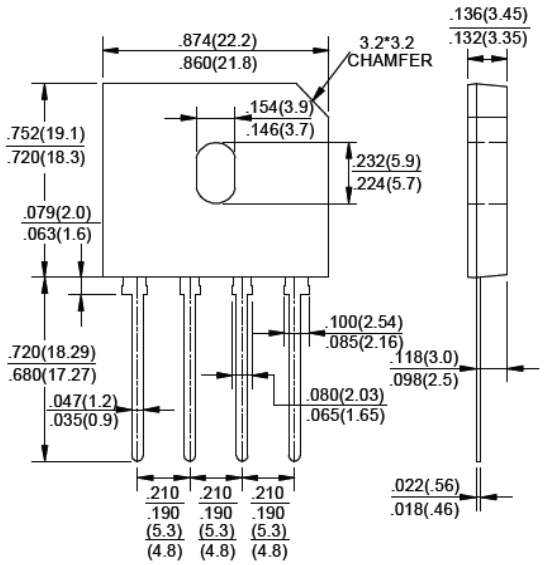
Mechanical Data

◆Polarity : Symbols molded on body

◆Weight : 0.15 ounces, 4.0 grams

◆Mounting position : Any

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBU 8005	GBU 801	GBU 802	GBU 804	GBU 806	GBU 808	GBU 810	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current, @ T_C=100℃(without heatsink)	$I_{(AV)}$	8.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	200							A
Maximum Forward Voltage at 4.0A DC	V_F	1.0							V
Maximum DC Reverse Current @ T_J = 25℃	I_R	5.0							μA
at Rated DC blocking voltage @ T_J = 125℃		500							
I^2t Rating for fusing (t < 8.3ms)	I^2t	166							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.2							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 100mm x 100mm x 1.6mm Cu Plate Heatsink.

Заказ г.Минск www.tiristor.by email: minsk17@tut.by viber и тел.+375447584780 www.fotorele.net

GBU8005 THRU GBU810

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 8.0 Ampere

RATING AND CHARACTERISTIC CURVES GBU8005 THRU GBU810

FIG.1-FORWARD CURRENT DERATING CURVE

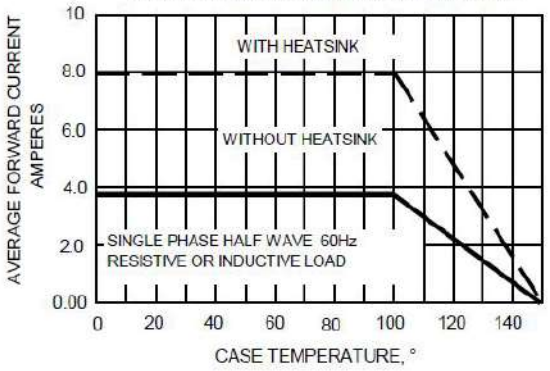


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

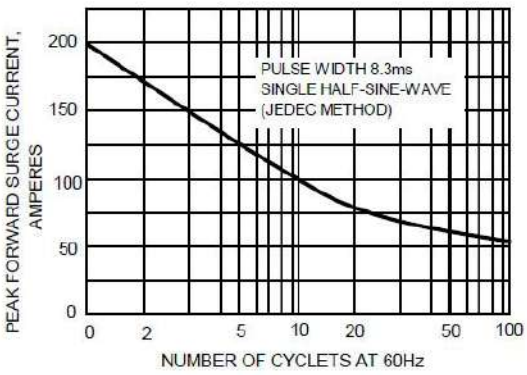


FIG.3-TYPICAL JUNCTION CAPACITANCE

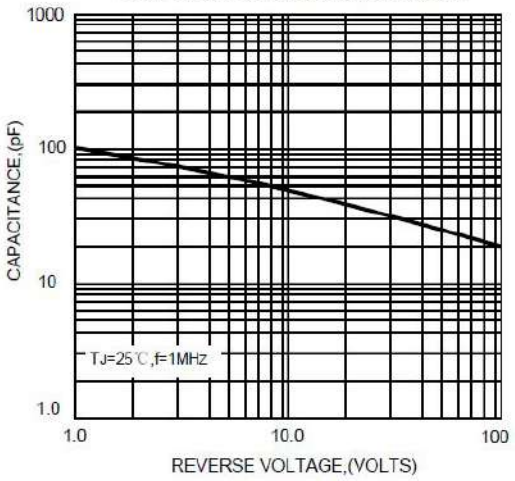


FIG.4-TYPICAL FORWARD CHARACTERISTICS

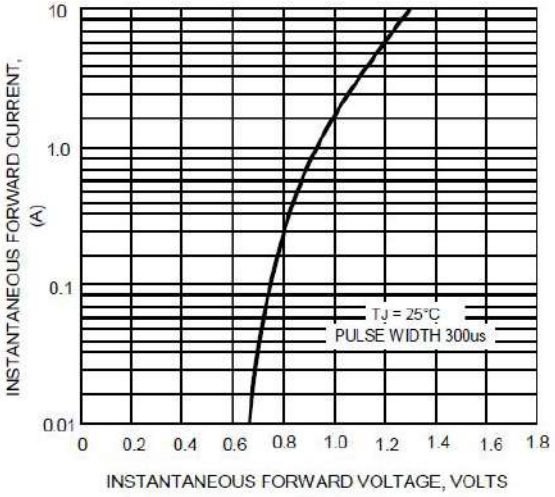
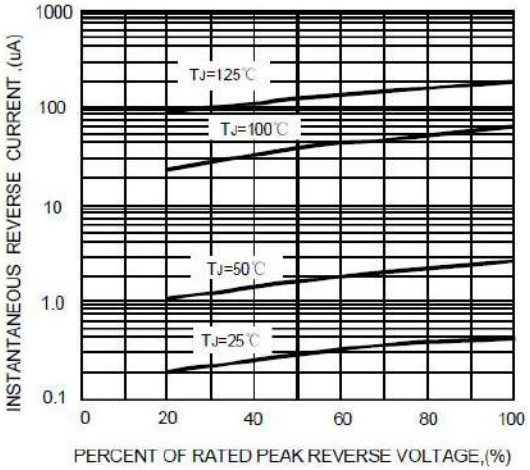


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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Suntan® Su®

GBU10005 THRU GB1010

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 10 Ampere

FEATURES

◆Rating to 1000V PRV

◆Ideal for printed circuit board

◆Reliable low cost construction utilizing molded plastic Technique

◆The plastic material has UL flammability classification 94V-0

◆Electrically isolated base-1500 Volts

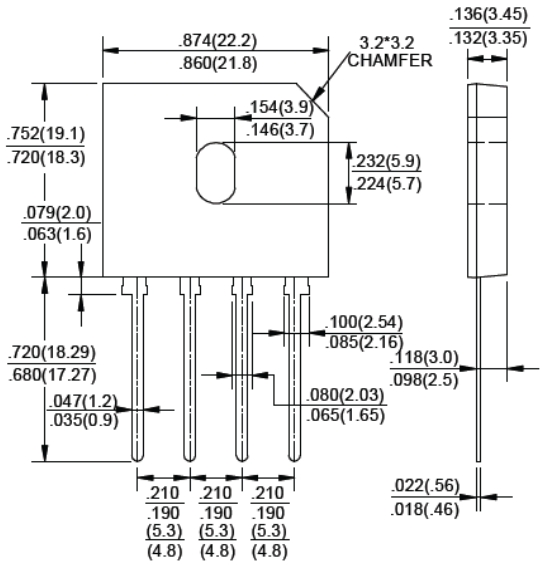
Mechanical Data

◆Polarity : As marked on Body

◆Weight : 0.15 ounces, 4.0 grams

◆Mounting position : Any

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBU 10005	GBU 1001	GBU 1002	GBU 1004	GBU 1006	GBU 1008	GBU 1010	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current, @ T_C=100℃(without heatsink)	$I_{(AV)}$	10							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	220							A
Maximum Forward Voltage at 5.0A DC	V_F	1.0							V
Maximum DC Reverse Current @ T_J = 25℃ at Rated DC blocking voltage @ T_J = 125℃	I_R	5.0 500							μA
I^2t Rating for fusing (t < 8.3ms)	I^2t	200							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 150mm x 150mm x 1.6mm Cu Plate Heatsink.

GBU10005 THRU GB1010

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 10 Ampere

RATING AND CHARACTERISTIC CURVES GBU10005 THRU GB1010

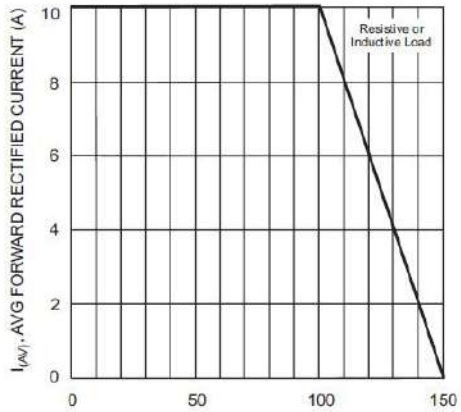


Fig. 1 Forward Current Derating Curve

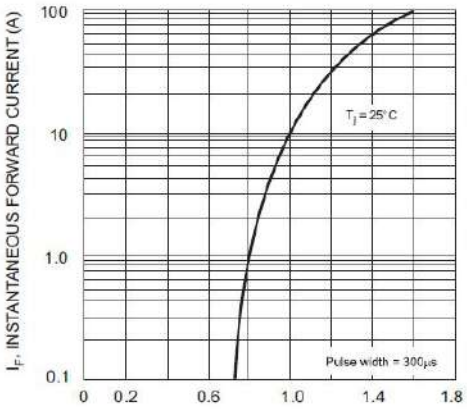


Fig. 2 Typical Forward Characteristics, per element

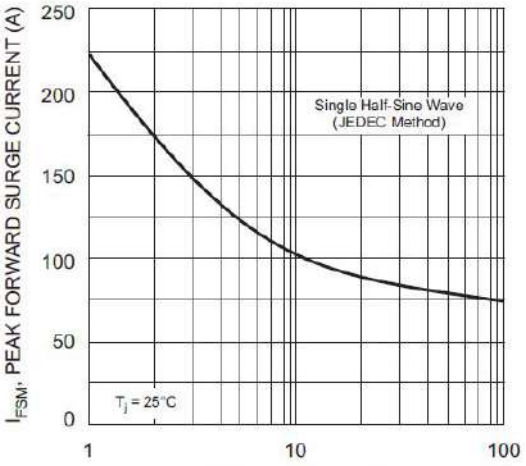


Fig. 3 Maximum Non-Repetitive Surge Current

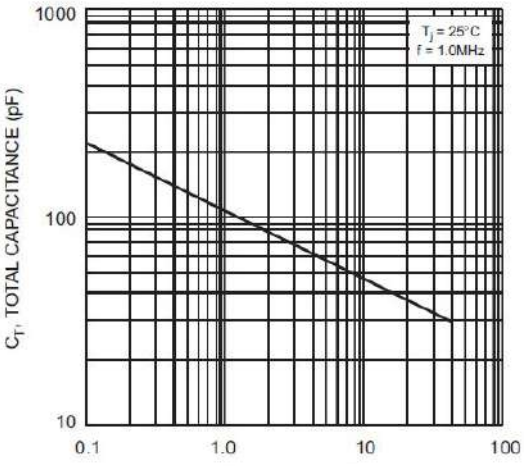
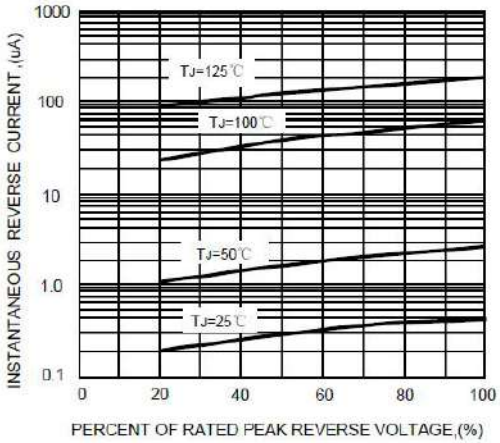


Fig. 4 Typical Total Capacitance, per element

FIG.5-TYPICAL REVERSE CHARACTERISTICS



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GBU15005 THRU GBU1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

FEATURES

◆Rating to 1000V PRV

◆Ideal for printed circuit board

◆Reliable low cost construction utilizing molded plastic Technique

◆The plastic material has UL flammability classification 94V-0

◆Electrically isolated base-1500 Volts

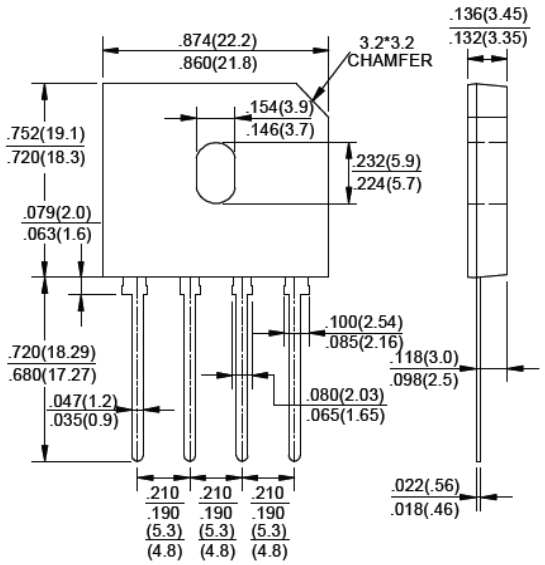
Mechanical Data

◆Polarity : As marked on Body

◆Weight : 0.15 ounces, 4.0 grams

◆Mounting position : Any

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBU 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current, @ T_C=100℃(without heatsink)	$I_{(AV)}$	15							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	240							A
Maximum Forward Voltage at 7.5A DC	V_F	1.1							V
Maximum DC Reverse Current @ T_J = 25℃	I_R	5.0							μA
at Rated DC blocking voltage @ T_J = 125℃		500							
I^2t Rating for fusing (t < 8.3ms)	I^2t	166							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	50							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 200mm x 200mm x 5mm Al Plate Heatsink.

GBU15005 THRU GBU1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

RATING AND CHARACTERISTIC CURVES GBU15005 THRU GBU1510

FIG.1- DERATING CURVE
OUTPUT RECTIFIED CURRENT

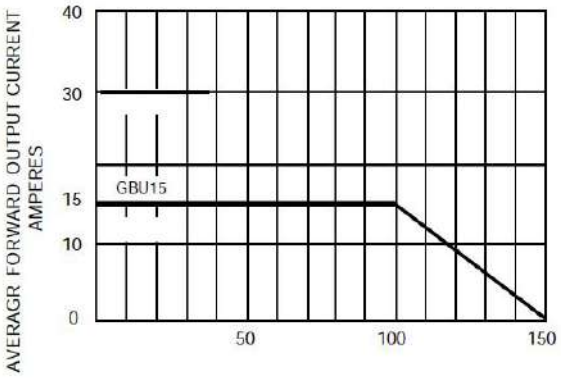


FIG.2-TYPICAL FORWARD
CHARACTERISTICS

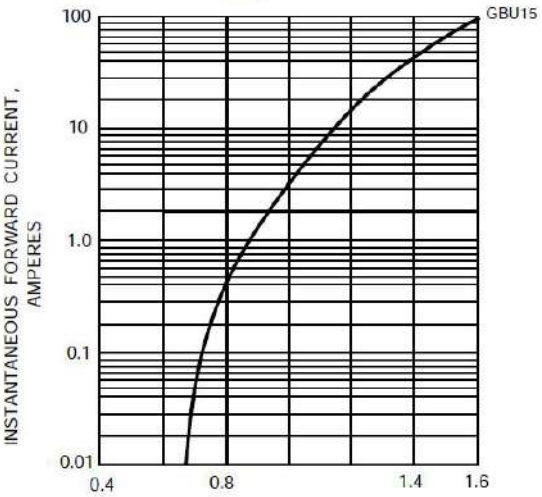


FIG.3-MAXIMUM FORWARD SURGE CURRENT

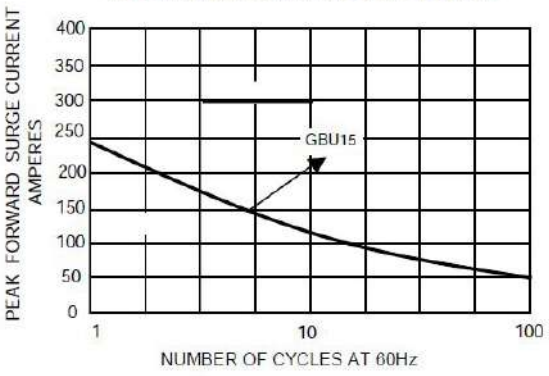


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

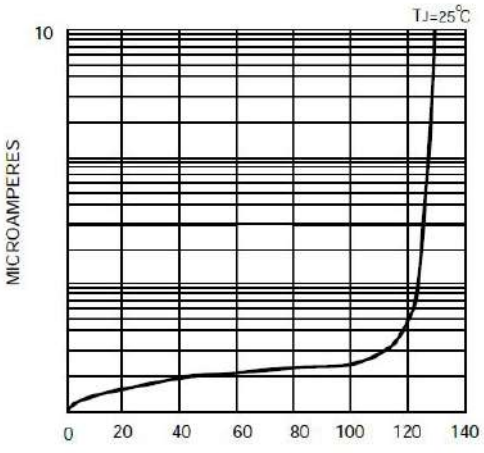
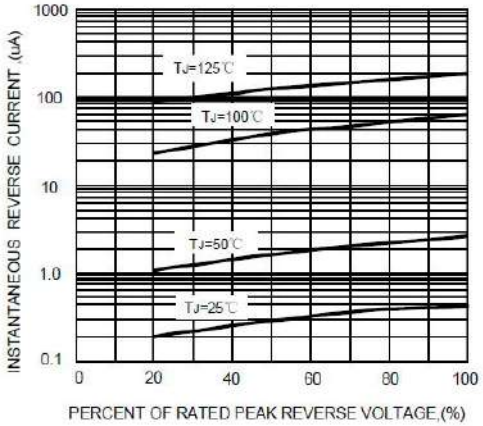


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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GBU15005 THRU GBU1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

FEATURES

◆Rating to 1000V PRV

◆Ideal for printed circuit board

◆Reliable low cost construction utilizing molded plastic Technique

◆The plastic material has UL flammability classification 94V-0

◆Electrically isolated base-1500 Volts

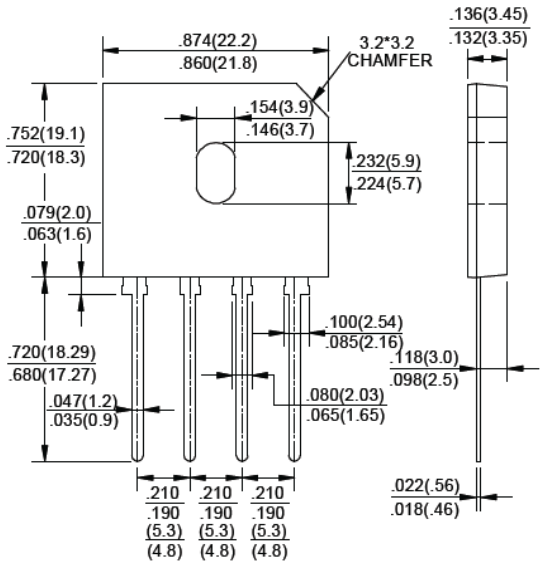
Mechanical Data

◆Polarity : As marked on Body

◆Weight : 0.15 ounces, 4.0 grams

◆Mounting position : Any

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBU 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current, @ T_C=100℃(without heatsink)	$I_{(AV)}$	15							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	240							A
Maximum Forward Voltage at 7.5A DC	V_F	1.1							V
Maximum DC Reverse Current @ T_J = 25℃	I_R	5.0							μA
at Rated DC blocking voltage @ T_J = 125℃		500							
I^2t Rating for fusing (t < 8.3ms)	I^2t	166							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	50							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 200mm x 200mm x 5mm Al Plate Heatsink.

GBU15005 THRU GBU1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

RATING AND CHARACTERISTIC CURVES GBU15005 THRU GBU1510

FIG.1- DERATING CURVE
OUTPUT RECTIFIED CURRENT

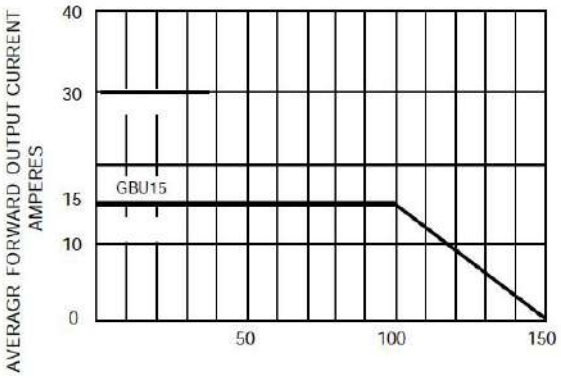


FIG.2-TYPICAL FORWARD
CHARACTERISTICS

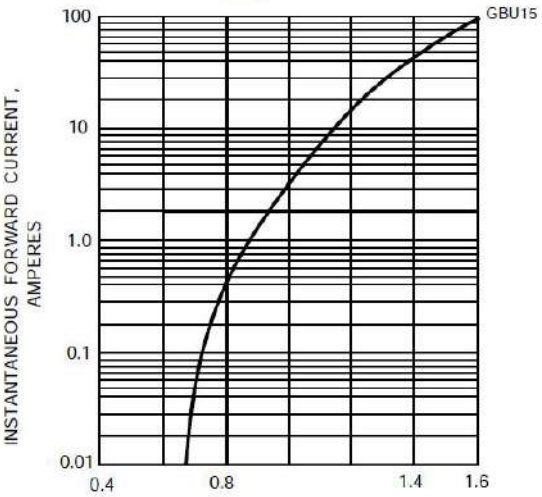


FIG.3-MAXIMUM FORWARD SURGE CURRENT

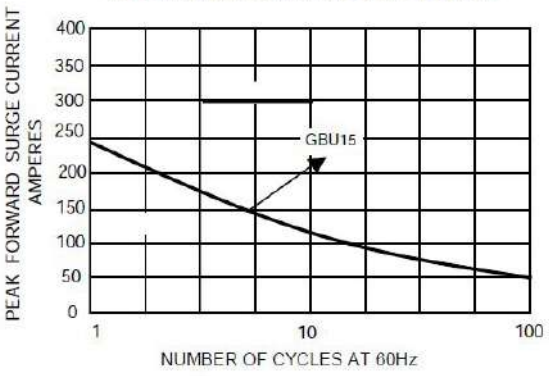


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

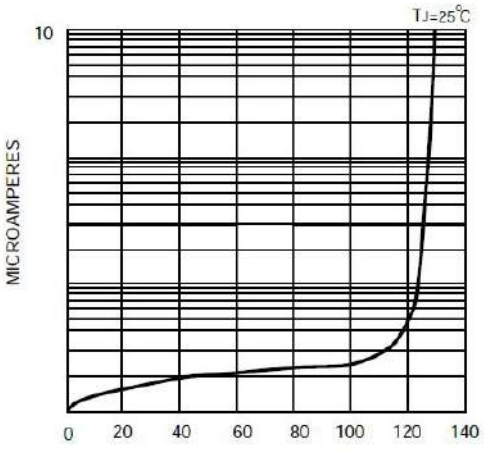
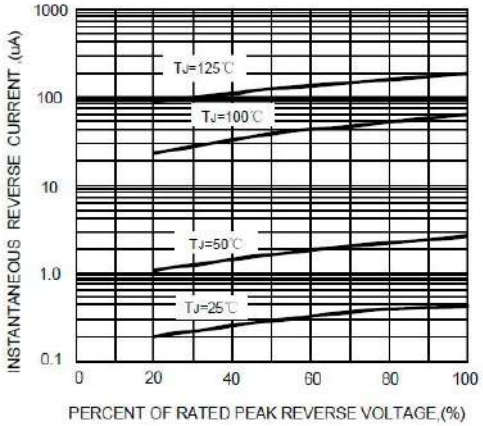


FIG.5-TYPICAL REVERSE CHARACTERISTICS



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Suntan® Su®

Заказ г.Минск www.tiristor.by email: minsk17@tut.by viber и тел.+375447584780 www.fotorele.net

GBU15005 THRU GBU1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

FEATURES

◆Rating to 1000V PRV

◆Ideal for printed circuit board

◆Reliable low cost construction utilizing molded plastic Technique

◆The plastic material has UL flammability classification 94V-0

◆Electrically isolated base-1500 Volts

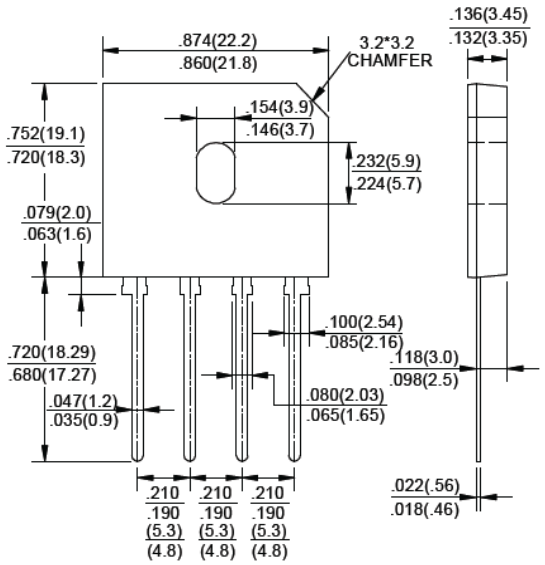
Mechanical Data

◆Polarity : As marked on Body

◆Weight : 0.15 ounces, 4.0 grams

◆Mounting position : Any

GBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	GBU 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current, @ T_C=100℃(without heatsink)	$I_{(AV)}$	15							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	240							A
Maximum Forward Voltage at 7.5A DC	V_F	1.1							V
Maximum DC Reverse Current @ T_J = 25℃ at Rated DC blocking voltage @ T_J = 125℃	I_R	5.0 500							μA
I^2t Rating for fusing (t < 8.3ms)	I^2t	166							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	50							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	2.0							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 200mm x 200mm x 5mm Al Plate Heatsink.

GBU15005 THRU GBU1510

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15 Ampere

RATING AND CHARACTERISTIC CURVES GBU15005 THRU GBU1510

FIG.1- DERATING CURVE
OUTPUT RECTIFIED CURRENT

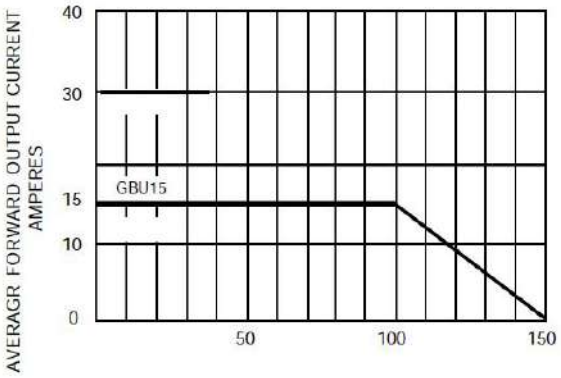


FIG.2-TYPICAL FORWARD
CHARACTERISTICS

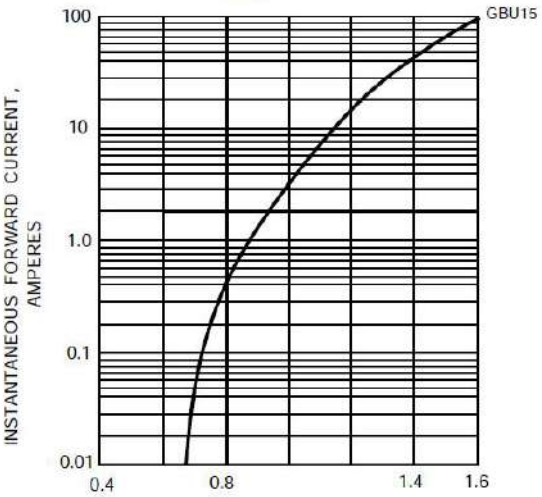


FIG.3-MAXIMUM FORWARD SURGE CURRENT

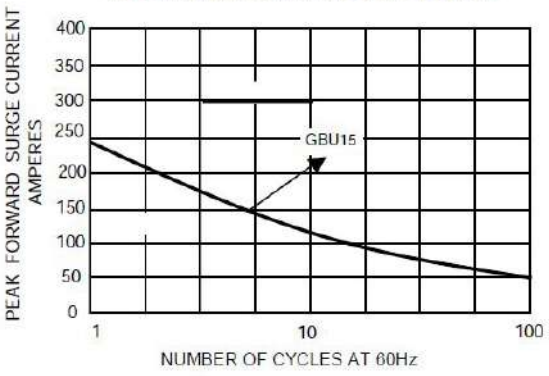


FIG.4-TYPICAL REVERSE
CHARACTERISTICS

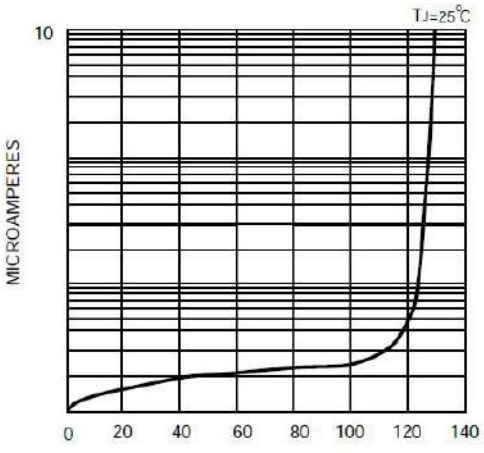
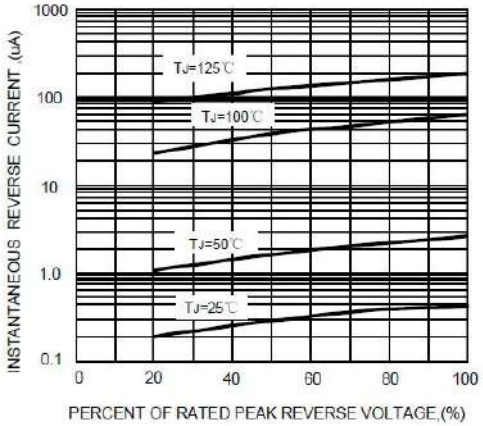


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBL4005 THRU KBL410

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 4.0 Ampere

FEATURES

◆High forward surge current capability.

◆Ideal for printed circuit board.

◆High temperature soldering guaranteed:

260℃/10 second, 0.375" (9.5mm) lead length

at 5 lbs. (2.3kg) tension.

◆Electrically isolated base-1500 Volts.

Mechanical Data

◆Case: Transfer molded plastic.

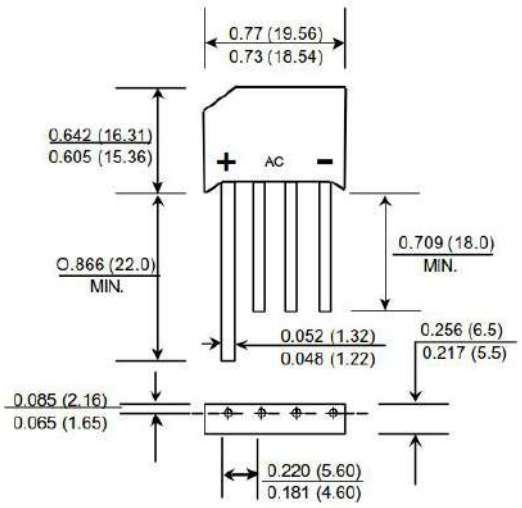
◆Terminal: Lead solderable per MIL - STD - 202E

method 208℃.

◆Mounting position: Any.

◆Weight: 0.22 ounce, 6.21 gram.

KBL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	KBL4005	KBL401	KBL402	KBL404	KBL406	KBL408	KBL410	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Current at 40℃ T_A (Note 1)	$I_{(AV)}$	4.0							A
Peak Forward Surge Current 8.3ms single half sine-wave Super Imposed on Rated Load	I_{FSM}	150							A
Maximum forward Voltage Drop Per Element at 4.0A Peak	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking voltage	I_R	5.0							μA
Maximum Reverse Current at Rated DC Blocking voltage and 150℃ T_A	I_R	1.0							mA
Operating Temperature RangeTJ	T_J	-65 to +125							℃
Storage Temperature RangeTA	T_{STG}	-65 to +150							℃

Note: 1. Mounting conditions, 0.5" lead length maximum.

KBL4005 THRU KBL410

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 4.0 Ampere

RATING AND CHARACTERISTIC CURVES KBL4005 THRU KBL410

FIG.1-DERATING CURVE FOR OUTPUT RECITIFIED CURRENT

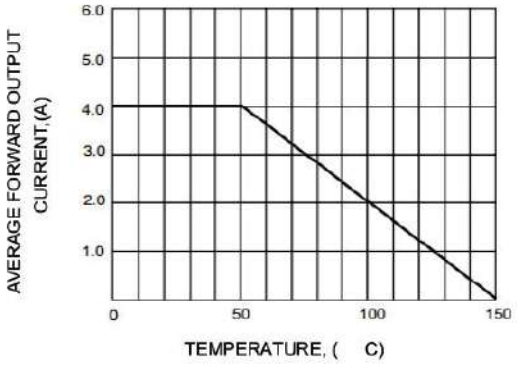


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

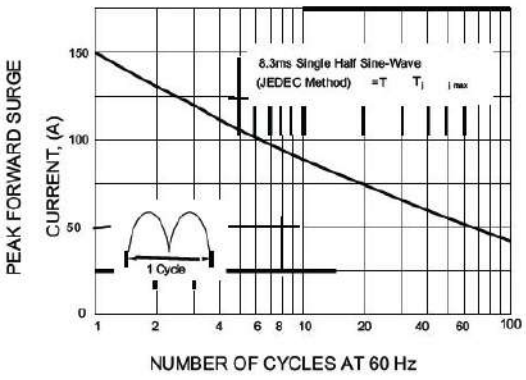


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

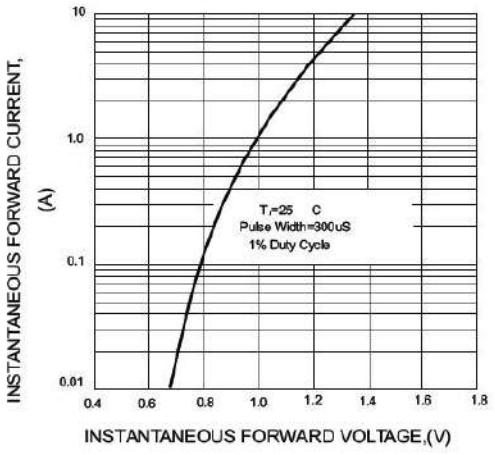


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

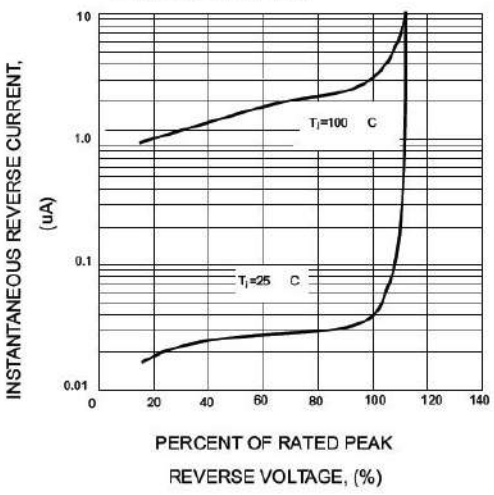
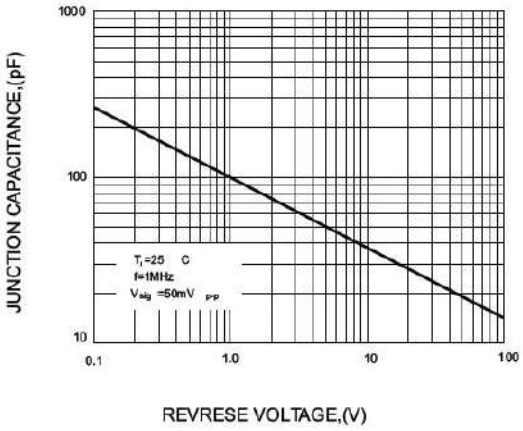


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBP2005 THRU KBP210

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 2.0 Ampere

FEATURES

◆High forward surge current capability.

◆Ideal for printed circuit board.

◆High temperature soldering guaranteed:

260℃/10 second, 0.375" (9.5mm) lead length

at 5 lbs. (2.3kg) tension.

Mechanical Data

◆Case: Transfer molded plastic.

◆Terminal: Lead solderable per MIL - STD - 202E

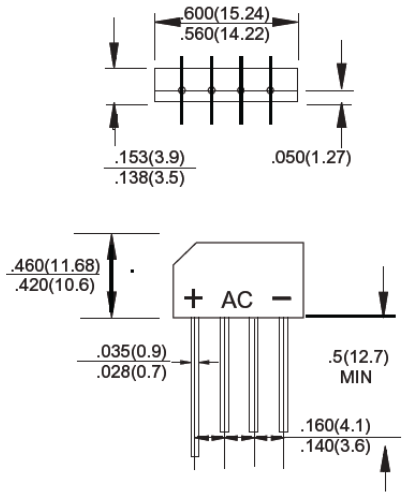
method 208℃.

◆Polarity: Polarity symbols marked on case

◆Mounting position: Any.

◆Weight: 0.069 ounce, 1.95 gram.

KBP



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	KBP2005	KBP201	KBP202	KBP204	KBP206	KBP208	KBP210	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at T_A =50℃ (Note 2)		$I_{(AV)}$	2.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDE method)		I_{FSM}	50							Amps
Rating for Fusing (t<8.3ms)		I^2t	10							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 2.0A		V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element	T_A = 25℃	I_R	5							uA
	T_A= 100℃		0.5							mA
Typical Junction Capacitance (Note 1)		C_j	20							pF
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	28							℃/W
Operating Temperature Range		T_J	-65 to +150							℃
Storage Temperature Range		T_{STG}	-65 to +150							

Note: 1. Measured at 1 MHz and applied reverse voltage of 4 V.

2. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B with 0.5 X 0.5" (13 X 13 mm) copper pads.

KBP2005 THRU KBP210

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 2.0 Ampere

RATING AND CHARACTERISTIC CURVES KBP2005 THRU KBP210

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

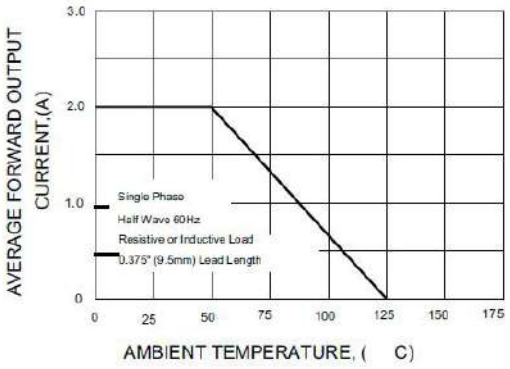


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

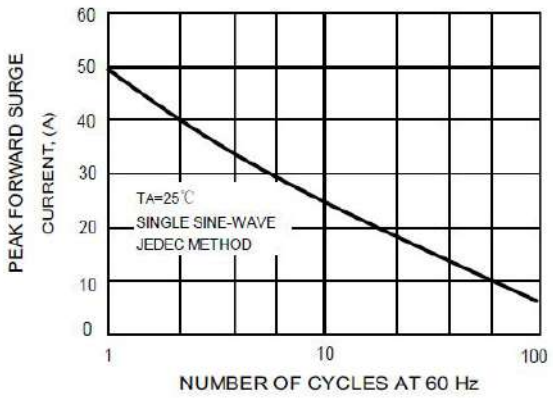


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

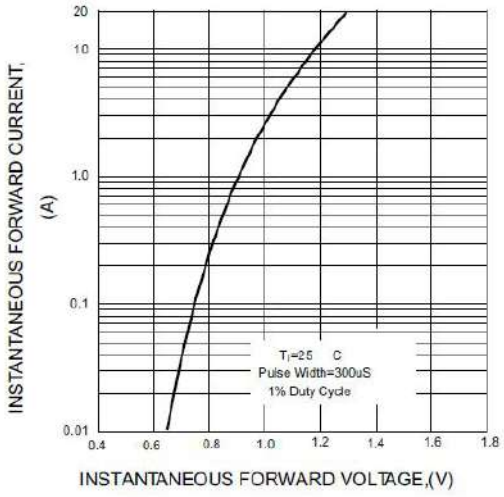


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

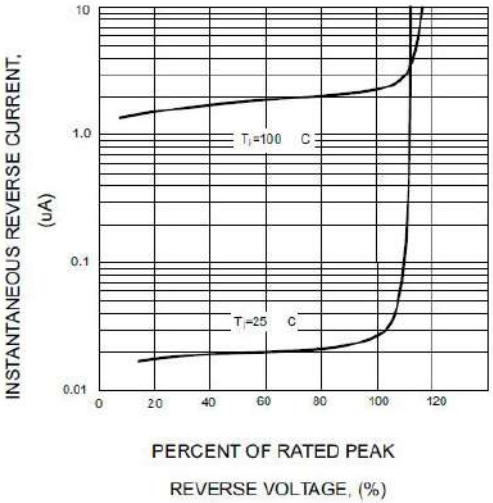
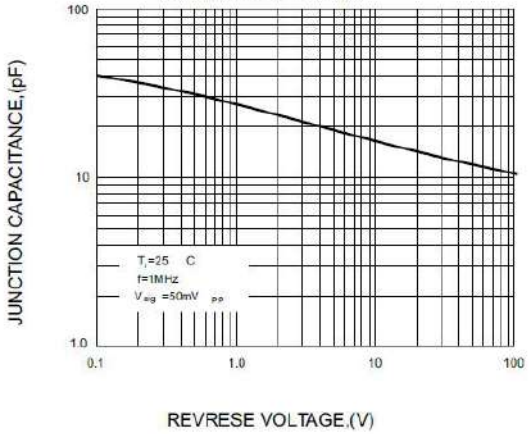


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBPC25005 THRU KBPC2510

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25.0 Ampere

FEATURES

◆High forward surge current capability.

◆Low thermal resistance.

◆High isolation voltage from case to lugs.

◆High temperature soldering guaranteed:

260℃/10 second, at 5 lbs. (2.3kg) tension.

Mechanical Data

◆Case: Matel case.

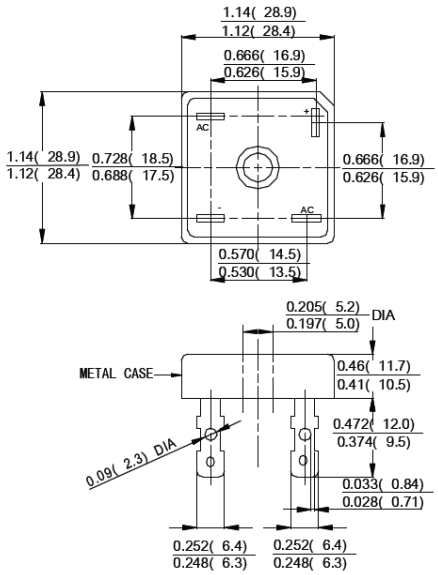
◆Terminal: Plated 0.25" (6.35mm) lug.

◆Polarity: Polarity symbols marked on case.

◆Mounting: Thru hole for #10 screw, 20 in,- lbs. Torque Max.

◆Weight:1.02 ounce, 29gram.

KBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	KBPC 25005	KBPC 2501	KBPC 2502	KBPC 2504	KBPC 2506	KBPC 2508	KBPC 2510	UNIT
Maximum Repetitive Peak Revere Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at T_C=50℃(Note1,2)		$I_{(AV)}$	25							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	300							Amps
Rating for Fusing(t<8.3ms)		I^2T	373							A^2s
Maximum Instantaneous Forward Voltage at12.5A		V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	5.0							μAmps
	T_A=125℃		0.5							mAmps
Isolation Voltage from case to lugs		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)		$R_{\theta JL}$	2.0							℃/W
Operating Temperature Range		T_J	-65 to +150							℃
Storage Temperature Range		T_{stg}	-65 to +150							℃

Note: 1.Unit mounted on 9 " × 3.5 " × 4.6 " thick (23 × 9 × 11.8mm) Al. Plate.

2.Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

KBPC25005 THRU KBPC2510

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25.0 Ampere

RATING AND CHARACTERISTIC CURVES KBPC25005 THRU KBPC2510

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

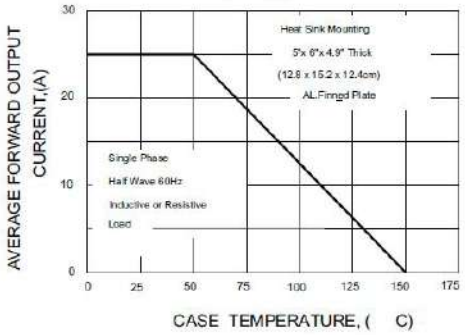


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

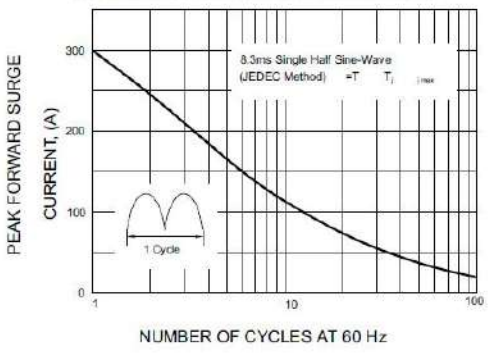


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

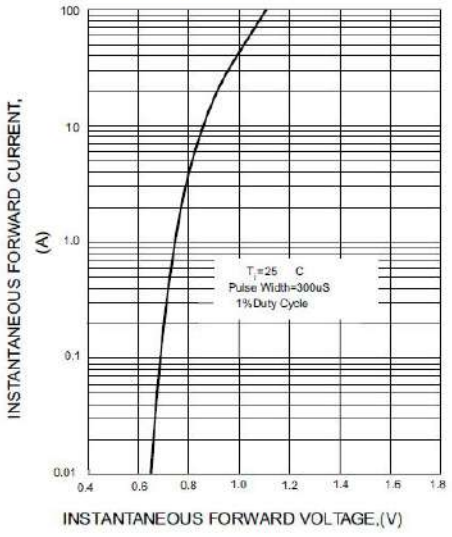


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

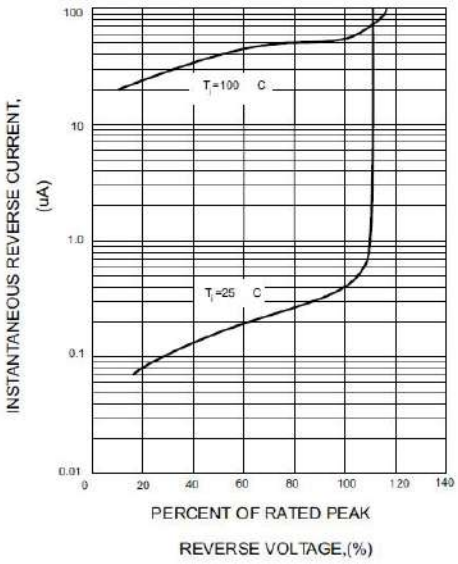


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

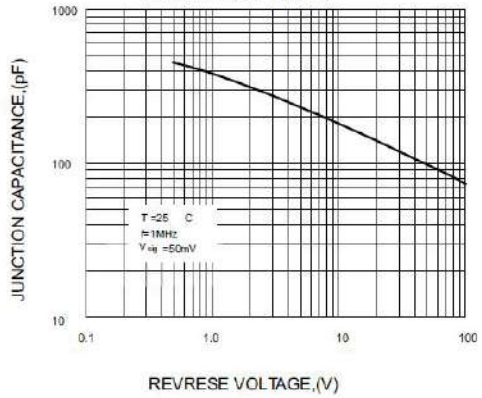
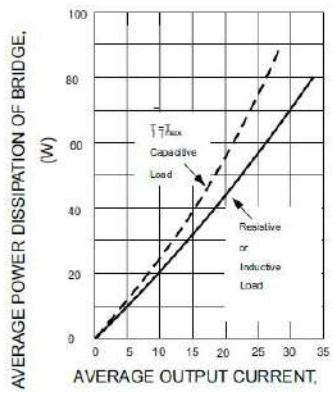


FIG.6-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBPC25005W THRU KBPC2510W

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25.0 Ampere

FEATURES

◆High forward surge current capability.

◆Low thermal resistance.

◆High isolation voltage from case to lugs.

◆High temperature soldering guaranteed:

260℃/10 second, at 5 lbs. (2.3kg) tension.

Mechanical Data

◆Case: Matel case.

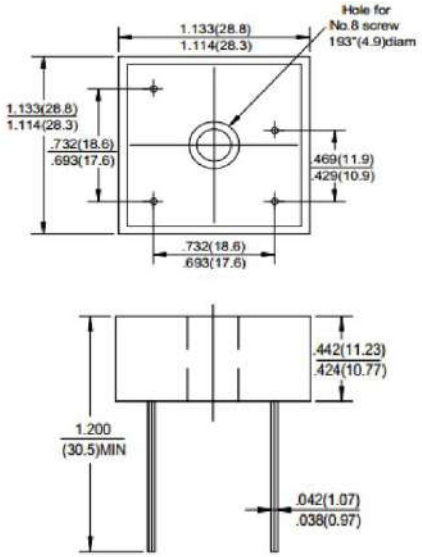
◆Terminal: Plated 0.25" (6.35mm) lug.

◆Polarity: Polarity symbols marked on case.

◆Mounting: Thru hole for #10 screw, 20 in,- lbs. Torque Max.

◆Weight:1.02 ounce, 29gram.

KBPC-W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	KBPC 25005W	KBPC 2501W	KBPC 2502W	KBPC 2504W	KBPC 2506W	KBPC 2508W	KBPC 2510W	UNIT
Maximum Repetitive Peak Revere Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at T_C=50℃ (Note1, 2)	$I_{(AV)}$	25							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	300							Amps
Rating for Fusing(t<8.3ms)	I^2T	373							A^2s
Maximum Instantaneous Forward Voltage at12.5A	V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage T_A=25℃	I_R	5.0							μAmps
Maximum Reverse Current at Rated DC Blocking Voltage T_A=125℃	I_R	0.5							mAmps
Isolation Voltage from case to lugs	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)	$R_{\theta JL}$	2.0							℃/W
Operating Temperature Range	T_J	-65 to +150							℃
Storage Temperature Range	T_{stg}	-65 to +150							℃

Note: 1.Unit mounted on 9 ” × 3.5 ” × 4.6 ” thick (23 × 9 × 11.8mm) Al. finned plate.

2.Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

KBPC25005W THRU KBPC2510W

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25.0 Ampere

RATING AND CHARACTERISTIC CURVES KBPC25005W THRU KBPC2510W

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

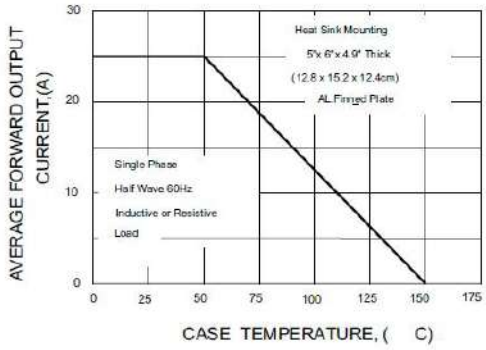


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

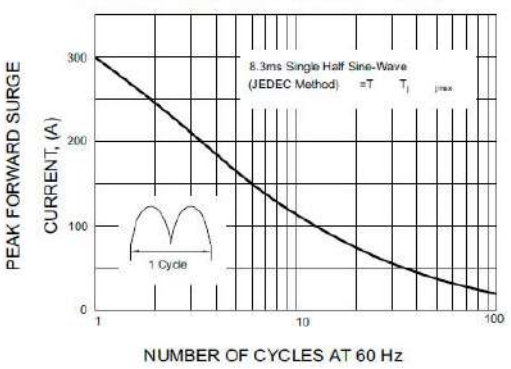


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

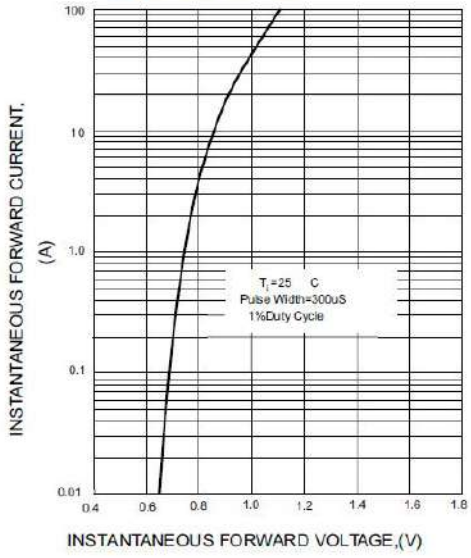


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

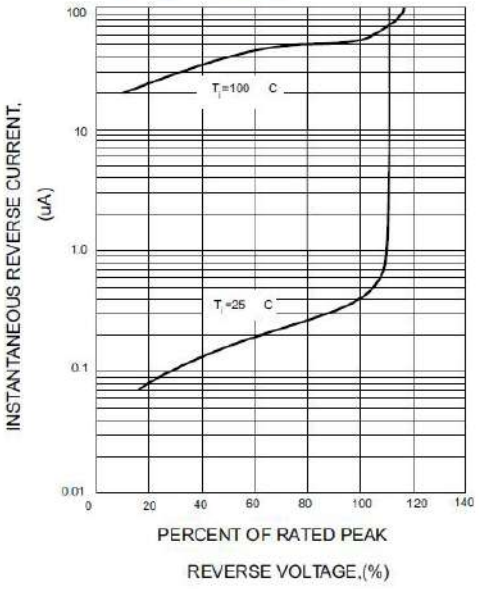


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

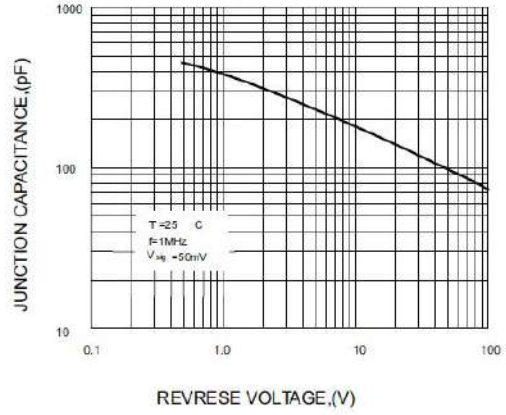
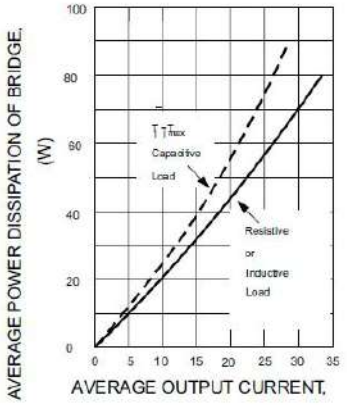


FIG.6-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBPC35005 THRU KBPC3510

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 35.0 Ampere

FEATURES

◆High forward surge current capability.

◆Integrally molded heatsink provide very low thermal resistance.

◆High isolation voltage from case to lugs.

◆High temperature soldering guaranteed: 260℃/10 second, at 5 lbs. (2.3kg) tension.

Mechanical Data

◆Case: Matel case.

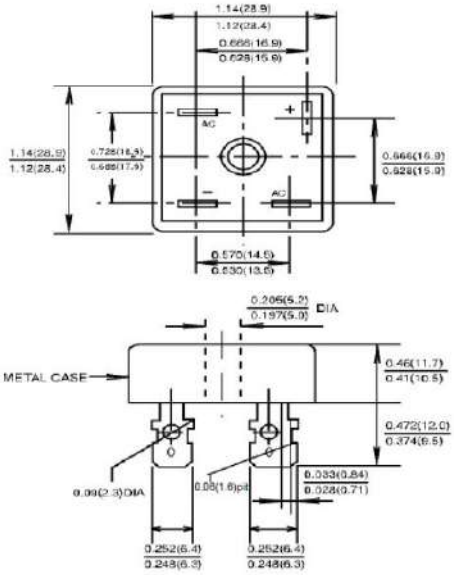
◆Terminal: Plated 0.25" (6.35mm) lug.

◆Polarity: Polarity symbols marked on case.

◆Mounting: Thru hole for #10 screw, 20 in,- lbs. Torqute Max.

◆Weight:1.02 ounce, 29gram.

KBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	KBPC 35005	KBPC 3501	KBPC 3502	KBPC 3504	KBPC 3506	KBPC 3508	KBPC 3510	UNIT
Maximum Repetitive Peak Revere Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at T_C=50℃(Note1,2)		$I_{(AV)}$	35							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	400							Amps
Rating for Fusing(t<8.3ms)		I^2T	664							A^2s
Maximum Instantaneous Forward Voltage at17.5A		V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	5.0							μAmps
	T_A=125℃		0.5							mAmps
Isolation Voltage from case to lugs		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)		$R_{\theta JL}$	2.0							℃/W
Operating Temperature Range		T_J	-65 to +150							℃
Storage Temperature Range		T_{stg}	-65 to +150							℃

Note: 1.Unit mounted on 9 ” × 3.5 ” × 4.6 ” thick (23 × 9 × 11.8mm) Al. plate.

2.Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

KBPC35005 THRU KBPC3510

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 35.0 Ampere

RATING AND CHARACTERISTIC CURVES KBPC35005 THRU KBPC3510

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

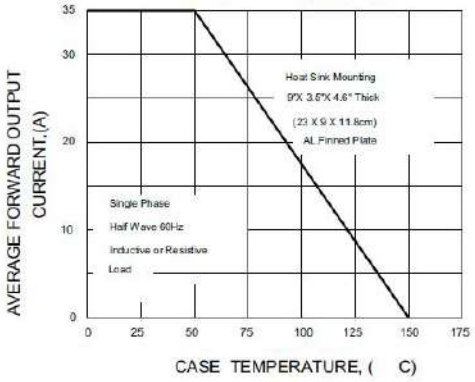


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

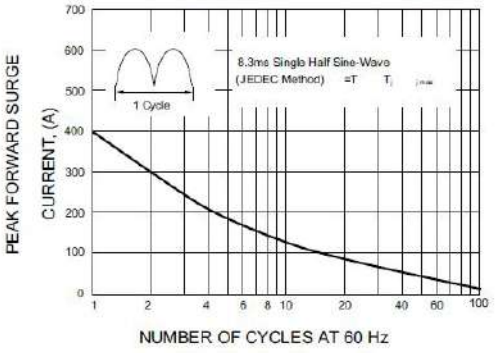


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

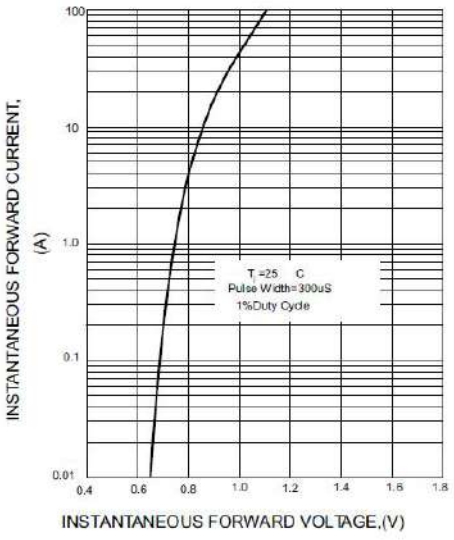


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

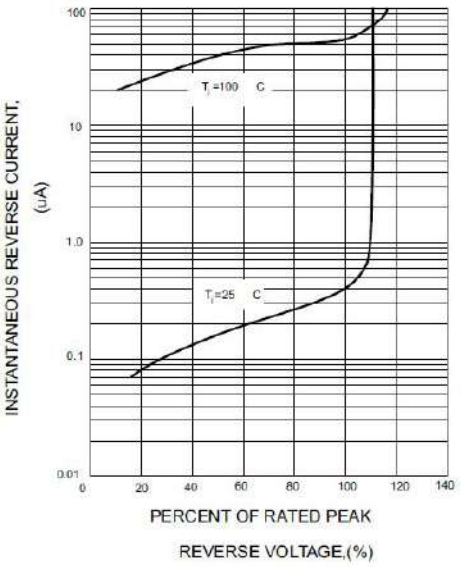


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

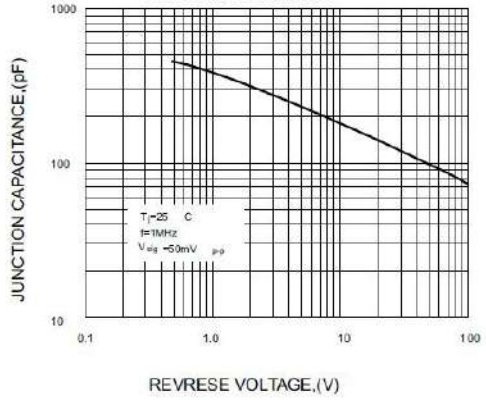
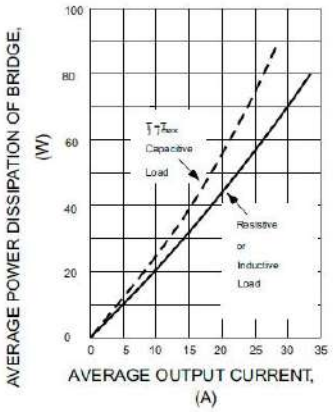


FIG.6-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBPC35005W THRU KBPC3510W

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 35.0 Ampere

FEATURES

◆High forward surge current capability.

◆Low thermal resistance.

◆High isolation voltage from case to lugs.

◆High temperature soldering guaranteed:

260℃/10 second, at 5 lbs. (2.3kg) tension.

Mechanical Data

◆Case: Matel case.

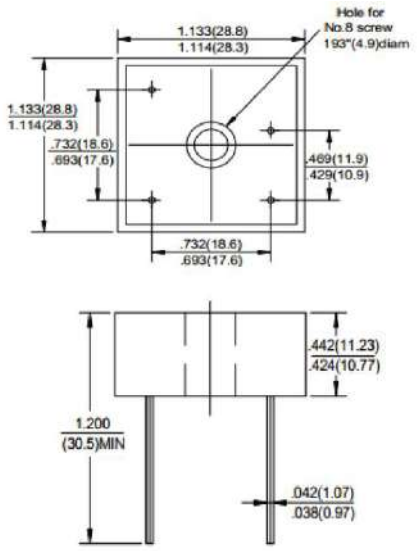
◆Terminal: Plated 0.04" (1.02mm) lug.

◆Polarity: Polarity symbols marked on case.

◆Mounting: Thru hole for #10 screw, 20 in,- lbs. Torque Max.

◆Weight:0.93 ounce, 26.4gram.

KBPC-W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	KBPC 35005W	KBPC 3501W	KBPC 3502W	KBPC 3504W	KBPC 3506W	KBPC 3508W	KBPC 3510W	UNIT
Maximum Repetitive Peak Revere Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at T_C=50℃ (Note1, 2)	$I_{(AV)}$	35							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400							Amps
Rating for Fusing(t<8.3ms)	I^2T	664							A^2s
Maximum Instantaneous Forward Voltage at17.5A	V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage T_A=25℃	I_R	10							μAmps
Maximum Reverse Current at Rated DC Blocking Voltage T_A=150℃	I_R	1.0							mAmps
Isolation Voltage from case to lug	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)	$R_{\theta JL}$	2.0							℃/W
Operating Temperature Range	T_J	-65 to +150							℃
Storage Temperature Range	T_{stg}	-65 to +150							℃

Note: 1.Unit mounted on 5 " × 4 " × 3 " thick (12.8 mm × 10.2 mm × 7.3mm) Al. plate.

2.Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

KBPC35005W THRU KBPC3510W

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 35.0 Ampere

RATING AND CHARACTERISTIC CURVES KBPC35005W THRU KBPC3510W

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

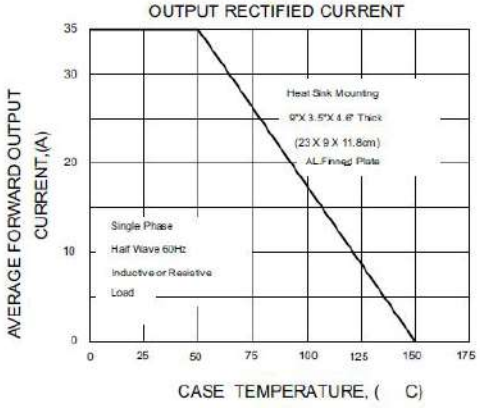


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

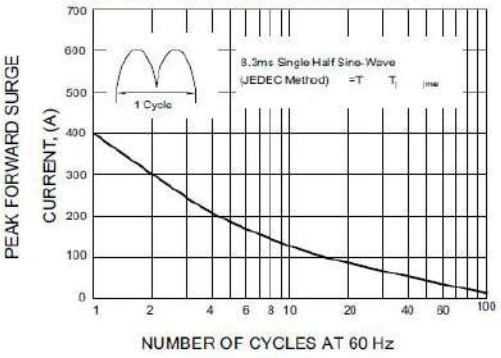


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE LEMENT

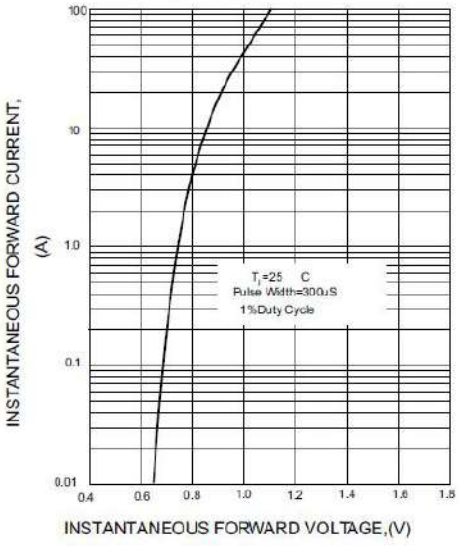


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

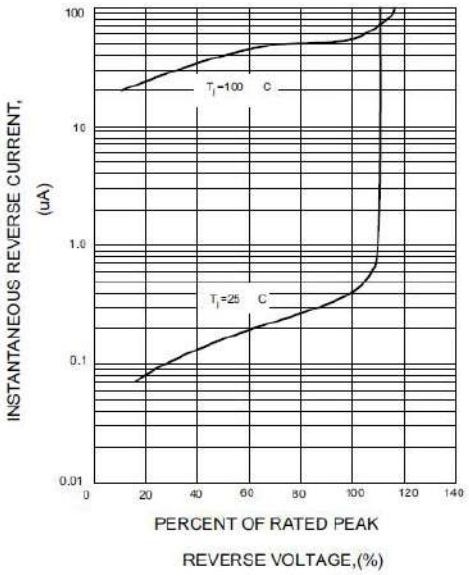


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

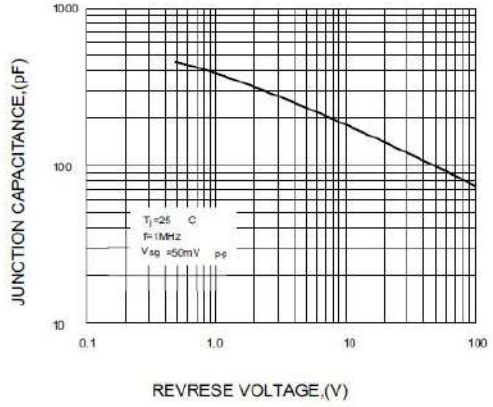
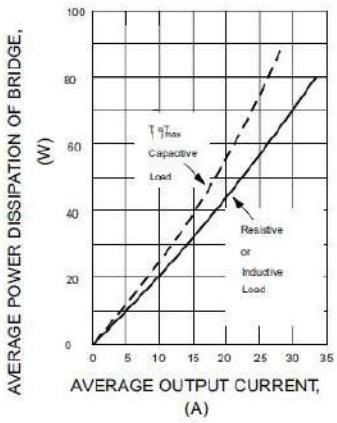


FIG.6-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBPC6005 THRU KBPC610

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 6.0 Ampere

FEATURES

- ◆High Current Capability
- ◆High Case Dielectric Strength
- ◆High Surge Current Capability
- ◆Ideal for Printed Circuit Board Application
- ◆Plastic Material has Underwriters Laboratory Flammability Classification 94V-O

Mechanical Data

- ◆Case: Molded Plastic
- ◆Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- ◆Polarity: Marked on Body
- ◆Weight: 3.8 grams (approx.)
- ◆Mounting Position: Through Hole for #6 Screw
- ◆Mounting Torque: 5.0 Inch-pounds Maximum
- ◆Marking: Type Number

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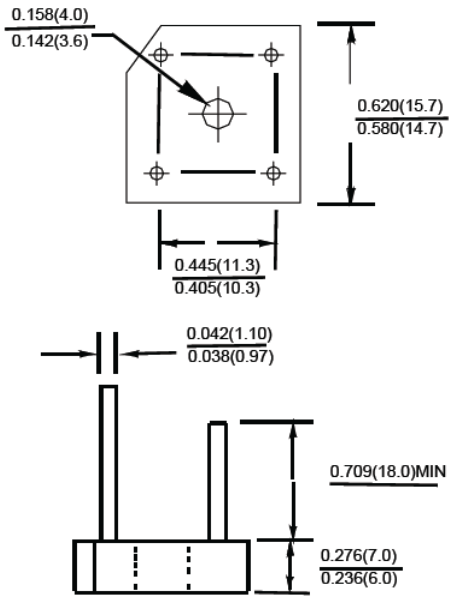

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	KBPC 6005	KBPC 601	KBPC 602	KBPC 604	KBPC 606	KBPC 608	KBPC 610	UNIT
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RRM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @TC = 50°C	Io	60							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	125							A
Forward Voltage (per element) @I_F = 3.0A	V_{FM}	1.0V							
Peak Reverse Current @T_C = 25°C At Rated DC Blocking Voltage @T_C = 100°C	I_R	5 0.5							μA mA
I^2t Rating for fusing (t < 8.3ms) (Note 2)	I^2t	64							A^2S
Typical Junction Capacitance (Note 3)	C_J	55							pF
Typical Thermal Resistance (Note 4)	$R_{\theta JC}$	12.5							K/W
Operating and Storage Temperature Range	T_J,T_{STG}	-65 to +125							℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC. 2. Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

3. Mounted on metal chassis. 4. Non-repetitive, for t > 1ms and < 8.3ms.

Suntan® Su®

KBPC6005 THRU KBPC610

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 6.0 Ampere

RATING AND CHARACTERISTIC CURVES KBPC6005 THRU KBPC610

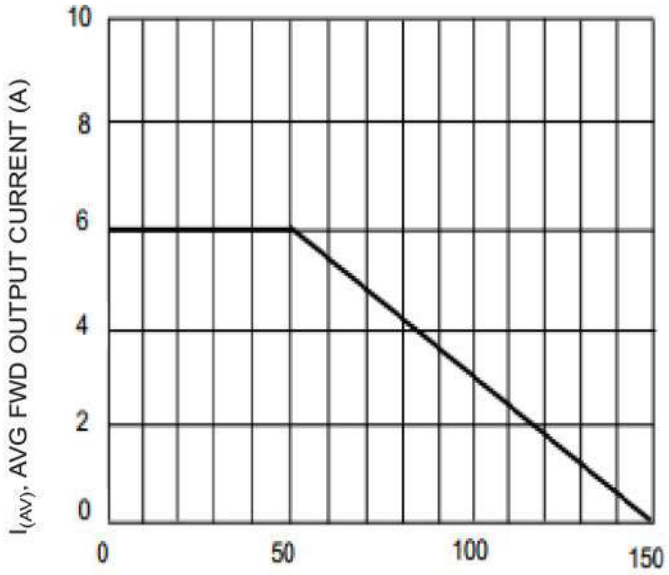

Fig. 1 Forward Current Derating Curve

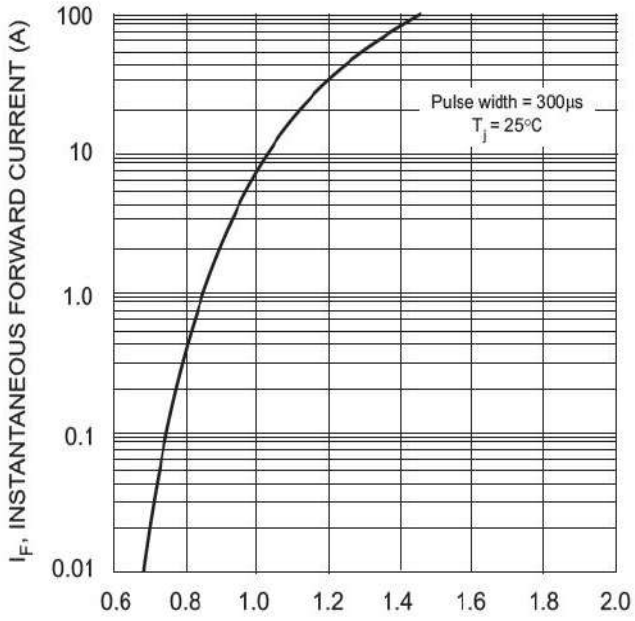

Fig. 2 Typical Forward Characteristics, per element

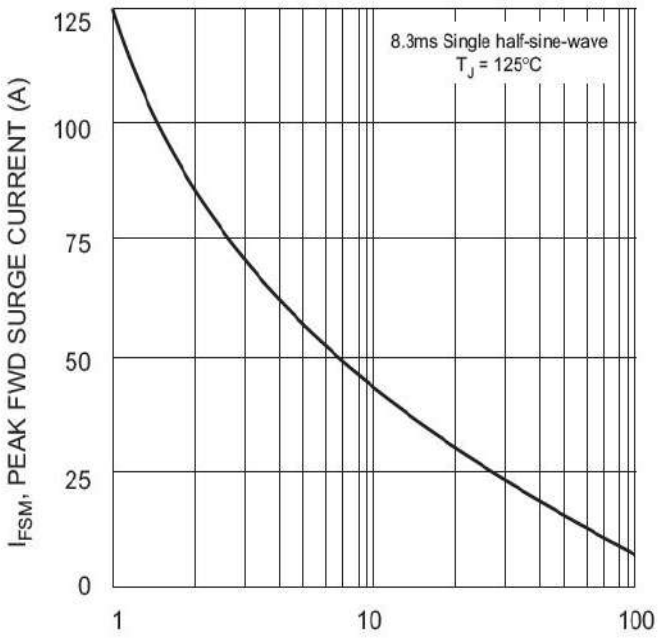

Fig. 3 Peak Forward Surge Current

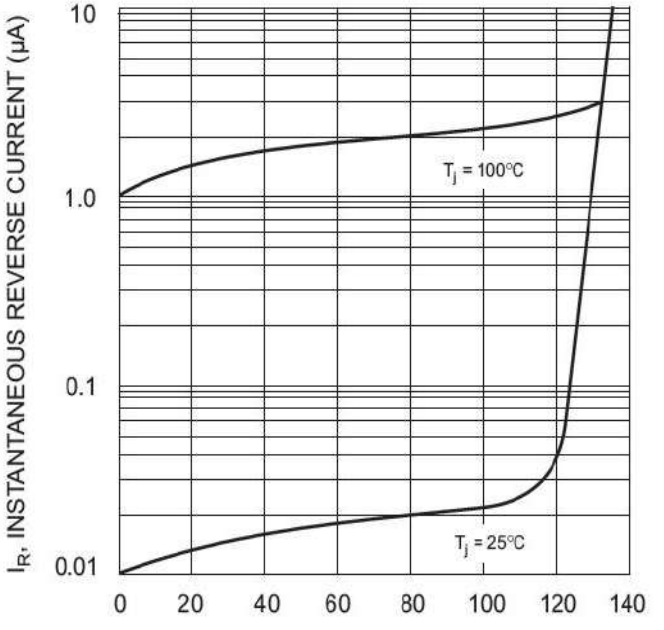

Fig. 4 Typical Reverse Characteristics

Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBPC8005 THRU KBPC810

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 8.0 Ampere

FEATURES

◆High forward surge current capability

◆Ideal for printed circuit board

◆High isolation voltage from case to leads

◆High temperature soldering guaranteed:

260°C /10 second, at 5 lbs. (2.3kg) tension.

Mechanical Data

◆Case: Molded plastic body

◆Terminal: Lead solderable per MIL-STD-202E method 208C

◆Polarity: Polarity symbols molded on case

◆Mounting: Thru hole for #6 screw, 5.0 in.-lbs torque max

◆Weight:0. 20ounce, 5.62 grams

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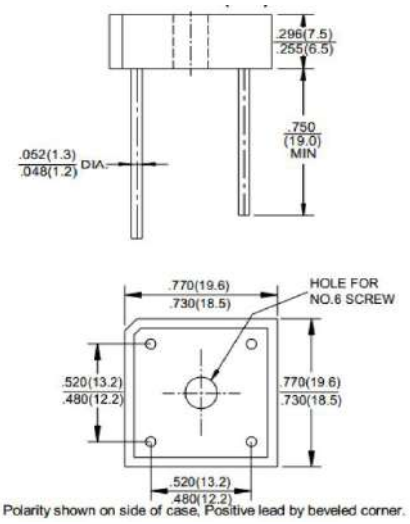

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	KBPC 8005	KBPC 801	KBPC 802	KBPC 804	KBPC 806	KBPC 808	KBPC 810	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RRM}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at TC=100 ℃		$I_{(AV)}$	8.0							Amps
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	175							Amps
Rating for Fusing(t<8.3ms)		I^2t	64							A^2S
Maximum Instantaneous Forward Voltage at 4.0A		V_F	1.0							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T_A=25℃	I_R	5.0							μAmps
	T_A=125℃		1.0							mAmps
Isolation Voltage from case to leads		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1)		$R_{\theta JC}$	6.0							℃/W
Operating Temperature Range		T_J	-55 to +150							℃
Storage Temperature Range		T_{STG}	-55 to +150							℃

Note: 1. Unit mounted on 8.7 " × 8.7 " × 0.24 " thick (22 × 22 × 0.6 cm) Al. plate.

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KBPC8005 THRU KBPC810

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 8.0 Ampere

RATING AND CHARACTERISTIC CURVES KBPC8005 THRU KBPC810

FIG.1—TYPICAL FORWARD CURRENT DERATING CURVE

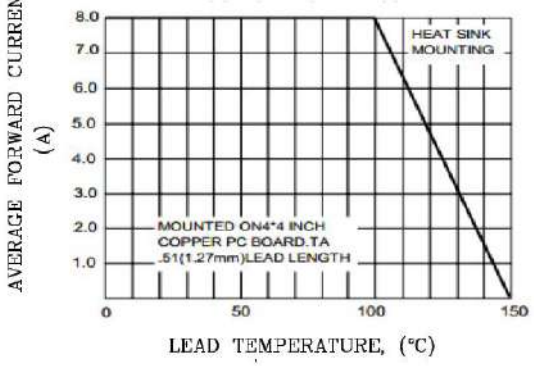


FIG.2—MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

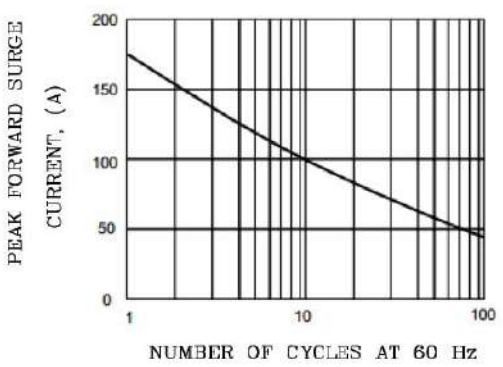


FIG.3—TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

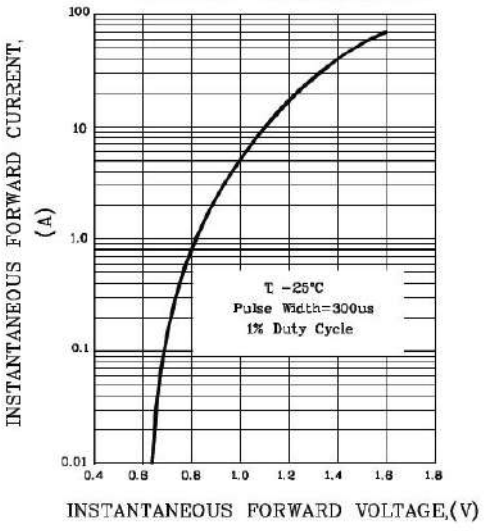


FIG.4—TYPICAL REVERSE CHARACTERISTICS

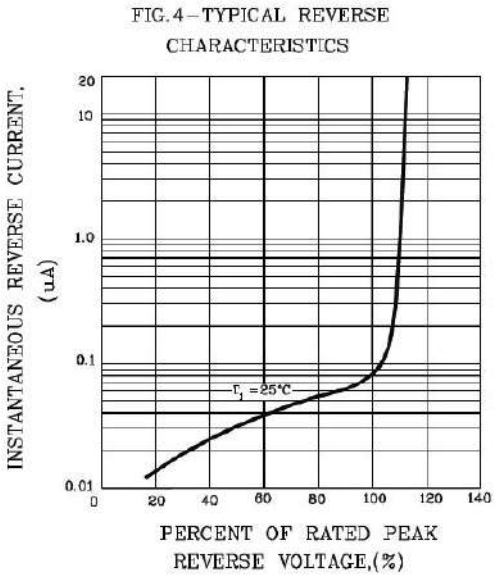
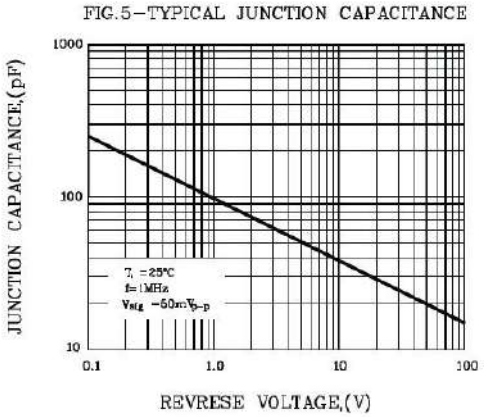


FIG.5—TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBPC10005 THRU KBPC1010

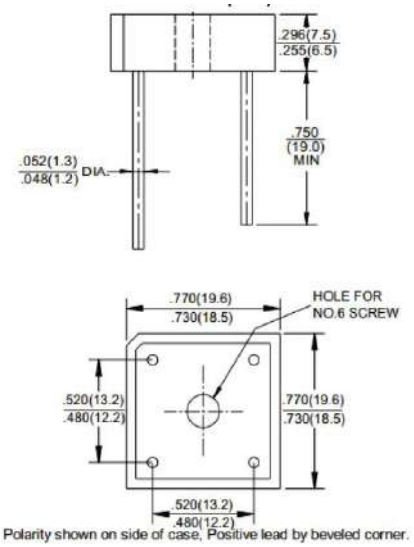
SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 10.0 Ampere

FEATURES

- ◆Rating to 1000V PRV
- ◆Surge overload rating to 175 Amperes peak
- ◆Ideal for printed circuit board
- ◆Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ◆Lead solderable per MIL-STD-202 method 208
- ◆Mounting: thru hole for # 6 screw Mounting

BR-8



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	KBPC 10005	KBPC 1001	KBPC 1002	KBPC 1004	KBPC 1006	KBPC 1008	KBPC 1010	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RRM}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward And Output Current @ T_A=50℃	$I_{F(AV)}$	10.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load	I_{FSM}	175.0							A
Maximum instantaneous forward voltage at 5.0 A	V_F	1.0							V
Maximum Reverse Current @ T_A=25℃	I_R	5.0							μA
at rated DC blocking voltage @T_A=125℃		0.5							mA
Operating junction temperature range	T_J	-55 to +125							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Unit mounted on 8.7”×8.7”×0.24” thick (22×22×0.6 cm) Al. plate.

2. Unit mounted on P.C.B at 0.375” (9.5mm) lead length with 0.47”×0.47” (12×12mm) copper pads.

KBPC10005 THRU KBPC1010

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 10.0 Ampere

RATING AND CHARACTERISTIC CURVES KBPC10005 THRU KBPC1010

FIG.1 -- PEAK FORWARD SURGE CURRENT

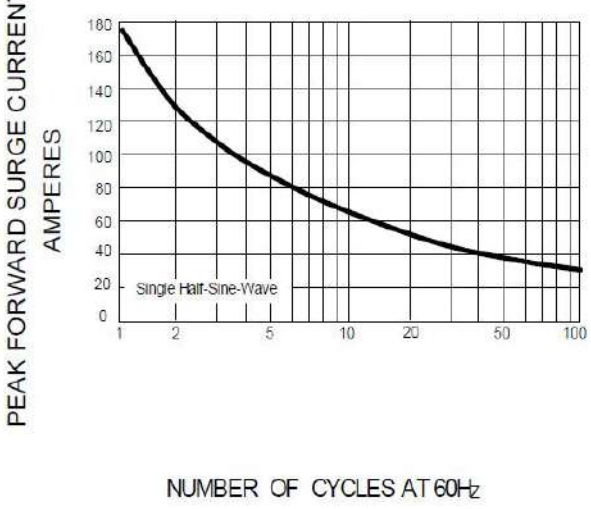


FIG.2 – FORWARD DERATING CURVE

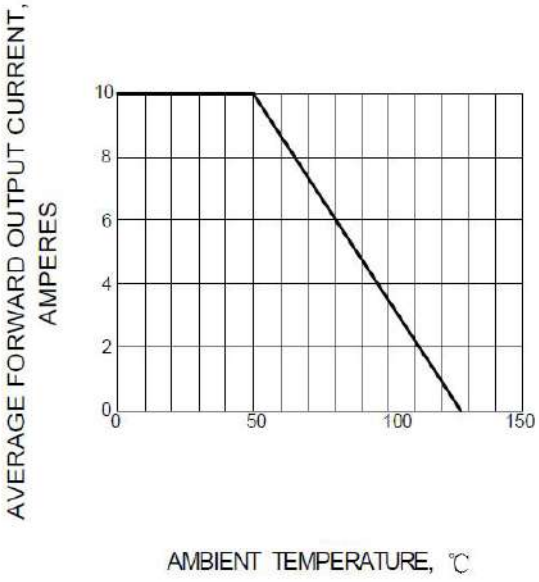


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

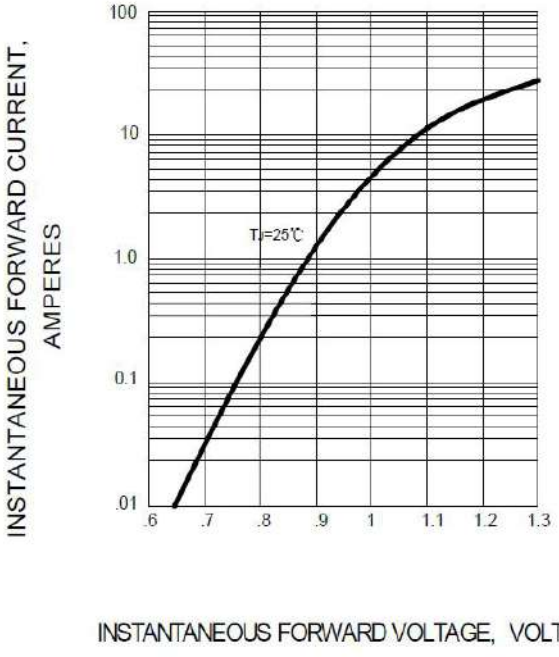
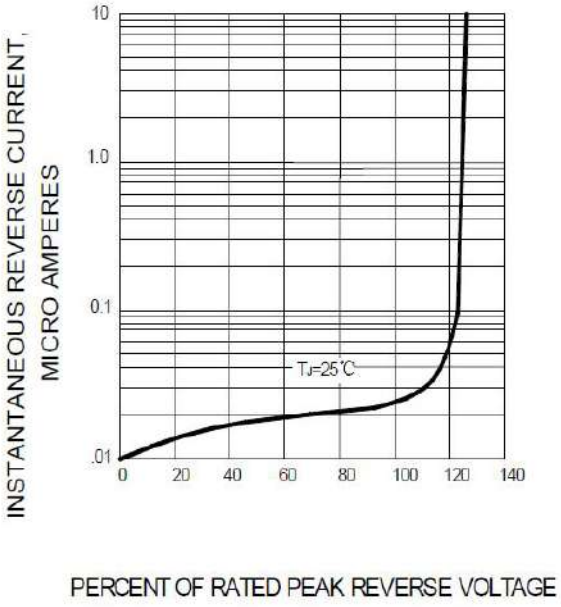


FIG.4 – TYPICAL REVERSE CHARACTERISTIC



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBPC15005 THRU KBPC1510

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15.0 Ampere

FEATURES

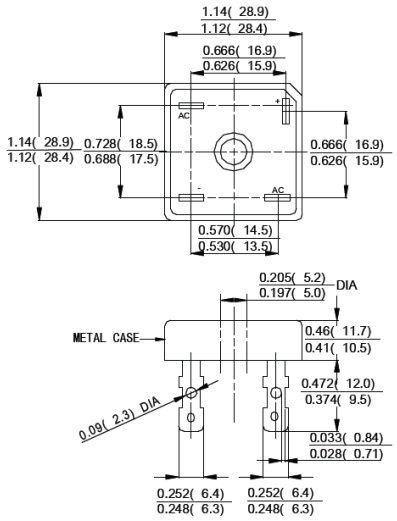
- ◆High overload surge current capability
- ◆Low thermal resistance
- ◆High isolation voltage from case to lugs
- ◆High temperature soldering guaranteed:

260°C /10 second, at 5 lbs. (2.3kg) tension

Mechanical Data

- ◆Case: Metal case
- ◆Terminal: Plated 0.25" (6.35mm) lug
- ◆Polarity: Polarity symbols marked on case
- ◆Mounting: Thru hole for #10 screw, 20 in,- lbs. Torque Max
- ◆Weight: 1.02 ounce, 29 gram

KBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	KBPC 15005	KBPC 1501	KBPC 1502	KBPC 1504	KBPC 1506	KBPC 1508	KBPC 1510	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RRM}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at TC=50℃(Note1,2)		$I_{(VA)}$	15							Amps
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	300							Amps
Rating for Fusing(t<8.3ms)		I^2t	373							A^2S
Maximum Instantaneous Forward Voltage at 7.5A		V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T_A=25℃	I_R	5.0							μAmps
	T_A=125℃		0.5							mAmps
Isolation Voltage from case to lugs		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)		$R_{\theta JC}$	2.0							℃/W
Operating Temperature Range		T_J	-65 to +150							℃
Storage Temperature Range		T_{STG}	-65 to +150							℃

Note: 1. Unit mounted on 9”×3.5”×4.6”(23×9×11.8mm) Al. finned plate.

2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

KBPC15005 THRU KBPC1510

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 15.0 Ampere

RATING AND CHARACTERISTIC CURVES KBPC15005 THRU KBPC1510

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

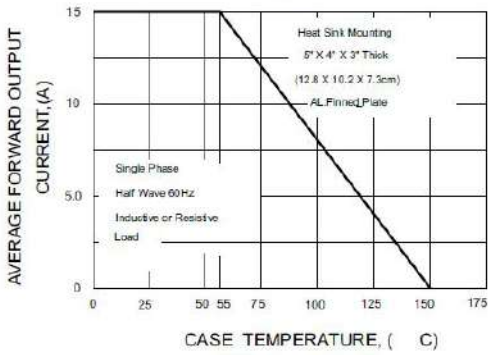


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

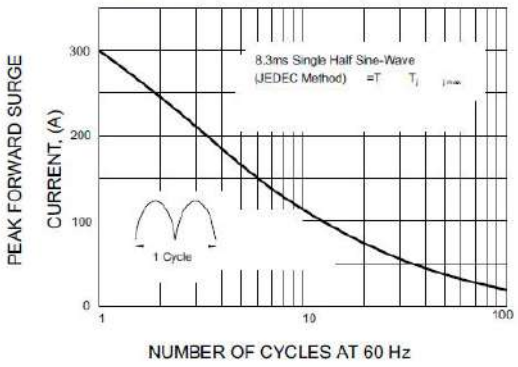


FIG.3-TYPICAL FORWARD CHARACTERICTICS PER BRIDGE ELEMENT

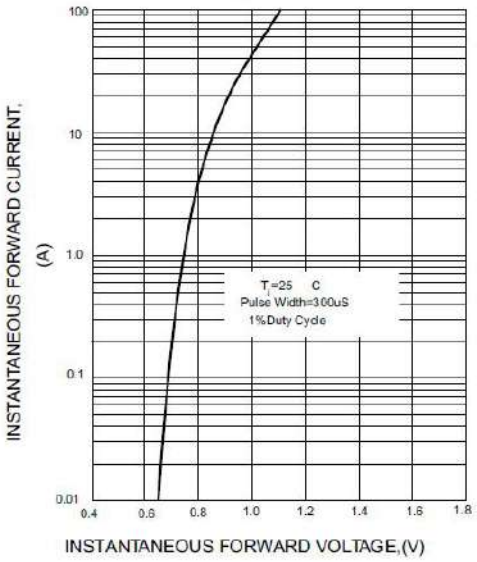


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

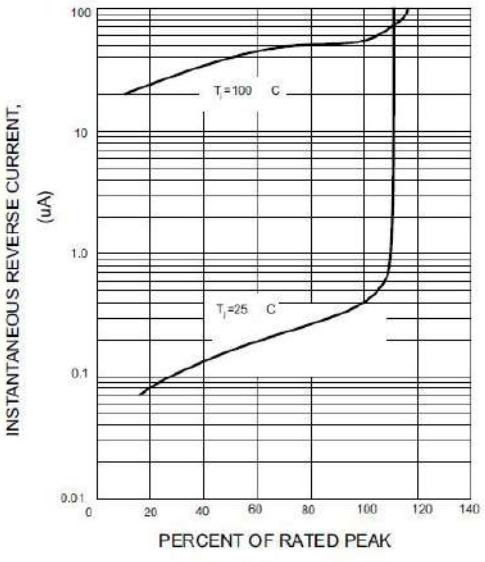


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

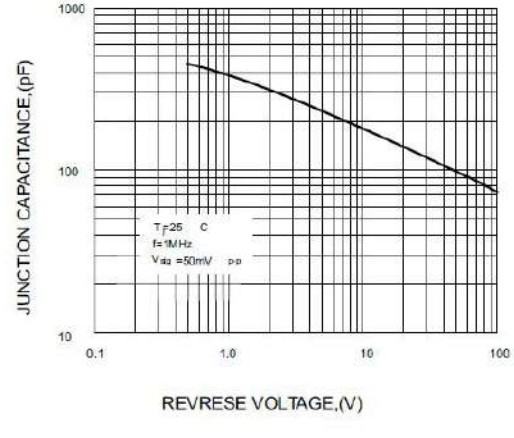
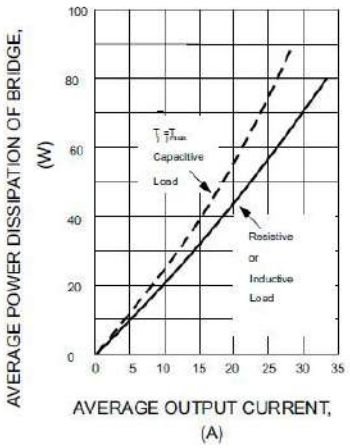


FIG.6-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBPC50005 THRU KBPC5010

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 50.0 Ampere

FEATURES

◆High forward surge current capability

◆Integrally molded heatsink provide very low thermal resistance

◆High isolation voltage from case to lugs

◆High temperature soldering guaranteed: 260°C /10 second, at 5 lbs. (2.3kg) tension

Mechanical Data

◆Case: Metal case

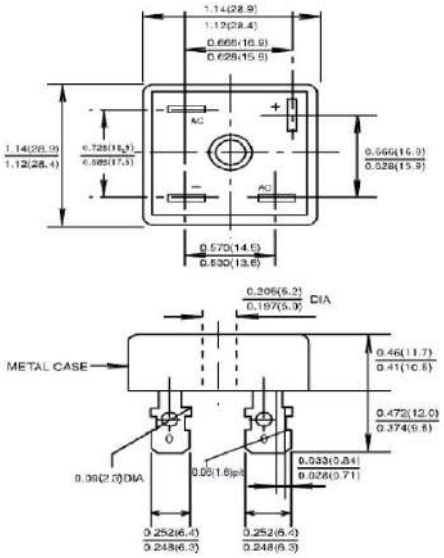
◆Terminal: Plated 0.25" (6.35mm) lug

◆Polarity: Polarity symbols marked on case

◆Mounting: Thru hole for #10 screw, 20 in,- lbs. Torqute Max

◆Weight: 1.02 ounce, 29 gram

KBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	KBPC 50005	KBPC 5001	KBPC 5002	KBPC 5004	KBPC 5006	KBPC 5008	KBPC 5010	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RRM}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at T_C=50℃(Note1,2)		$I_{(AV)}$	50							Amps
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	400							Amps
Rating for Fusing(t<8.3ms)		I^2t	664							A^2S
Maximum Instantaneous Forward Voltage at 25A		V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T_A=25℃	I_R	5.0							μAmps
	T_A=125℃		1.0							mAmps
Isolation Voltage from case to lugs		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)		$R_{\theta JC}$	2.0							℃/W
Operating Temperature Range		T_J	-65 to +150							℃
Storage Temperature Range		T_{STG}	-65 to +150							℃

Note: 1. Unit mounted on 9”×3.5”×4.6”(23×9×11.8mm) Al. finned plate.

2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

KBPC50005 THRU KBPC5010

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 50.0 Ampere

RATING AND CHARACTERISTIC CURVES KBPC50005 THRU KBPC5010

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

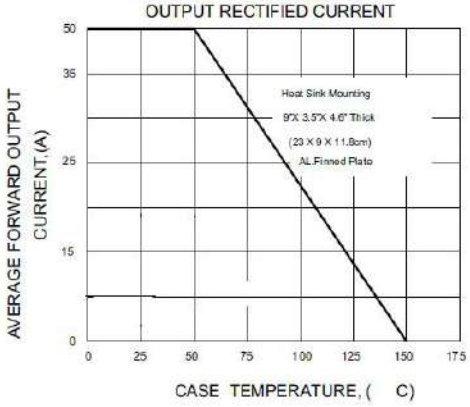


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

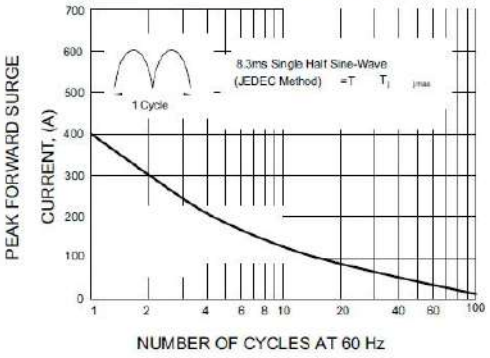


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE LEMENT

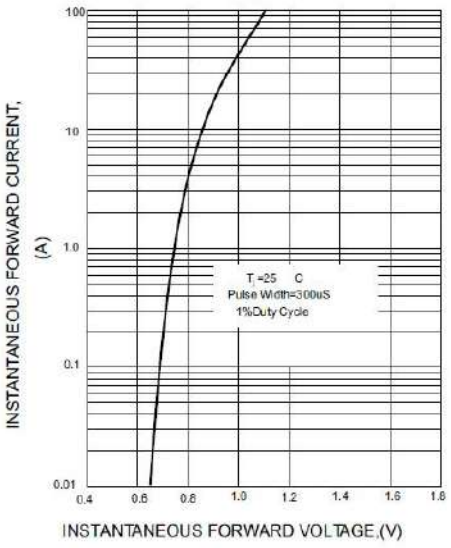


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

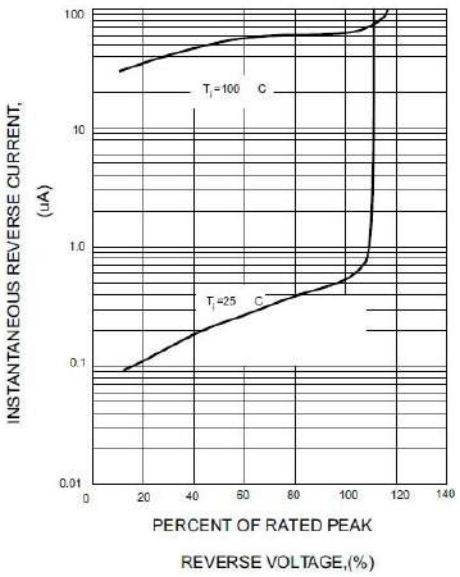
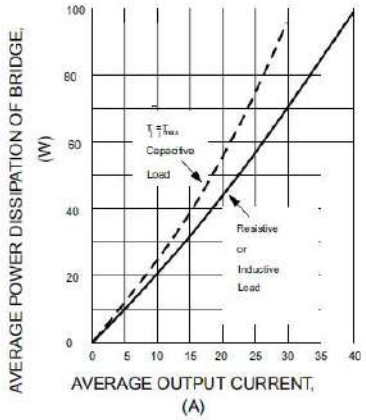


FIG.5-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBPC50005W THRU KBPC5010W

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 50.0 Ampere

FEATURES

◆High forward surge current capability

◆Low thermal resistance

◆High isolation voltage from case to lugs

◆High temperature soldering guaranteed:

260°C /10 second, at 5 lbs. (2.3kg) tension

Mechanical Data

◆Case: Metal case

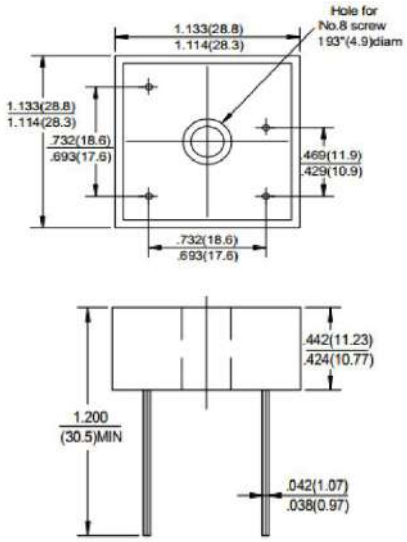
◆Terminal: Plated 0.25" (6.35mm) lug

◆Polarity: Polarity symbols marked on case

◆Mounting: Thru hole for #10 screw, 20 in,- lbs. Torqute Max

◆Weight: 1.02 ounce, 29 gram

KBPC-W



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	KBPC 50005W	KBPC 5001W	KBPC 5002W	KBPC 5004W	KBPC 5006W	KBPC 5008W	KBPC 5010W	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RRM}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at TC=55℃(Note1,2)		$I_{(AV)}$	50							Amps
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	400							Amps
Rating for Fusing(t<8.3ms)		I^2t	664							A^2S
Maximum Instantaneous Forward Voltage at 7.5A		V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	T_A=25℃	I_R	5.0							μAmps
	T_A=150℃		1.0							mAmps
Isolation Voltage from case to lugs		V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)		$R_{\theta JC}$	2.0							℃/W
Operating Temperature Range		T_J	-65 to +150							℃
Storage Temperature Range		T_{STG}	-65 to +150							℃

Note: 1. Unit mounted on 5"×4"×3" thick (12.8mm×10.2mm×7.3mm) Al. plate.

2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

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KBPC50005W THRU KBPC5010W

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 50.0 Ampere

RATING AND CHARACTERISTIC CURVES KBPC50005W THRU KBPC5010W

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

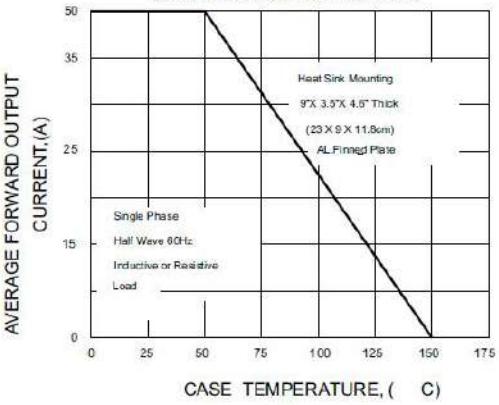


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

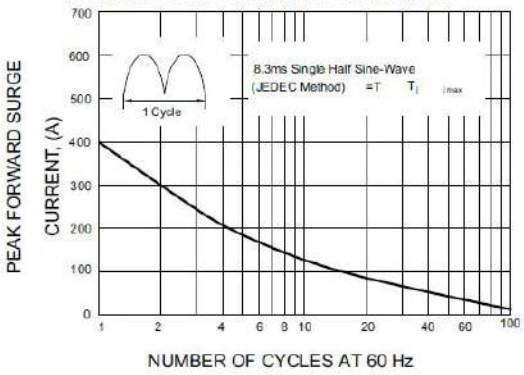


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE LEMENT

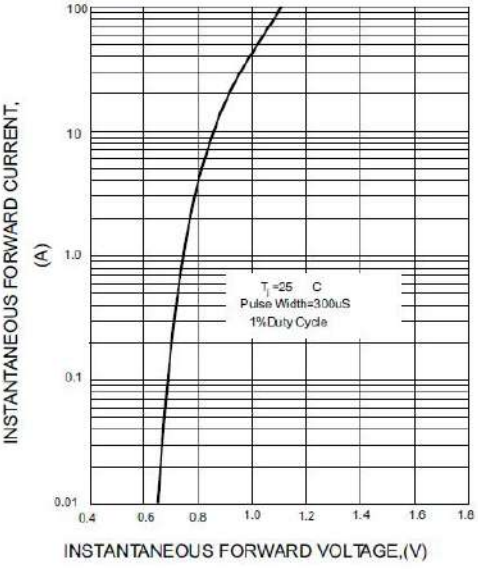


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

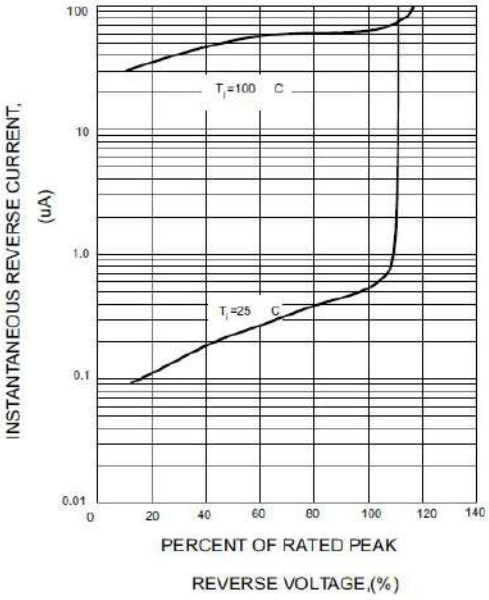
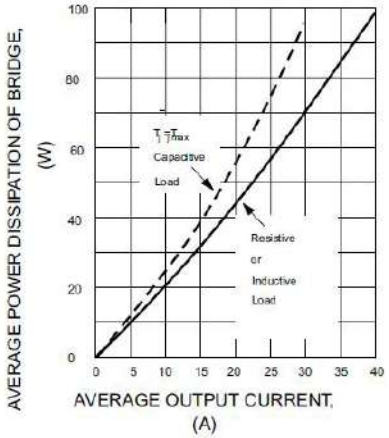


FIG.5-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

KBU6005 THRU KBU610

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 6.0 Ampere

FEATURES

◆High forward surge current capability.

◆Ideal for printed circuit board.

◆High temperature soldering guaranteed:

260℃/10 second, 0.375" (9.5mm) lead length

at 5 lbs. (2.3kg) tension.

Mechanical Data

◆Case: Transfer molded plastic.

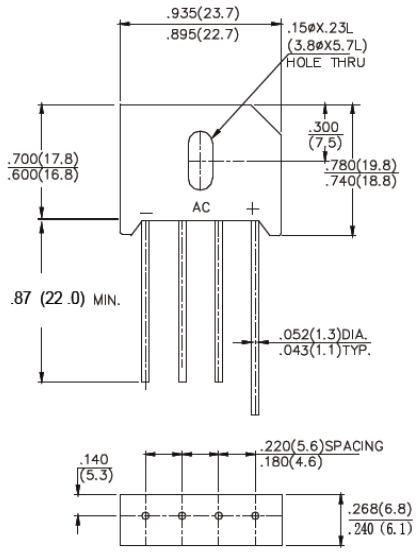
◆Terminal: Lead solderable per MIL - STD - 202E method 208℃.

◆Polarity: Polarity symbols marked on case.

◆Mounting: Thru hole for #6 screw, 5 in,- lbs. Torque Max.

◆Weight: 0.27 ounce, 7.59 gram.

KBU



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER		SYMBOL	KBU 6005	KBU 601	KBU 602	KBU 604	KBU 606	KBU 608	KBU 610	UNIT
Maximum Repetitive Peak Revere Voltage		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current at T_C=100℃		$I_{(AV)}$	6.0							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	150							Amps
Rating for Fusing(t<8.3ms)		I^2T	93							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 3.0A		V_F	1.0							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage per element	T_A=25℃	I_R	10							μA
	T_A=100℃		1.0							mA
Typical Junction Capacitance (Note 1)		C_j	105							pF
Typical Thermal Resistance (Note 2)		$R_{\theta JC}$	4.7							℃/W
Operating Temperature Range		T_J	-65 to +150							℃
Storage Temperature Range		T_{STG}	-65 to +150							

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

2. Unit mounted on 2.6" X 1.4" X 0.06" thick (6.3 X 3.5 X 0.15cm) Al. plate.

KBU6005 THRU KBU610

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 6.0 Ampere

RATING AND CHARACTERISTIC CURVES KBU6005 THRU KBU610

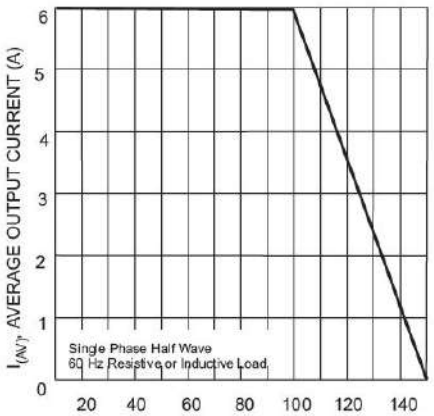


Fig. 1 Forward Current Derating Curve

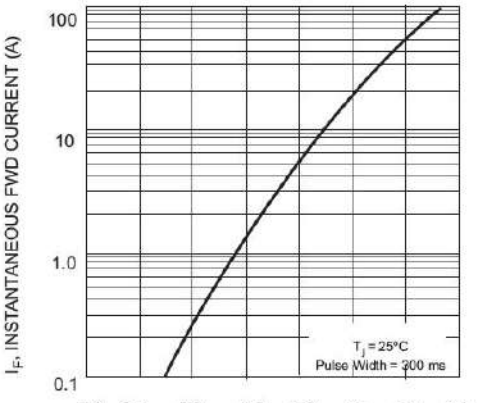


Fig. 2 Typical Forward Characteristics, per element

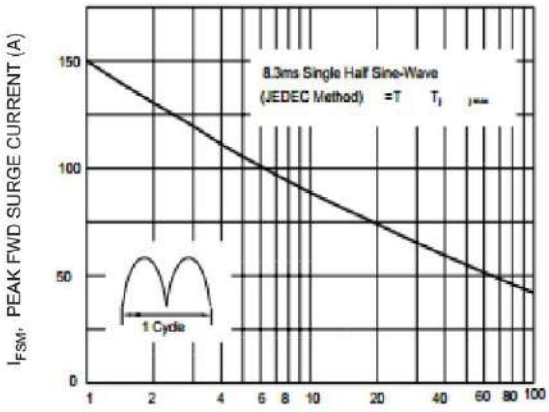


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

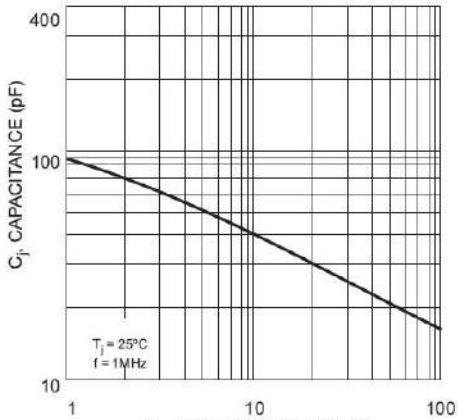


Fig. 4 Typical Junction Capacitance Per Element

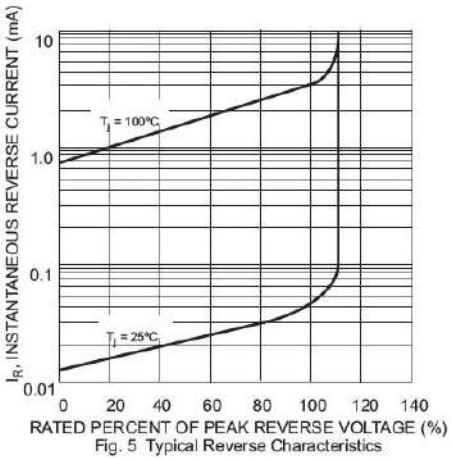


Fig. 5 Typical Reverse Characteristics

Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

MB1F THRU MB10F

SURFACE MOUNT FAST SWITCHING RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere

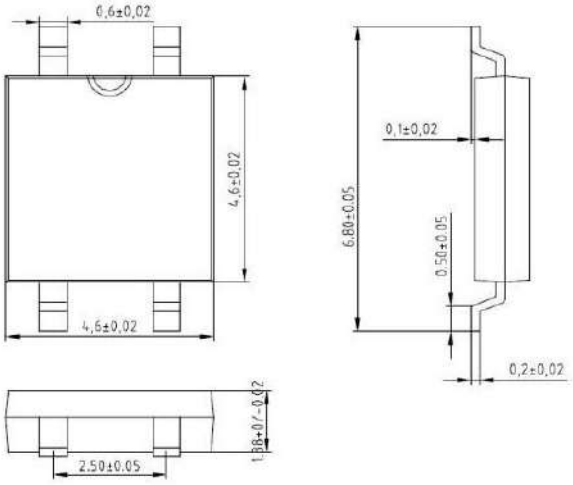
FEATURES

- ◆Glass passivated chip junction.
- ◆Ideal for surface mounted applications.
- ◆Low leakage.
- ◆High forward surge current capability.
- ◆High temperature soldering guaranteed: 260℃/10 seconds at terminals.

Mechanical Data

- ◆Case: Molded plastic body.
- ◆Epoxy: UL94V-0 rate flame retardant.
- ◆Polarity: Molded on body.
- ◆Lead: Plated terminals solderable per MIL-STD-202E method 208C.
- ◆Weight: 0.003 ounce, 0.1 gram.

MBF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	MB1F	MB2F	MB3F	MB4F	MB6F	MB8F	MB10F	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Output Current, 0.06 ” (1.5mm) lead length at T_A=40℃ (Note 2)	$I_{(AV)}$	1.0							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Rating for Fusing (t＜8.3ms)	I^2t	10							A^2s
Maximum Instantaneous Forward Voltage drop Per Bridge element 1.0A	V_F	1.1							V
Maximum DC Reverse Current at T_A=25℃ at Rated DC Blocking voltage T_A=125℃	I_R	5.0 0.5							μA mA
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	40							℃/W
Operating and Storage Temperature Range	T_J , T_{STG}	-55 to +150							℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

2. Unit mounted on P.C.B. with 0.95”×1.15” copper pads.

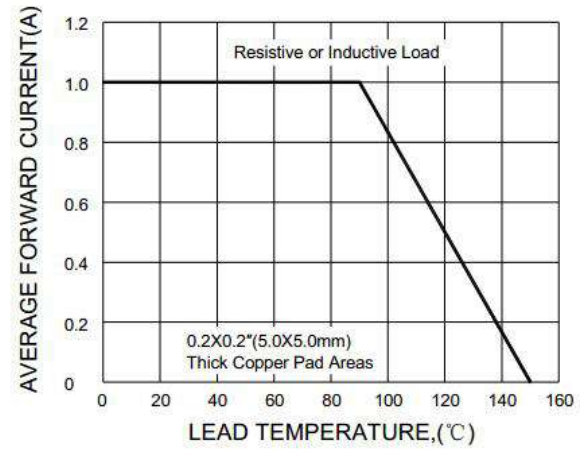
MB1F THRU MB10F

SURFACE MOUNT FAST SWITCHING RECTIFIER

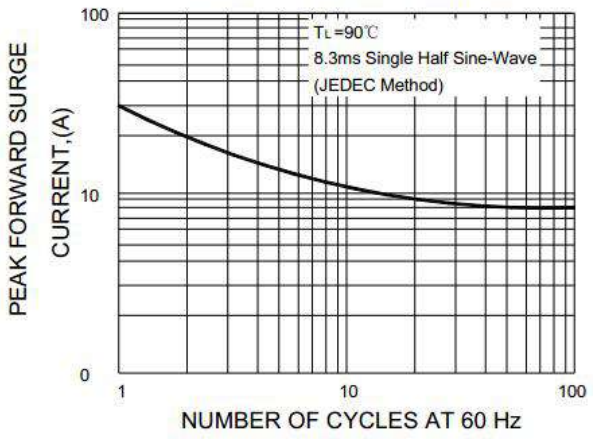
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.0 Ampere

RATING AND CHARACTERISTIC CURVES MB1F THRU MB10F

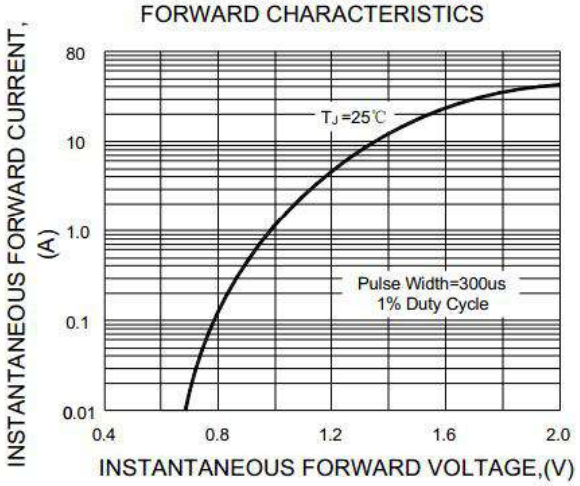
F1G.1-FORWARD CURRENT DERATING CURVE



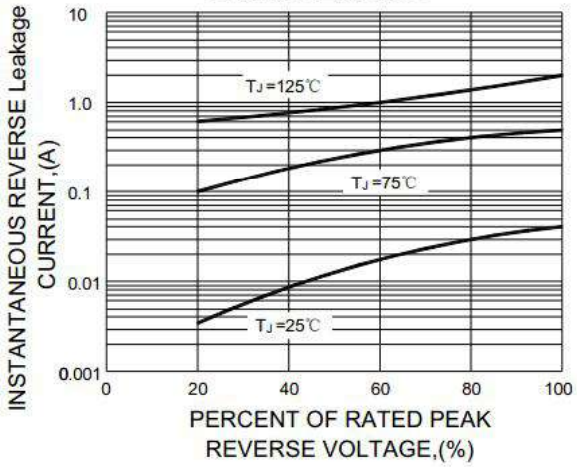
F1G.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



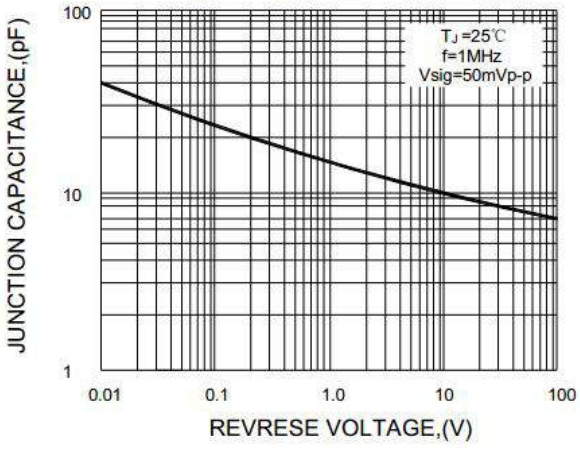
F1G.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



F1G.4-TYPICAL REVERSE CHARACTERISTICS



F1G.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

MB1S THRU MB10S

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE: 100 to 1000 Volts FORWARD CURRENT: 0.8 Ampere

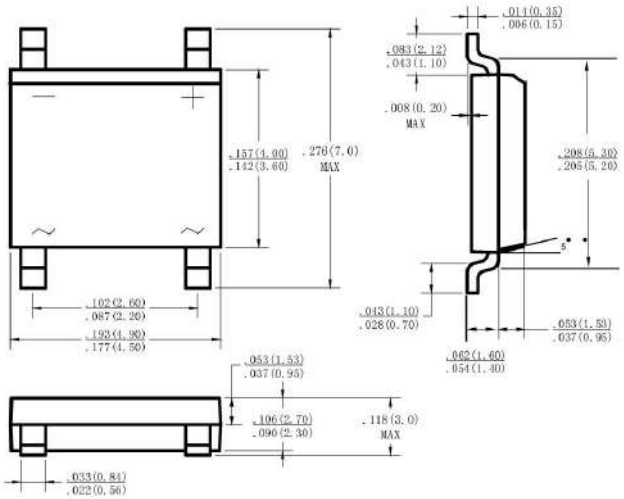
FEATURES

- ◆Rating to 1000V PRV
- ◆Ideal for printed circuit board
- ◆Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ◆Lead tin plated copper

Mechanical Data

- ◆Polarity: Symbol molded on body
- ◆Mounting position: Any

MBS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

CHARACTERISTICS	*SYMBOLS*	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (Note 1) @T_A=40 ℃	$I_{(AV)}$	0.8						A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I_{FSM}	30						A
Peak Forward Voltage at 0.8A DC	V_F	1.1						V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @T_J=125℃	I_R	5.0 500						μA
Typical Junction Capacitance Per Element (Note2)	C_J	15						pF
Typical Thermal Resistance (Note3)	$R_{\theta JL}$	75						℃/W
Operating Temperature Range	T_J	-55 to +150						℃
Storage Temperature Range	T_{STG}	-55 to +150						℃

Note: NOTES: 1.Mounted on P.C. board. 2. Measured at1.0MHz and applied reverse voltage of 4.0V DC. 3. Thermal resistance junction to case

MB1S THRU MB10S

SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE: 100 to 1000 Volts FORWARD CURRENT: 0.8 Ampere

RATING AND CHARACTERISTIC CURVES MB1S THRU MB10S

FIG.1-FORWARD CURRENT DERATING CURVE

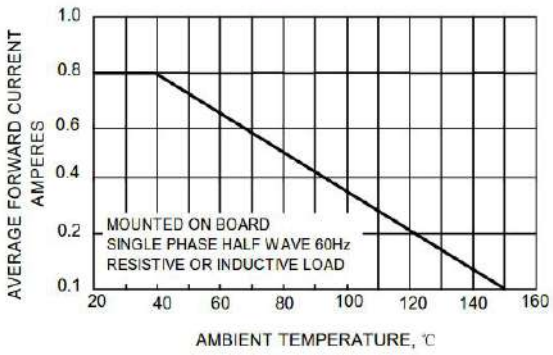


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

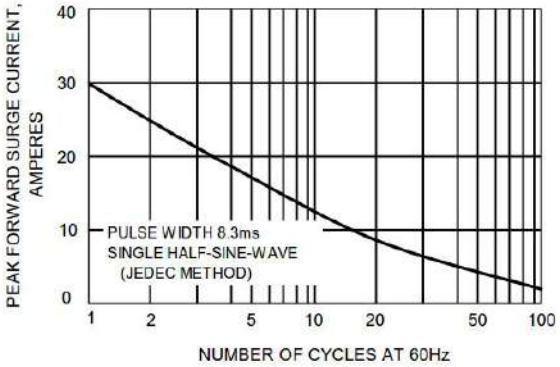


FIG.3-TYPICAL REVERSE CHARACTERISTICS

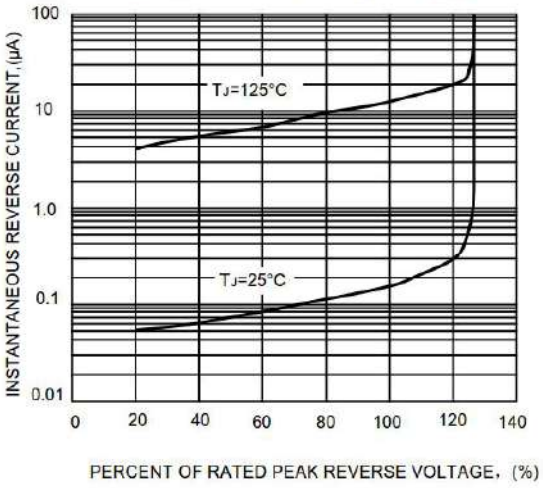


FIG.4-TYPICAL FORWARD CHARACTERISTICS

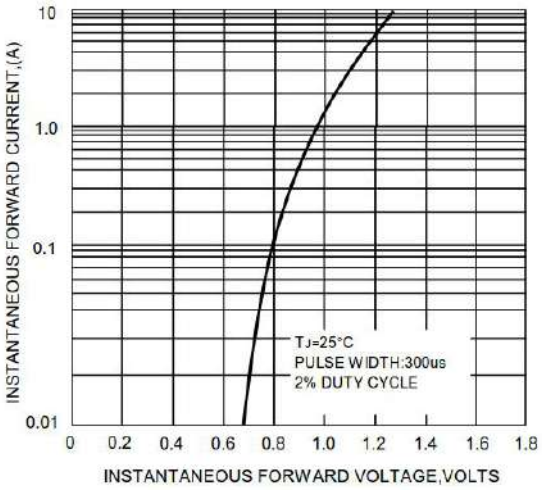
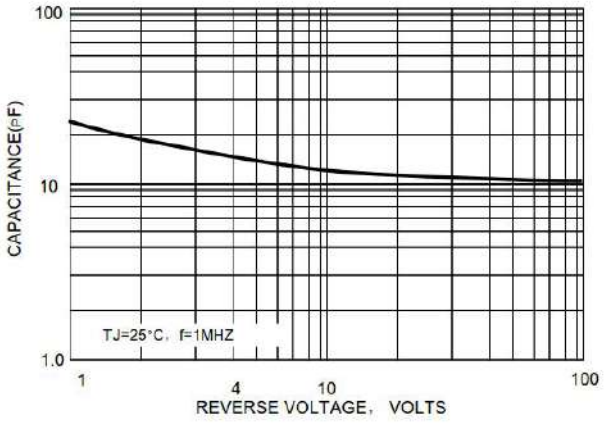


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

RS201 THRU RS207

Single Phase 2.0 AMPS. Glass Passivated Bridge Rectifiers

Voltage Range 50 to 1000 Volts Current 2.0 Amperes

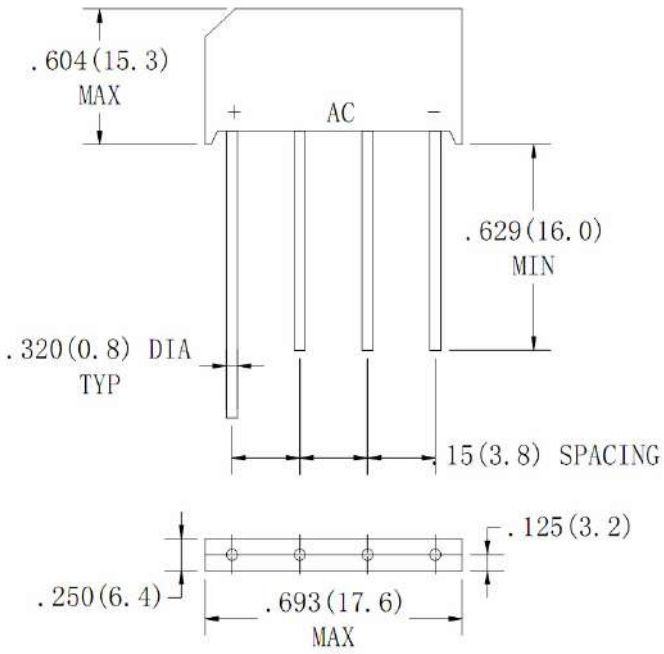
FEATURES

- ◆Ideal for printed circuit board
- ◆Reliable low cost construction technique results in inexpensive product
- ◆High temperature soldering guaranteed: 260℃ / 10 seconds / 0.375" (9.5mm) lead length at 5 lbs., (2.3 kg) tension
- ◆UL Recognized File number: E347215

Mechanical Data

- ◆Case: Molded plastic
- ◆Lead: solder plated
- ◆Polarity: As marked

RS2



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.For capacitive load, derate current by 20%

Type Number		RS201	RS202	RS203	RS204	RS205	RS206	RS207	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T_A = 40℃	I(AV)	2.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}	50							A
Maximum Instantaneous Forward Voltage @2.0A	V_F	1.1							V
Maximum DC Reverse Current @ TA=25℃ Rated DC Blocking voltage per leg TA = 125℃	I_R	10 500							μA
Typical Thermal Resistance (Note)	$R\theta_{JA}$	28							℃/W
Operating Temperature Range	T_J	-55 to +125							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: Unit Mounted on P.C.B. with 0.47×0.47"(12×12mm) Copper Pads,0.375"(9.5mm) Lesd Length

Suntan® Su®

RS201 THRU RS207

Single Phase 2.0 AMPS. Glass Passivated Bridge Rectifiers

Voltage Range 50 to 1000 Volts Current 2.0 Amperes

RATING AND CHARACTERISTIC CURVES RS201 THRU RS207

FIG.1-MAXIMUM NONO-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELELMENT

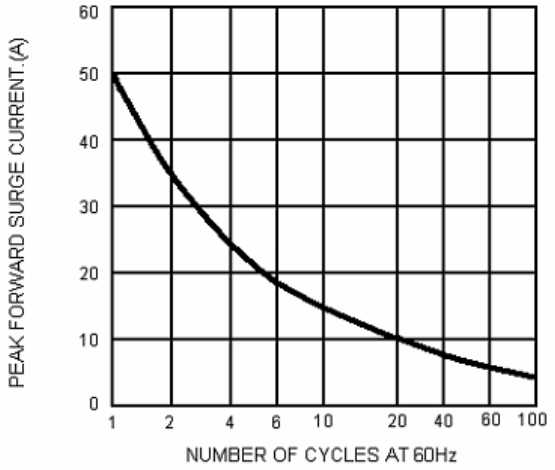


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

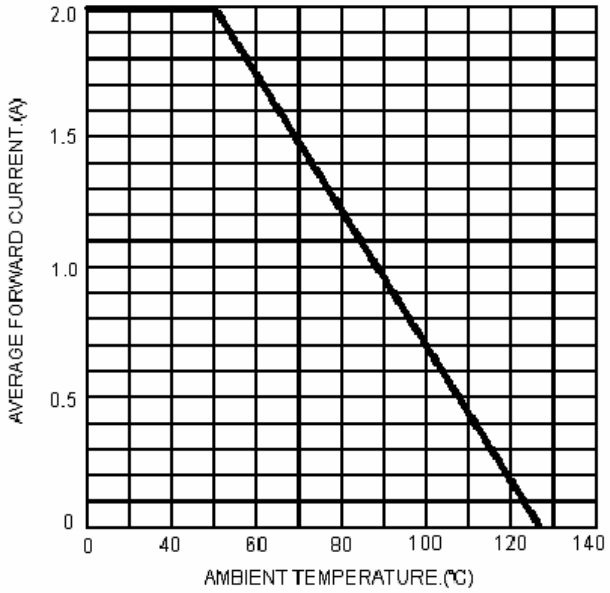


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

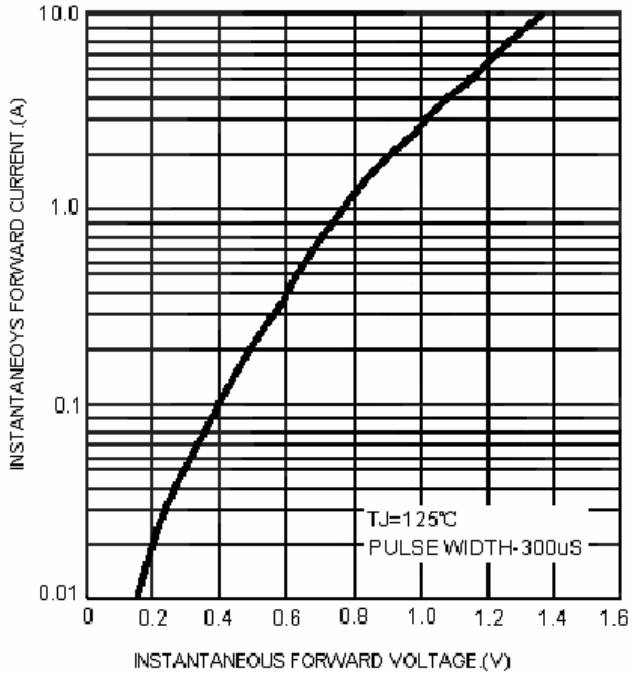
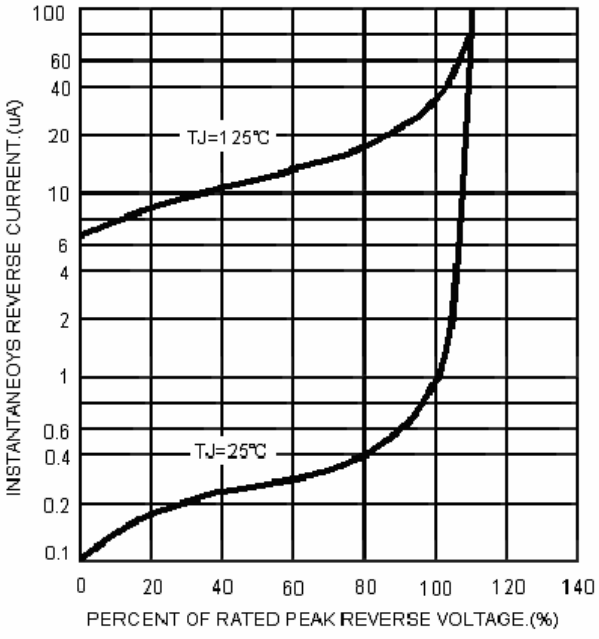


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



Note: Specification are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

S25VB005 THRU S25VB100

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 25 Ampere

FEATURES

◆Rating to 1000V PRV

◆High efficiency

◆Glass passivated chip junction

◆Electrically isolated metal case for maximum heat Dissipation

◆The plastic material has UL flammability classification 94V-0

◆Electrically isolated base-2500 Vlots

Mechanical Data

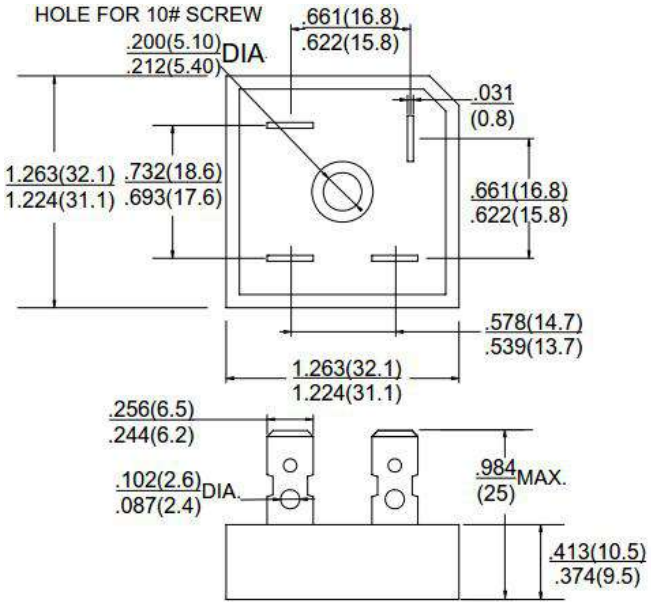
◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation

◆Polarity : As marked on Body

◆Mounting : Hole for # 10 screw

◆Weight : 0.70 ounces , 20 grams (terminal)

S35



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	S25VB 005	S25VB 10	S25VB 20	S25VB 40	S25VB 60	S25VB 80	S25VB 100	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RRM}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @Tc=Ta	$I_{(AV)}$	25.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load	I_{FSM}	350							A
Maximum Forward Voltage at 12.5A DC	V_F	1.05							V
Maximum DC Reverse Current @ T_J=25℃ atrated DC blocking voltage @ T_J=125℃	I_R	5.0 500							μA
I^2t Rating for Fusing(t<8.3ms)	I^2t	370							A^2S
Typical Junction Capacitance per element (Note 2)	C_J	150							pF
Typical Thermal Resistance	$R_{\theta JC}$	1.4							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

S25VB005 THRU S25VB100

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 25 Ampere

RATING AND CHARACTERISTIC CURVES S25VB005 THRU S25VB100

FIG.1 - FORWARD CURRENT DERATING CURVE

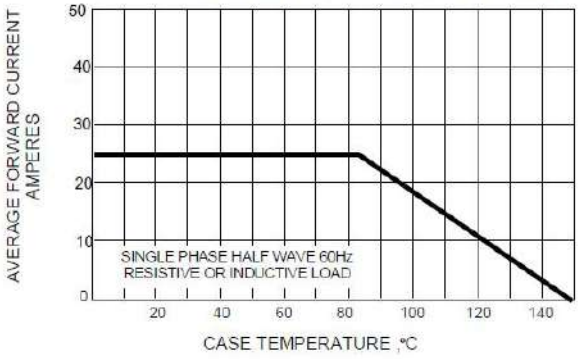


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

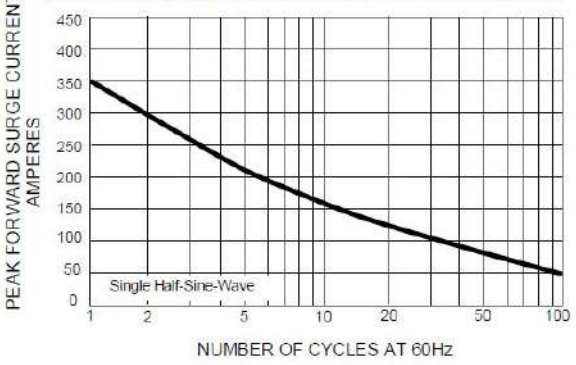


FIG.3 - TYPICAL JUNCTION CAPACITANCE

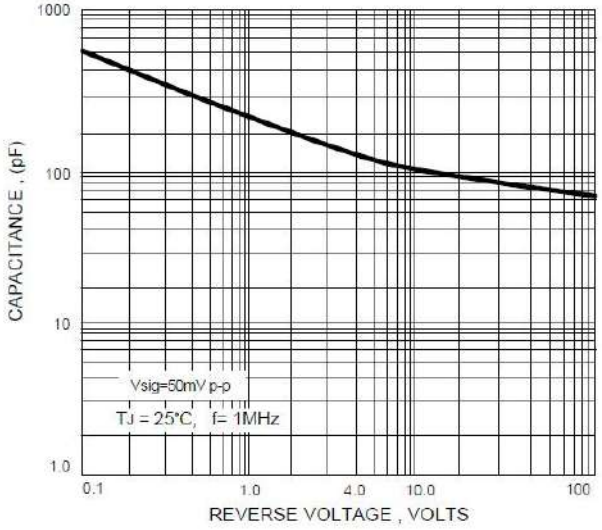


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

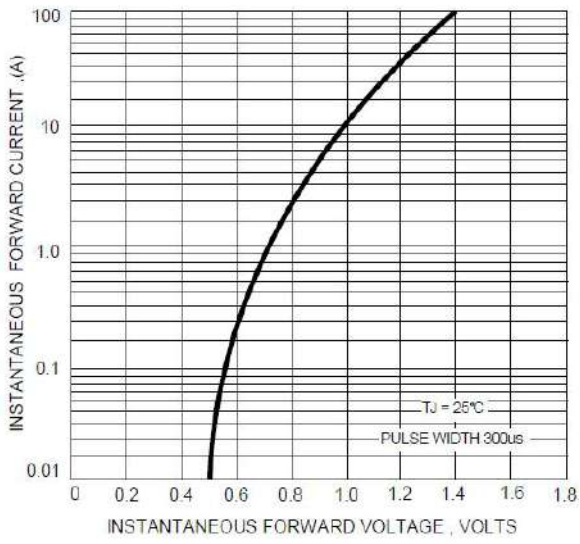
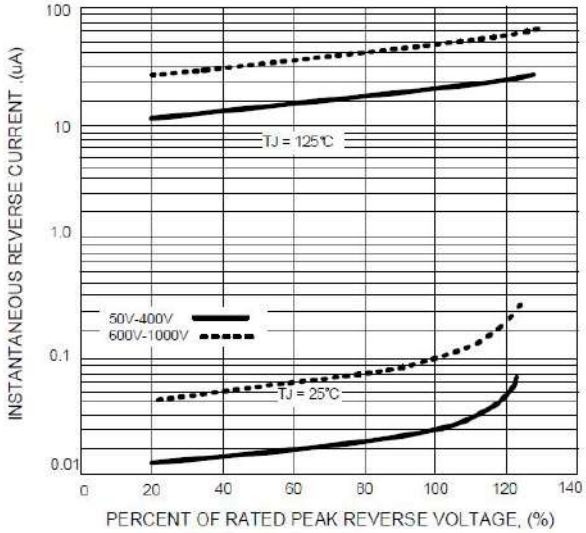


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

S35VB005 THRU S35VB100

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 35 Ampere

FEATURES

◆Rating to 1000V PRV

◆High efficiency

◆Glass passivated chip junction

◆Electrically isolated metal case for maximum heat Dissipation

◆The plastic material has UL flammability classification 94V-0

◆Electrically isolated base-2500 Volts

Mechanical Data

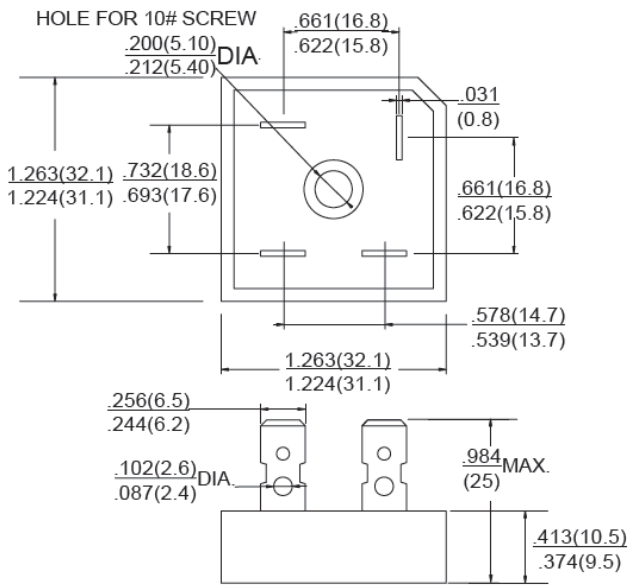
◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation

◆Polarity : As marked on Body

◆Mounting : Hole for # 10 screw

◆Weight : 0.70 ounces , 20 grams (terminal)

S35



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	S35VB 005	S35VB 10	S35VB 20	S35VB 40	S35VB 60	S35VB 80	S35VB 100	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RRM}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @Tc=Ta	$I_{(AV)}$	35.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load	I_{FSM}	400							A
Maximum Forward Voltage at 17.5A DC	V_F	1.05							V
Maximum DC Reverse Current @ T_J=25℃ atrated DC blocking voltage @ T_J=125℃	I_R	5.0 500							μA
I^2t Rating for Fusing(t<8.3ms)，(Note 1)	I^2t	660							A^2S
Typical Junction Capacitance per element (Note 2)	C_J	150							pF
Typical Thermal Resistance	$R_{\theta JC}$	1.4							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

S35VB005 THRU S35VB100

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 35 Ampere

RATING AND CHARACTERISTIC CURVES S35VB005 THRU S35VB100

FIG.1 - FORWARD CURRENT DERATING CURVE

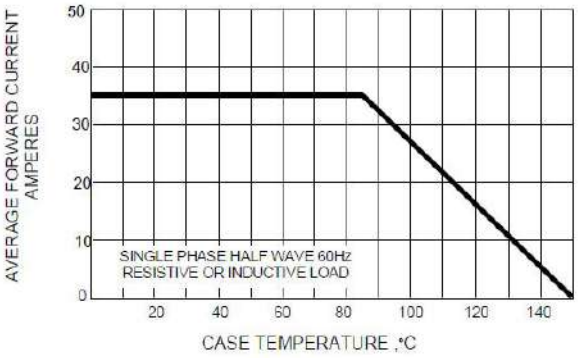


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

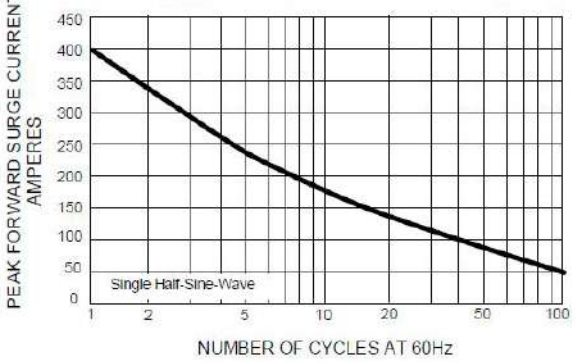


FIG.3 - TYPICAL JUNCTION CAPACITANCE

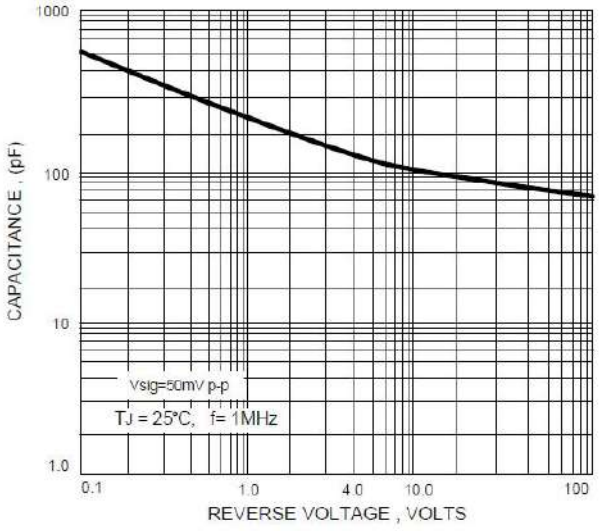


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

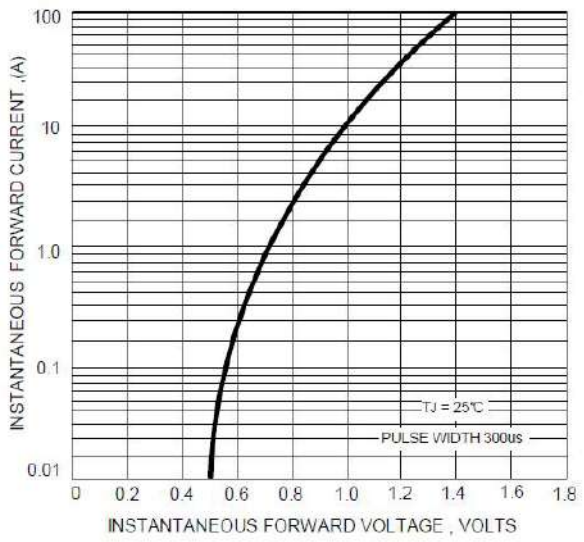
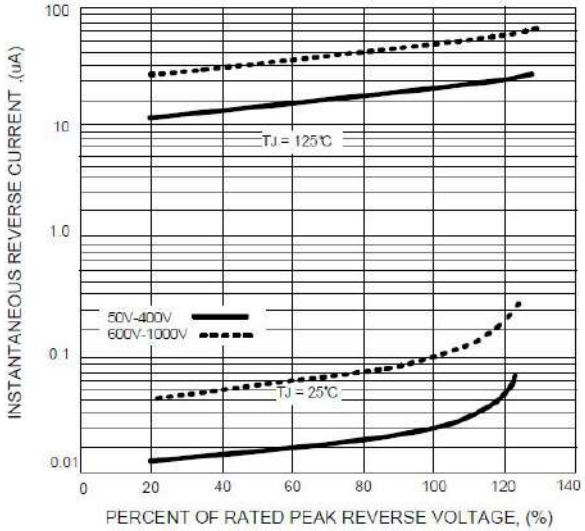


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

S50VB005 THRU S50VB100

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 50 Ampere

FEATURES

◆Rating to 1000V PRV

◆High efficiency

◆Glass passivated chip junction

◆Electrically isolated metal case for maximum heat Dissipation

◆The plastic material has UL flammability classification 94V-0

◆Electrically isolated base-2500 Vlots

Mechanical Data

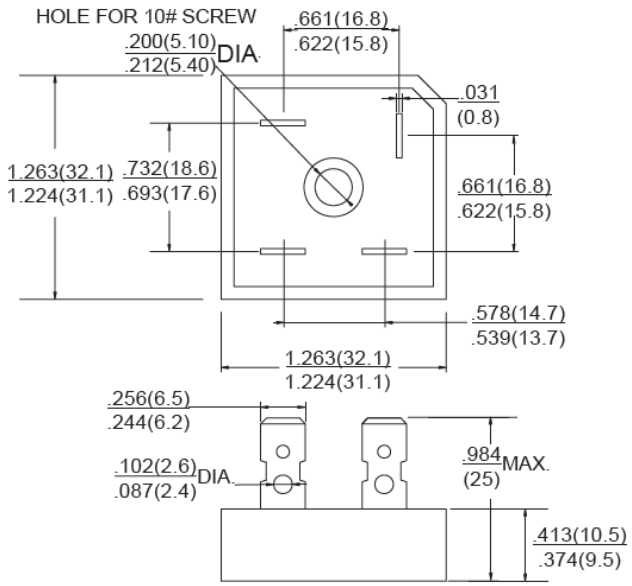
◆Case : Molded plastic with Heatsink internally mounted in the bridge encapsulation

◆Polarity : As marked on Body

◆Mounting : Hole for # 10 screw

◆Weight : 0.70 ounces , 20 grams (terminal)

S35



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	S50VB 005	S50VB 10	S50VB 20	S50VB 40	S50VB 60	S50VB 80	S50VB 100	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RRM}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @Tc=Ta	$I_{(AV)}$	50.0							A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load	I_{FSM}	450							A
Maximum Forward Voltage at 25.0A DC	V_F	1.1							V
Maximum DC Reverse Current @ T_J=25℃ atrated DC blocking voltage @ T_J=125℃	I_R	5.0 500							μA
I^2t Rating for Fusing(t<8.3ms)，(Note 1)	I^2t	800							A^2S
Typical Junction Capacitance per element (Note 2)	C_J	150							pF
Typical Thermal Resistance	$R_{\theta JC}$	1.4							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at non-repetitive, for greater than 1ms and less than 8.3ms

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

S50VB005 THRU S50VB100

SINGLE-PHASE BRIDGE RECTIFIER GLASS PASSIVATED BRIDGE RECTIFIERS
REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 50 Ampere

RATING AND CHARACTERISTIC CURVES S50VB005 THRU S50VB100

FIG.1 - FORWARD CURRENT DERATING CURVE

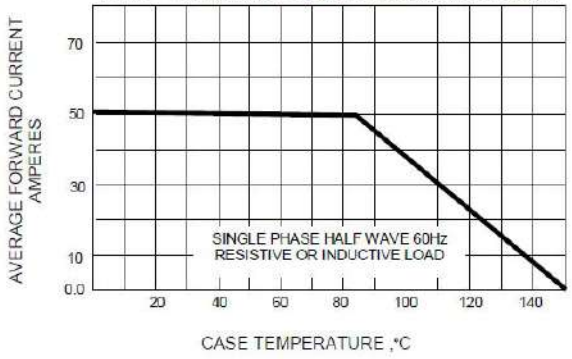


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

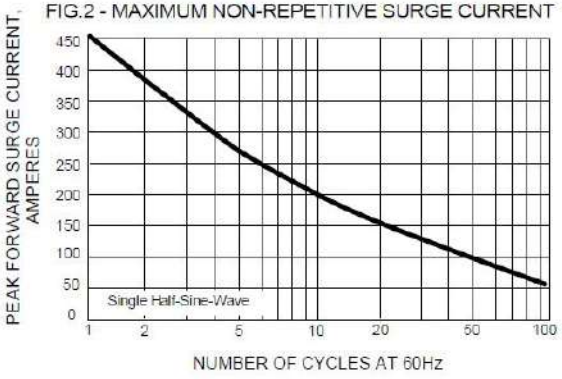


FIG.3 - TYPICAL JUNCTION CAPACITANCE

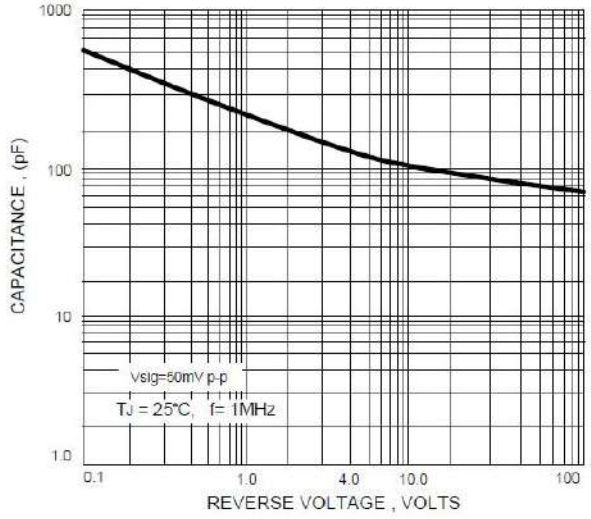


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

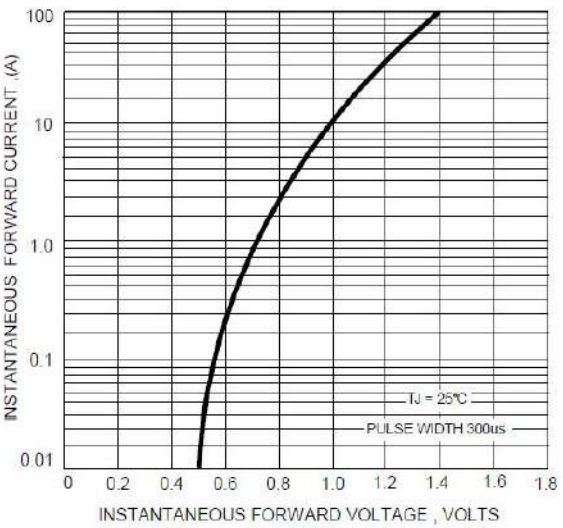
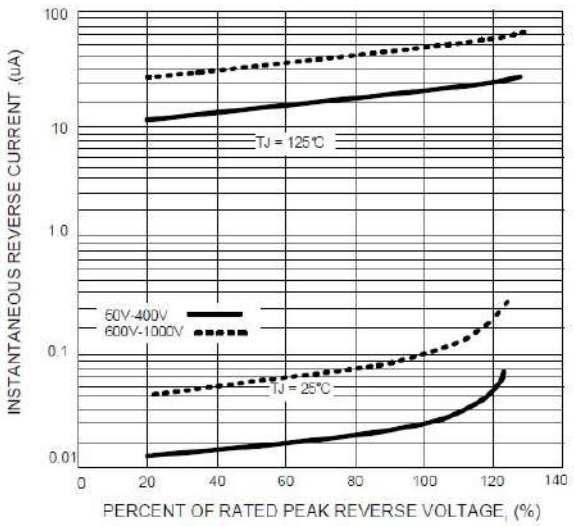


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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Suntan® Su®

SKBPC1504 THRU SKBPC1516

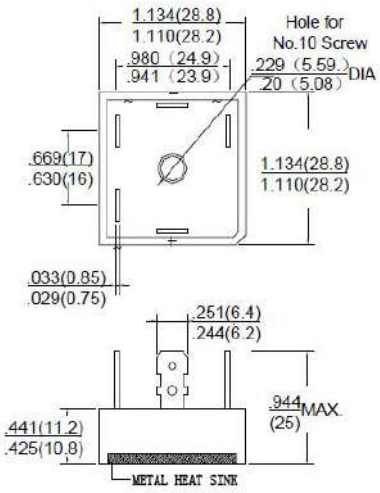
THREE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

REVERSE VOLTAGE 400 to 1600 Volts FORWARD CURRENT 15 Ampere

FEATURES

- ◆Io 15A
- ◆V_{RRM} 400V~1600V
- ◆Glass passivated chip
- ◆High surge forward current capability

SKBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	Conditions	SKBC 1504	SKBPC 1506	SKBPC 1508	SKBPC 1510	SKBPC 1512	SKBPC 1514	SKBPC 1516	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}		400	600	800	1000	1200	1400	1600	V
Average Rectified Output Current	I_O	60Hz sine wave, R-load With heatsink Tc=55℃	15							A
Surge(Nonrepetitive) Forward Current	I_{FSM}	60Hz sine wave, 1 cycle, Ta=25℃	300							A
Current Squared Time	I^2t	1ms≤t<8.3ms Tj=25℃ Rating of per diode	375							A^2S
Storage Temperature	T_{STG}		-40～+150							℃
Junction Temperature	T_J		-55～+150							℃
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2.5							KV

Item	SYMBOL	UNIT	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	I_{FM}=7.5A, Pulse measurement, Rating of per	1.2
Peak Reverse Current	I_{RRM}	uA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-C}$	℃/W	Between junction and case, With heatsink	3.0

SKBPC1504 THRU SKBPC1516

General purpose 3 phase Bridge Rectifier

REVERSE VOLTAGE 400 to 1600 Volts FORWARD CURRENT 15 Ampere

RATING AND CHARACTERISTIC CURVES SKBPC1504 THRU SKBPC1516

图1：Io-Tc曲线
FIG1:Io-Tc Curve

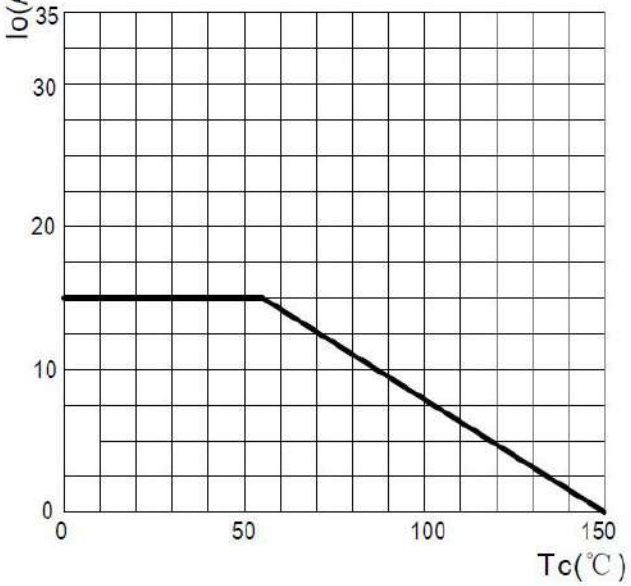


图2：耐正向浪涌电流曲线
FIG2:Surge Forward Current Capability

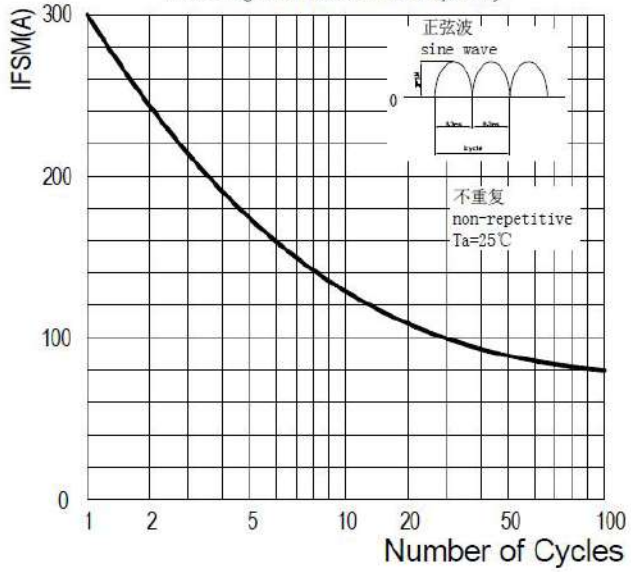


图3：正向电压曲线
FIG3:Instantaneous Forward Voltage

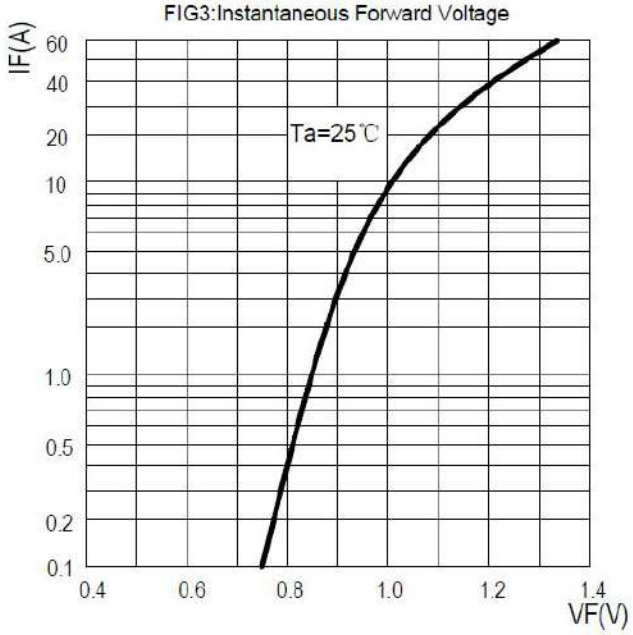
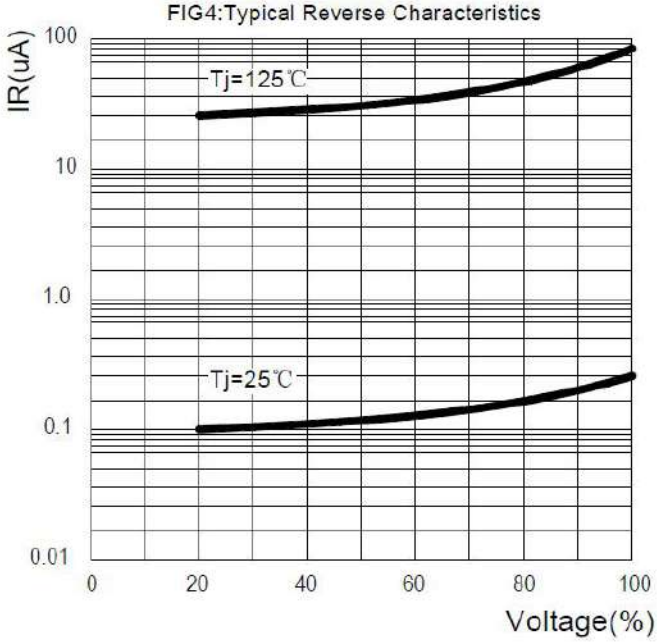


图4：反向电流曲线
FIG4:Typical Reverse Characteristics



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Suntan® Su®

SKBPC2504 THRU SKBPC2516

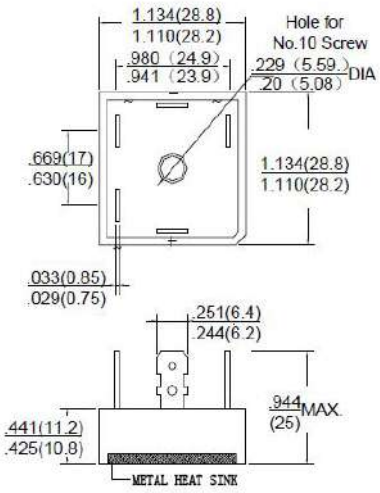
THREE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

REVERSE VOLTAGE 400 to 1600 Volts FORWARD CURRENT 25 Ampere

FEATURES

- ◆Io 25A
- ◆V_{RRM} 400V~1600V
- ◆Glass passivated chip
- ◆High surge forward current capability

SKBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	Conditions		SKBC 2504	SKBPC 2506	SKBPC 2508	SKBPC 2510	SKBPC 2512	SKBPC 2514	SKBPC 2516	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}			400	600	800	1000	1200	1400	1600	V
Average Rectified Output Current	I_O	60Hz sine wave, R-load	With heatsink Tc=55℃	25							A
Surge(Nonrepetitive) Forward Current	I_{FSM}	60Hz sine wave, 1 cycle, Ta=25℃		360							A
Current Squared Time	I^2t	1ms≤t<8.3ms Tj=25℃ Rating of per diode		540							A^2S
Storage Temperature	T_{STG}			-40～+150							℃
Junction Temperature	T_J			-55～+150							℃
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute		2.5							KV
Item	**SYMBOL**	**UNIT**		**Test Condition**							**Max**
Peak Forward Voltage	V_{FM}	V		I_{FM}=8.5A, Pulse measurement, Rating of per							1.2
Peak Reverse Current	I_{RRM}	uA		V_{RM}=V_{RRM} , Pulse measurement, Rating of per diode							10
Thermal Resistance	$R_{\theta J-C}$	℃/W		Between junction and case, With heatsink							1.9

SKBPC2504 THRU SKBPC2516

General purpose 3 phase Bridge Rectifier

REVERSE VOLTAGE 400 to 1600 Volts FORWARD CURRENT 25 Ampere

RATING AND CHARACTERISTIC CURVES SKBPC2504 THRU SKBPC2516

图1：Io-Tc曲线
FIG1:Io-Tc Curve

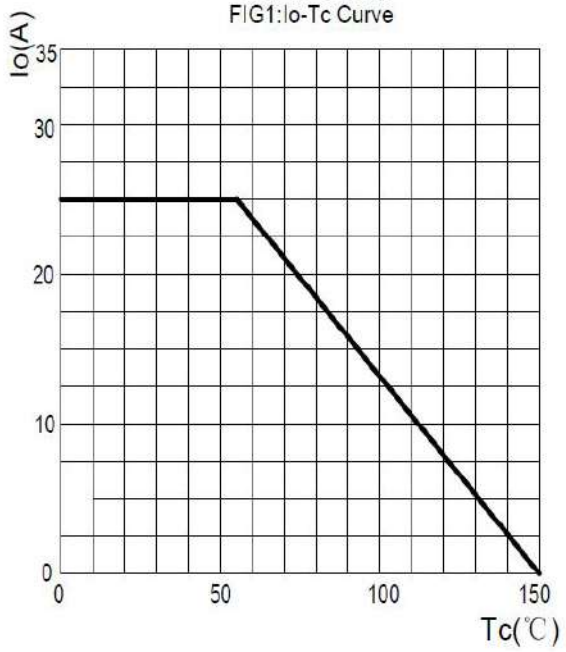


图2：耐正向浪涌电流曲线
FIG2:Surge Forward Current Capadility

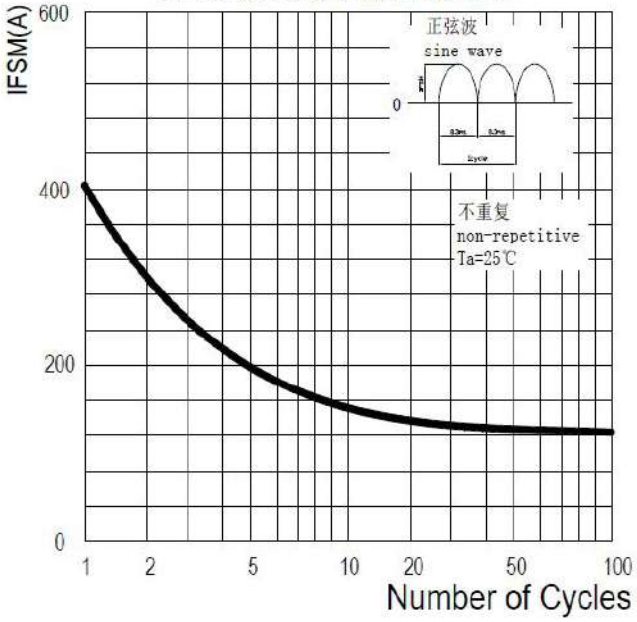


图3：正向电压曲线
FIG3:Instantaneous Forward Voltage

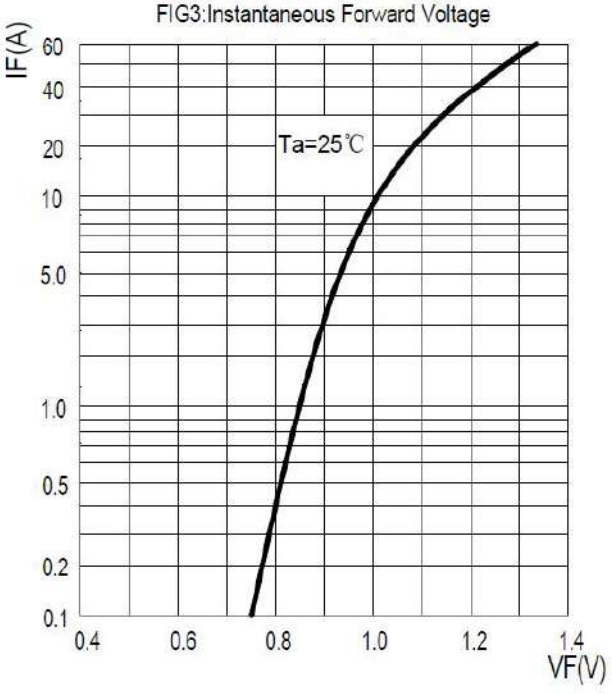
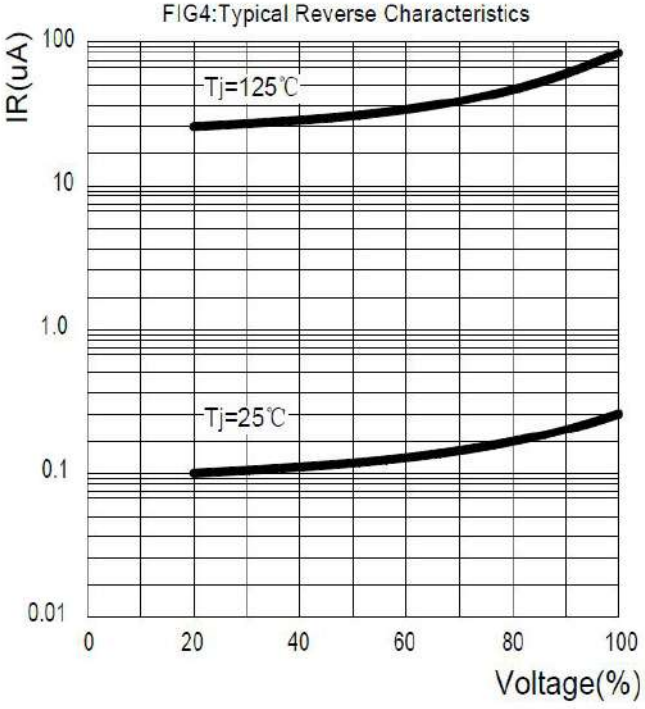


图4：反向电流曲线
FIG4:Typical Reverse Characteristics



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Suntan® Su®

SKBPC3504 THRU SKBPC3516

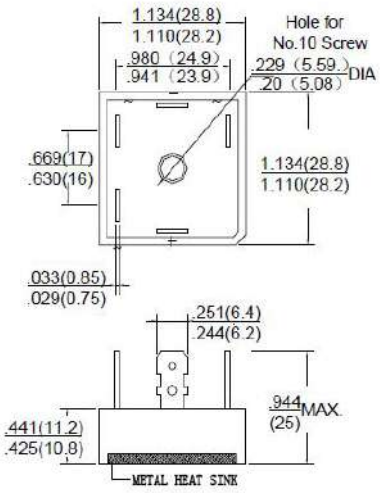
THREE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

REVERSE VOLTAGE 400 to 1600 Volts FORWARD CURRENT 35 Ampere

FEATURES

- ◆Io 35A
- ◆V_{RRM} 400V~1600V
- ◆Glass passivated chip
- ◆High surge forward current capability

SKBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	Conditions	SKBC 3504	SKBPC 3506	SKBPC 3508	SKBPC 3510	SKBPC 3512	SKBPC 3514	SKBPC 3516	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}		400	600	800	1000	1200	1400	1600	V
Average Rectified Output Current	I_O	60Hz sine wave, R-load With heatsink Tc=55℃	35							A
Surge(Nonrepetitive) Forward Current	I_{FSM}	60Hz sine wave, 1 cycle, Ta=25℃	425							A
Current Squared Time	I^2t	1ms≤t<8.3ms Tj=25℃ Rating of per diode	750							A^2S
Storage Temperature	T_{STG}		-40～+150							℃
Junction Temperature	T_J		-55～+150							℃
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2.5							KV
Item	**SYMBOL**	**UNIT**	**Test Condition**							**Max**
Peak Forward Voltage	V_{FM}	V	I_{FM}=12A, Pulse measurement, Rating of per							1.2
Peak Reverse Current	I_{RRM}	uA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode							10
Thermal Resistance	$R_{\theta J-C}$	℃/W	Between junction and case, With heatsink							1.35

SKBPC3504 THRU SKBPC3516

General purpose 3 phase Bridge Rectifier

REVERSE VOLTAGE 400 to 1600 Volts FORWARD CURRENT 15 Ampere

RATING AND CHARACTERISTIC CURVES SKBPC3504 THRU SKBPC3516

图1：Io-Tc曲线

FIG1:Io-Tc Curve

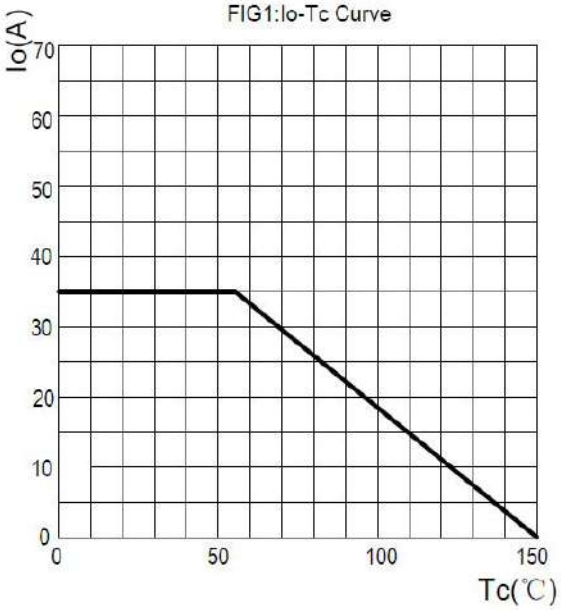


图2：耐正向浪涌电流曲线

FIG2:Surge Forward Current Capadility

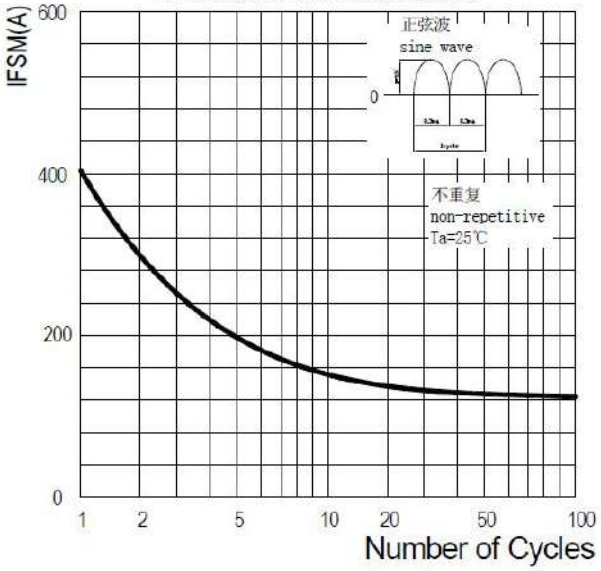


图3：正向电压曲线

FIG3:Instantaneous Forward Voltage

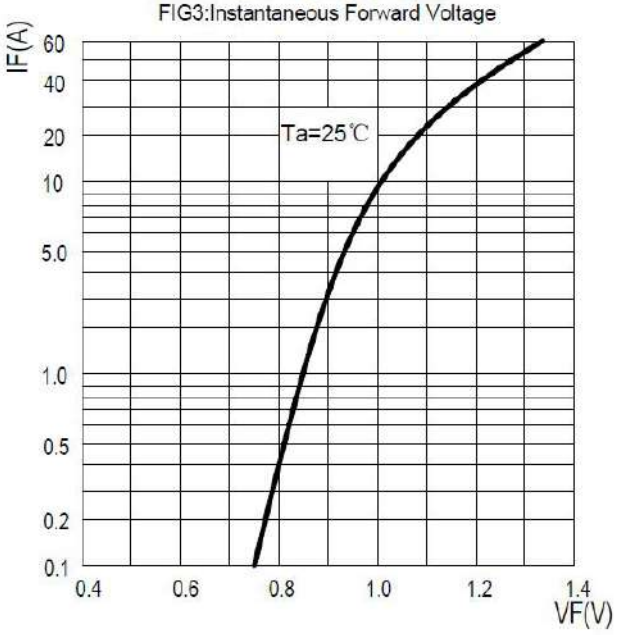
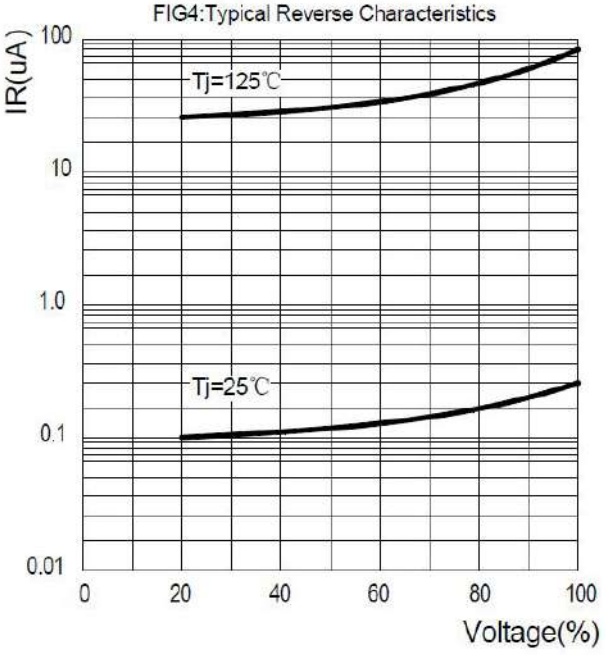


图4：反向电流曲线

FIG4:Typical Reverse Characteristics



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Suntan® Su®

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SKBPC5004 THRU SKBPC5016

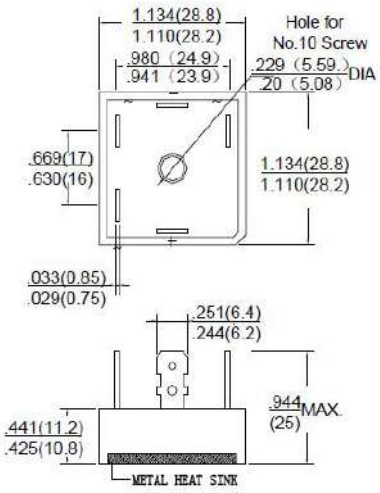
THREE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

REVERSE VOLTAGE 400 to 1600 Volts FORWARD CURRENT 50 Ampere

FEATURES

- ◆Io 50A
- ◆V_{RRM} 400V~1600V
- ◆Glass passivated chip
- ◆High surge forward current capability

SKBPC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	Conditions	SKBC 5004	SKBPC 5006	SKBPC 5008	SKBPC 5010	SKBPC 5012	SKBPC 5014	SKBPC 5016	UNIT
Repetitive Peak Reverse Voltage	V_{RRM}		400	600	800	1000	1200	1400	1600	V
Average Rectified Output Current	I_O	60Hz sine wave, R-load With heatsink Tc=55℃	50							A
Surge(Nonrepetitive) Forward Current	I_{FSM}	60Hz sine wave, 1 cycle, Ta=25℃	500							A
Current Squared Time	I^2t	1ms≤t<8.3ms Tj=25℃ Rating of per diode	1040							A^2S
Storage Temperature	T_{STG}		-40～+150							℃
Junction Temperature	T_J		-55～+150							℃
Dielectric Strength	V_{dis}	Terminals to case, AC 1 minute	2.5							KV

Item	SYMBOL	UNIT	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	I_{FM}=17A, Pulse measurement, Rating of per	1.2
Peak Reverse Current	I_{RRM}	uA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-C}$	℃/W	Between junction and case, With heatsink	0.9

SKBPC5004 THRU SKBPC5016

General purpose 3 phase Bridge Rectifier

REVERSE VOLTAGE 400 to 1600 Volts FORWARD CURRENT 50 Ampere

RATING AND CHARACTERISTIC CURVES SKBPC5004 THRU SKBPC5016

图1：Io-Tc曲线
FIG1:Io-Tc Curve

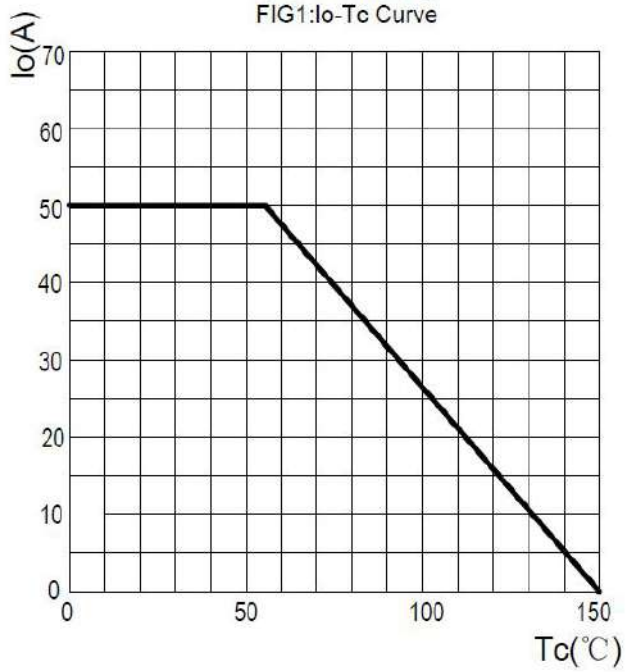


图2：耐正向浪涌电流曲线
FIG2:Surge Forward Current Capadility

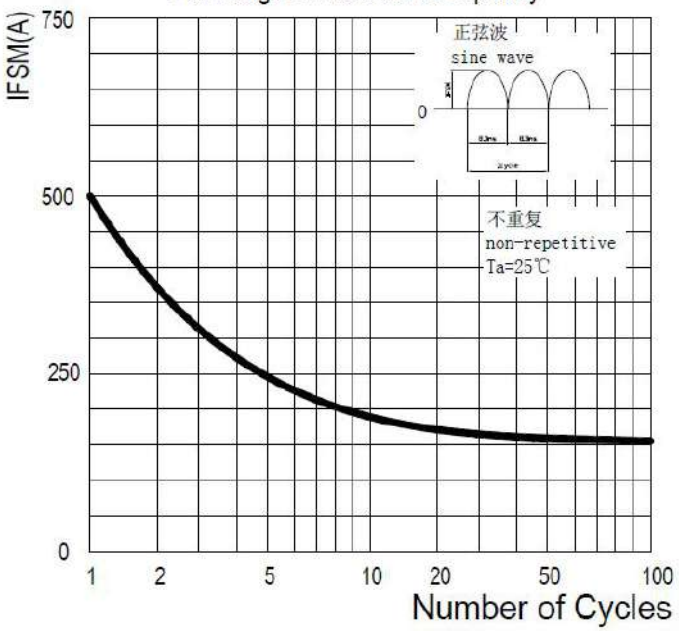


图3：正向电压曲线
FIG3:Instantaneous Forward Voltage

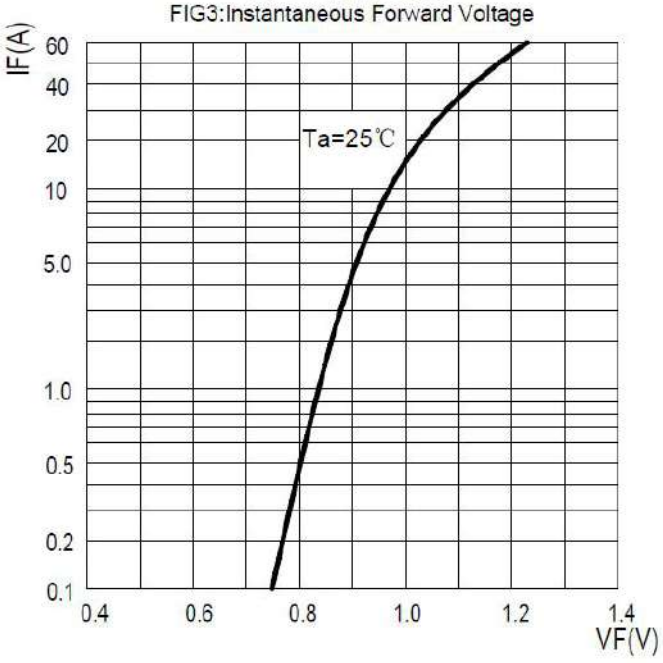
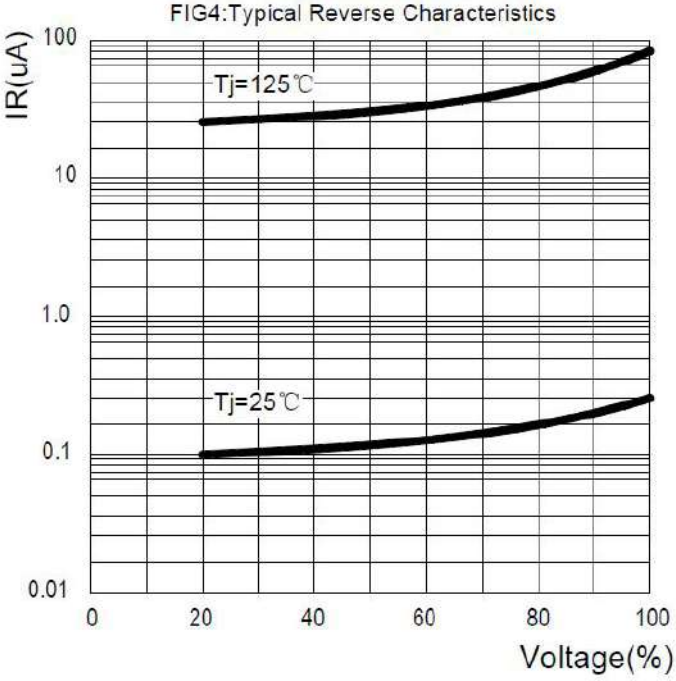


图4：反向电流曲线
FIG4:Typical Reverse Characteristics



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Suntan® Su®

W005 THRU W10

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.5 Amperes

FEATURES

◆Rating to 1000VPRV.

◆Ideal for printed circuit board.

◆Low forward voltage drop, high current capability.

◆Reliable low cost construction utilizing molded epoxy technique results in inexpensive product.

◆The plastic material has UL flammability classification 94V-0.

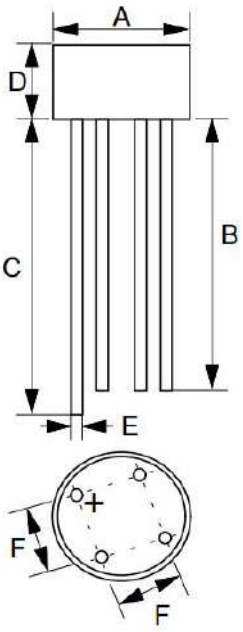
Mechanical Data

◆Case: Molded plastic.

◆Polarity: As marked on Body.

◆Weight: 0.05 ounces, 1.42grams.

◆Mounting position: Any.



WOB		
DIM.	MIN.	MAX.
A	8.90	9.30
B	25.4	–
C	27.9	–
D	5.10	5.60
E	0.70	0.80
F	4.60	5.60
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	W005	W01	W02	W04	W06	W08	W10	UNIT
Maximum Recurrent Peak Revere Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TA=25℃	$I_{(AV)}$	1.5							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Maximum forward Voltage at 1.0A DC	VF	1.0							V
Maximum DC Reverse Current @T_J=25℃ at Rated DC Blocking Voltage @ T_J=125℃	I_R	50 500							μA
I^2t Rating for fusing (t < 8.3ms)	I^2t	10.4							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	20							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	36							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

2. Thermal Resistance Junction to Ambient.

W005 THRU W10

SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE 50 to 1000 Volts FORWARD CURRENT 1.5 Amperes

RATING AND CHARACTERISTIC CURVES W005 THRU W10

FIG.1 - FORWARD CURRENT DERATING CURVE

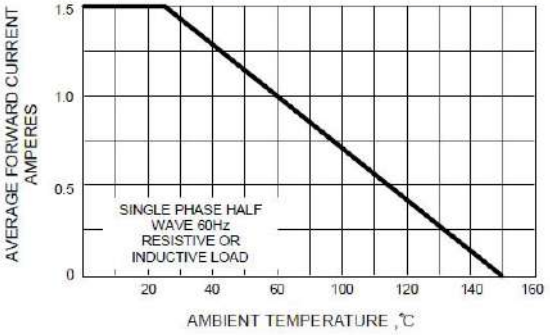


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

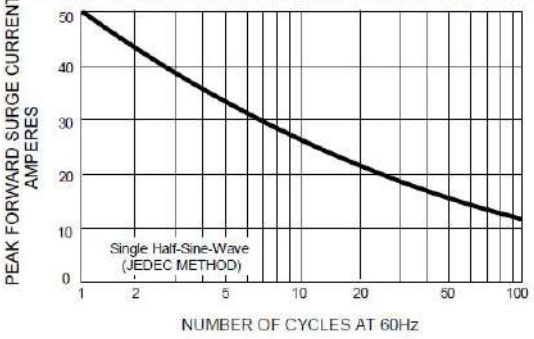


FIG.3 - TYPICAL JUNCTION CAPACITANCE

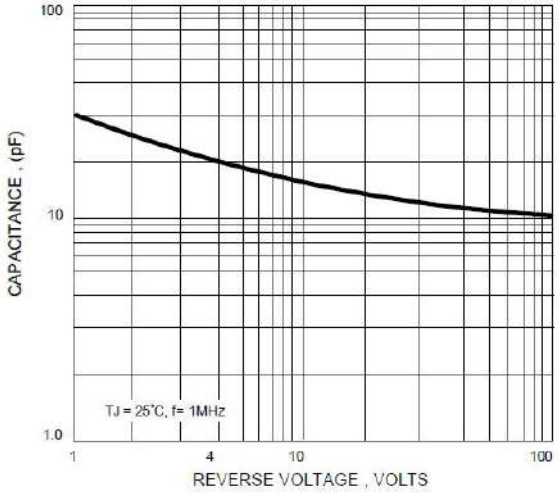


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

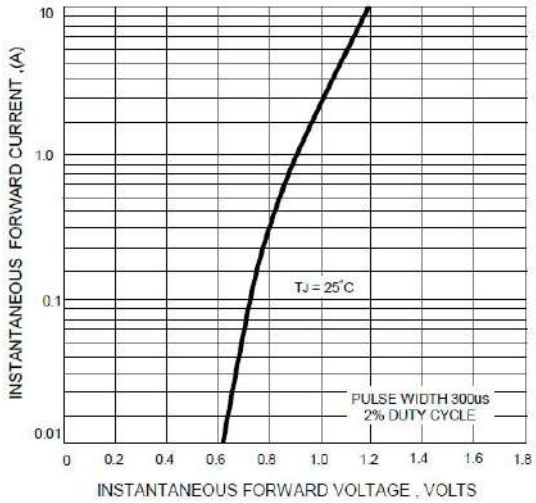
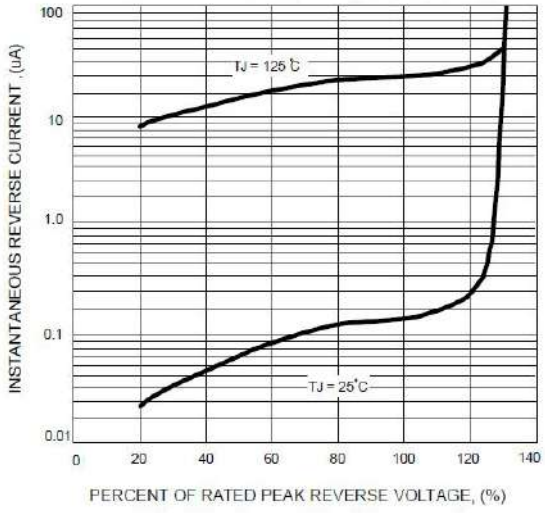


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.

Мост диодный +375447584780 viber **email minsk17@tut.by**
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