

Модуль IGBT **SEMIKRON SKM400GB128D**

Модуль IGBT 1200В 565А SEMITRANS3 **Минск +375447584780**

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Мы не работаем с частными (физическими) лицами.

Мы работаем только с юридическими лицами(организациями) и ИП и только по безналичному расчёту.

каталог, описание, технические, характеристики, datasheet, параметры, маркировка, габариты, фото



Comparison between V-IGBT and IGBT4 chips

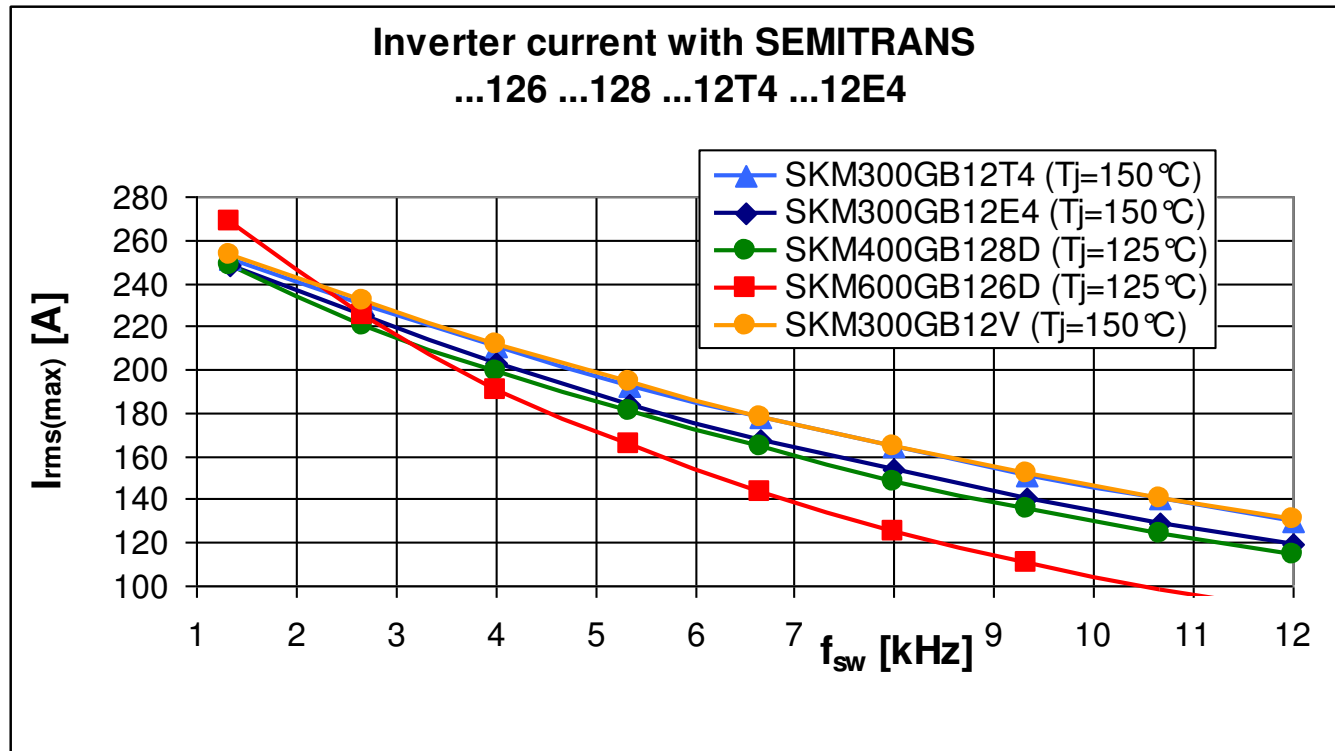
- **General**

- Based on 1200V Trench technology
- Power modules with V-IGBT chips inside end with „12V“.
- Chip size of V-IGBT is similar to IGBT4
- The same diode used (CAL 4)

- **Chip characteristics**

- Switches faster than IGBT4 (di/dt_{on} values) if the same gate resistor values are used, resulting in less E_{on} losses
- If di/dt_{on} is in the same range as IGBT4, the losses are also similar
- The IGBT can be slowed down by higher gate resistors so it reaches similar behavior as IGBT4
- The switch-off behavior of the different chips is similar
- V-IGBT and IGBT4 have the same SOA (Safe Operating Area)
- Overvoltages are lower at high DC-link voltage compared to IGBT4
- Switch-off characteristics (du/dt) can be influenced by gate resistor
- The inverter output current is similar to IGBT4 → **See diagram in the next page**
- Gate charge is about 90% higher than for IGBT4, which means that the gate driver shall be more powerful (higher output average current) → **See the table in the next pages**

Inverter output current (simulation based on data sheet values)



Cross reference new V-IGBT (...12V) IGBT modules

Max. switching frequency f_{max} (kHz) of the gate driver:

| | |
|------------------|--------|
| > 20 kHz: | green |
| 12 < f < 20 kHz: | orange |
| < 12 kHz: | red |

SKYPER 32 is limited to 50kHz; SKYPER 42 is limited to 100kHz

Values marked in **bold** mean that the Q_g of the power module featured in the left exceeds the max. value of the gate driver (thus does not work)

Note 1: The V-IGBT modules listed in the columns "Equivalent" and "Alternative" are also featured in this table

Note 2: The column "Equivalent" contains power modules that have the same nominal current and housing type; the suitability of the component in the specific application must be verified

Note 3: The column "Alternative" contains power modules that have different housing type or higher nominal current

Note 4: A 10% safety margin shall be considered in the max. switching frequency of the drivers since in the table typical gate charge values at $T_a=25^\circ\text{C}$ are used (which may vary)

Note 5: For single switch power modules ("GA", "GAL", "GAR"), the driver SKHI10/12 or SKYPER 32 and SKYPER 42 with only one output channel can be used.

Note 6: R_{Gon} and R_{Goff} gate resistor values have been taken from the datasheets. These are minimum values; optimised values will normally be $R_{Gmin} < R_g < 2 \cdot R_{Gmin}$

More information on gate resistors in: www.semikron.com/skcompub/de/SID-8A6B415A-7ECB87B6/AN-7003_Gate_Resistor-Principles_and_Applications_rev00.pdf

Note 7: For the calculation of the total power losses and the chip temperatures, we recommend the free SEMISEL simulation tool (<http://semisel.semikron.com/Circuit.asp?Language=2>)

| POWER MODULE | | | | | | | | SKYPER 32 R | SKYPER 32 PRO R | SKYPER 42 R | V-IGBT module | | | | |
|--------------|----------|---------------------|----------------|-------------------------|------------------------|-------------------------|-------------------------|-----------------|-----------------|-----------------|---------------|-----------------|----------|---------------------|----------------------|
| Housing | Article | Product Description | I_{Cnom} [A] | R_{gint} [Ω] | R_{gon} [Ω] | R_{goff} [Ω] | Q_g [μC] | f_{max} [kHz] | Adaptor | f_{max} [kHz] | Adaptor | f_{max} [kHz] | Adaptor | Equivalent (Note 2) | Alternative (Note 3) |
| SEMITRANS 2 | 22890002 | SKM50GB123D | 50 | 2,5 | 27 | 27 | 0,5 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM50GB12V | SKM75GB12V |
| SEMITRANS 2 | 22890000 | SKM75GB123D | 50 | 5 | 22 | 22 | 0,5 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM50GB12V | SKM75GB12V |
| SEMITRANS 2 | 22890010 | SKM100GB123D | 75 | 5 | 15 | 15 | 0,75 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM75GB12V | |
| SEMITRANS 2 | 22890030 | SKM145GB123D | 100 | 5 | 6,8 | 6,8 | 1 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM100GB12V | |
| SEMITRANS 3 | 22890260 | SKM150GB123D | 100 | 2,5 | 6,8 | 6,8 | 1 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | | SKM150GB12VG |
| SEMITRANS 3 | 22890270 | SKM200GB123D | 150 | 2,5 | 5,6 | 5,6 | 1,5 | 33,3 | L6100131 | 33,3 | L6100231 | 100,0 | L5059301 | SKM150GB12VG | |
| SEMITRANS 3 | 22890278 | SKM300GB123D | 200 | 2,5 | 4,7 | 4,7 | 2 | 25,0 | L6100131 | 25,0 | L6100231 | 75,0 | L5059301 | SKM200GB12V | |
| SEMITRANS 3 | 22890280 | SKM400GB123D | 300 | 1,25 | 3,3 | 3,3 | 3 | 16,7 | L6100131 | 16,7 | L6100231 | 50,0 | L5059301 | SKM300GB12V | |
| SEMITRANS 4 | 22890310 | SKM300GA123D | 200 | 2,5 | 4,7 | 4,7 | 2 | 25,0 | L6100131 | 25,0 | L6100231 | 75,0 | L5059301 | | SKM300GA12V |
| SEMITRANS 4 | 22890320 | SKM400GA123D | 300 | 1,25 | 3,3 | 3,3 | 3 | 16,7 | L6100131 | 16,7 | L6100231 | 50,0 | L5059301 | SKM300GA12V | |
| SEMITRANS 4 | 22890324 | SKM500GA123D | 400 | 1,25 | 3,3 | 3,3 | 3 | 16,7 | L6100131 | 16,7 | L6100231 | 50,0 | L5059301 | SKM400GA12V | |
| SEMITRANS 2 | 22890017 | SKM50GAL123D | 50 | 2,5 | 27 | 27 | 0,5 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | | SKM150GAL12V |
| SEMITRANS 2 | 22890019 | SKM75GAL123D | 50 | 5 | 22 | 22 | 0,5 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | | SKM150GAL12V |
| SEMITRANS 2 | 22890020 | SKM100GAL123D | 75 | 5 | 15 | 15 | 0,75 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | | SKM150GAL12V |
| SEMITRANS 2 | 22890022 | SKM145GAL123D | 100 | 5 | 6,8 | 6,8 | 1 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | | SKM150GAL12V |
| SEMITRANS 3 | 21916020 | SKM150GAL123D | 100 | 2,5 | 6,8 | 6,8 | 1 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | | SKM150GAL12V |
| SEMITRANS 3 | 22890025 | SKM195GAL123D | 150 | 2,5 | 5,6 | 5,6 | 1,5 | 33,3 | L6100131 | 33,3 | L6100231 | 100,0 | L5059301 | | SKM150GAL12V |
| SEMITRANS 3 | 22890026 | SKM200GAL123D | 150 | 2,5 | 5,6 | 5,6 | 1,5 | 33,3 | L6100131 | 33,3 | L6100231 | 100,0 | L5059301 | | SKM150GAL12V |
| SEMITRANS 3 | 22890028 | SKM300GAL123D | 200 | 2,5 | 4,7 | 4,7 | 2 | 25,0 | L6100131 | 25,0 | L6100231 | 75,0 | L5059301 | | SKM400GAL12V |
| SEMITRANS 2 | 21916000 | SKM75GAR123D | 50 | 5 | 22 | 22 | 0,5 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | - | |
| SEMITRANS 2 | 21915990 | SKM100GAR123D | 75 | 5 | 15 | 15 | 0,75 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | - | |
| SEMITRANS 2 | 21915750 | SKM145GAR123D | 100 | 5 | 6,8 | 6,8 | 1 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | - | |
| SEMITRANS 3 | 21915730 | SKM150GAR123D | 100 | 2,5 | 6,8 | 6,8 | 1 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | - | |
| SEMITRANS 3 | 21915510 | SKM200GAR123D | 150 | 2,5 | 5,6 | 5,6 | 1,5 | 33,3 | L6100131 | 33,3 | L6100231 | 100,0 | L5059301 | - | |

| POWER MODULE | | | | | | | | SKYPER 32 R | SKYPER 32 PRO R | SKYPER 42 R | V-IGBT module | | | | |
|--------------|----------|---------------------|-----------------------|-----------------------|----------------------|-----------------------|---------------------|------------------------|-----------------|------------------------|---------------|------------------------|----------|---------------------|----------------------|
| Housing | Article | Product Description | I _{Cnom} [A] | R _{gint} [Ω] | R _{gon} [Ω] | R _{goff} [Ω] | Q _g [μC] | f _{max} [kHz] | Adaptor | f _{max} [kHz] | Adaptor | f _{max} [kHz] | Adaptor | Equivalent (Note 2) | Alternative (Note 3) |
| SEMITRANS 3 | 21915670 | SKM300GAR123D | 200 | 2,5 | 4,7 | 4,7 | 2 | 25,0 | L6100131 | 25,0 | L6100231 | 75,0 | L5059301 | - | |
| SEMITRANS 2 | 22890630 | SKM195GB126D | 150 | 5 | 2 | 2 | 1,38 | 36,2 | L6100131 | 36,2 | L6100231 | 100,0 | L5059301 | SKM150GB12V | |
| SEMITRANS 3 | 22890631 | SKM200GB126D | 150 | 5 | 1,5 | 1,5 | 1,53 | 32,7 | L6100131 | 32,7 | L6100231 | 98,0 | L5059301 | SKM150GB12VG | |
| SEMITRANS 3 | 22890633 | SKM300GB126D | 200 | 3,8 | 1,5 | 1,5 | 1,8 | 27,8 | L6100131 | 27,8 | L6100231 | 83,3 | L5059301 | SKM200GB12V | |
| SEMITRANS 3 | 22890635 | SKM400GB126D | 300 | 2,5 | 2 | 2 | 2,8 | 17,9 | L6100131 | 17,9 | L6100231 | 53,6 | L5059301 | SKM300GB12V | |
| SEMITRANS 3 | 22890638 | SKM600GB126D | 400 | 1,88 | 2 | 2 | 3,6 | 13,9 | L6100131 | 13,9 | L6100231 | 41,7 | L5059301 | SKM400GB12V | |
| SEMITRANS 4 | 21915720 | SKM600GA126D | 400 | 1,88 | 2 | 2 | 3,6 | 13,9 | L6100131 | 13,9 | L6100231 | 41,7 | L5059301 | SKM400GA12V | |
| SEMITRANS 4 | 22890405 | SKM800GA126D | 600 | 1,25 | 3 | 3 | 5,2 | 9,6 | L6100131 | 9,6 | L6100231 | 28,8 | L5059301 | SKM600GA12V | |
| SEMITRANS 2 | 22890470 | SKM195GAL126D | 150 | 5 | 2 | 2 | 1,38 | 36,2 | L6100131 | 36,2 | L6100231 | 100,0 | L5059301 | SKM150GAL12V | |
| SEMITRANS 3 | 22890472 | SKM200GAL126D | 150 | 5 | 1,5 | 1,5 | 1,53 | 32,7 | L6100131 | 32,7 | L6100231 | 98,0 | L5059301 | | SKM150GAL12V |
| SEMITRANS 3 | 21916030 | SKM400GAL126D | 300 | 2,5 | 2 | 2 | 2,8 | 17,9 | L6100131 | 17,9 | L6100231 | 53,6 | L5059301 | | SKM400GAL12V |
| SEMITRANS 3 | 21916010 | SKM600GAL126D | 400 | 1,88 | 2 | 2 | 3,6 | 13,9 | L6100131 | 13,9 | L6100231 | 41,7 | L5059301 | SKM400GAL12V | |
| SEMITRANS 2 | 22890308 | SKM75GB128D | 50 | 5 | 6 | 6 | 0,6 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM50GB12V | SKM75GB12V |
| SEMITRANS 2 | 22890306 | SKM100GB128D | 75 | 5 | 4,7 | 4,7 | 0,86 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM75GB12V | |
| SEMITRANS 2 | 22890304 | SKM145GB128D | 100 | 4 | 3 | 3 | 1,2 | 41,7 | L6100131 | 41,7 | L6100231 | 100,0 | L5059301 | | |
| SEMITRANS 3 | 22890305 | SKM150GB128D | 100 | 2,5 | 8 | 8 | 1,2 | 41,7 | L6100131 | 41,7 | L6100231 | 100,0 | L5059301 | - | SKM150GB12VG |
| SEMITRANS 3 | 22890300 | SKM200GB128D | 150 | 2,5 | 7 | 7 | 1,7 | 29,4 | L6100131 | 29,4 | L6100231 | 88,2 | L5059301 | SKM150GB12VG | |
| SEMITRANS 3 | 22890290 | SKM300GB128D | 200 | 2 | 5 | 5 | 2,4 | 20,8 | L6100131 | 20,8 | L6100231 | 62,5 | L5059301 | SKM200GB12V | |
| SEMITRANS 3 | 22890294 | SKM400GB128D | 300 | 1,25 | 4,7 | 4,7 | 3,7 | 13,5 | L6100131 | 13,5 | L6100231 | 40,5 | L5059301 | SKM300GB12V | |
| SEMITRANS 4 | 22890354 | SKM300GA128D | 200 | 1,25 | 5,1 | 5,1 | 2,4 | 20,8 | L6100131 | 20,8 | L6100231 | 62,5 | L5059301 | | SKM300GA12V |
| SEMITRANS 4 | 22890350 | SKM400GA128D | 300 | 1,25 | 5 | 5 | 3,5 | 14,3 | L6100131 | 14,3 | L6100231 | 42,9 | L5059301 | SKM300GA12V | |
| SEMITRANS 4 | 22890349 | SKM500GA128D | 400 | 1 | 4 | 4 | 4,85 | 10,3 | L6100131 | 10,3 | L6100231 | 30,9 | L5059301 | SKM400GA12V | |
| SEMITRANS 2 | 22890480 | SKM145GAL128D | 100 | 4 | 3 | 3 | 1,2 | 41,7 | L6100131 | 41,7 | L6100231 | 100,0 | L5059301 | | SKM150GAL12V |
| SEMITRANS 3 | 22890484 | SKM300GAL128D | 200 | 2 | 5 | 5 | 2,4 | 20,8 | L6100131 | 20,8 | L6100231 | 62,5 | L5059301 | | SKM400GAL12V |
| SEMITRANS 3 | 22890487 | SKM400GAL128D | 300 | 1,25 | 4,7 | 4,7 | 3,7 | 13,5 | L6100131 | 13,5 | L6100231 | 40,5 | L5059301 | | SKM400GAL12V |
| SEMITRANS 2 | 22890570 | SKM145GAR128D | 100 | 4 | 3 | 3 | 1,2 | 41,7 | L6100131 | 41,7 | L6100231 | 100,0 | L5059301 | - | |
| SEMITRANS 3 | 22890578 | SKM400GAR128D | 300 | 1,25 | 4,7 | 4,7 | 3,7 | 13,5 | L6100131 | 13,5 | L6100231 | 40,5 | L5059301 | - | |
| SEMITRANS 2 | 22892000 | SKM50GB12T4 | 50 | 4 | 8,2 | 8,2 | 0,28 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM50GB12V | SKM75GB12V |
| SEMITRANS 2 | 22892010 | SKM75GB12T4 | 75 | 10 | 1 | 1 | 0,425 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM75GB12V | |
| SEMITRANS 2 | 22892020 | SKM100GB12T4 | 100 | 7,5 | 1 | 1 | 0,565 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM100GB12V | |
| SEMITRANS 3 | 22892030 | SKM100GB12T4G | 100 | 2 | 1 | 1 | 0,56 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | | SKM150GB12VG |
| SEMITRANS 2 | 22892040 | SKM150GB12T4 | 150 | 5 | 1 | 1 | 0,85 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM150GB12V | |
| SEMITRANS 3 | 22892050 | SKM150GB12T4G | 150 | 5 | 1 | 1 | 0,85 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM150GB12VG | |
| SEMITRANS 3 | 22892060 | SKM200GB12T4 | 200 | 3,8 | 1 | 1 | 1,13 | 44,2 | L6100131 | 44,2 | L6100231 | 100,0 | L5059301 | SKM200GB12V | |
| SEMITRANS 3 | 22892070 | SKM300GB12T4 | 300 | 2,5 | 1,5 | 1,5 | 1,7 | 29,4 | L6100131 | 29,4 | L6100231 | 88,2 | L5059301 | SKM300GB12V | |
| SEMITRANS 3 | 22892080 | SKM400GB12T4 | 400 | 1,9 | 1 | 1 | 2,26 | 22,1 | L6100131 | 22,1 | L6100231 | 66,4 | L5059301 | SKM400GB12V | |
| SEMITRANS 4 | 22892120 | SKM300GA12T4 | 300 | 2,5 | 1,4 | 1,5 | 1,7 | 29,4 | L6100131 | 29,4 | L6100231 | 88,2 | L5059301 | SKM300GA12V | |
| SEMITRANS 4 | 22892100 | SKM400GA12T4 | 400 | 1,9 | 1 | 1 | 2,26 | 22,1 | L6100131 | 22,1 | L6100231 | 66,4 | L5059301 | SKM400GA12V | |
| SEMITRANS 4 | 22892110 | SKM600GA12T4 | 600 | 1,3 | 2 | 2 | 3,4 | 14,7 | L6100131 | 14,7 | L6100231 | 44,1 | L5059301 | SKM600GA12V | |
| SEMITRANS 2 | 22892600 | SKM100GAL12T4 | 100 | 7,5 | 1 | 1 | 0,565 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | | SKM150GAL12V |

| POWER MODULE | | | | | | | | SKYPER 32 R | | SKYPER 32 PRO R | | SKYPER 42 R | | V-IGBT module | |
|--------------|----------|---------------------|-----------------------|-----------------------|----------------------|-----------------------|---------------------|------------------------|----------|------------------------|----------|------------------------|----------|---------------------|----------------------|
| Housing | Article | Product Description | I _{Cnom} [A] | R _{gint} [Ω] | R _{gon} [Ω] | R _{goff} [Ω] | Q _g [μC] | f _{max} [kHz] | Adaptor | f _{max} [kHz] | Adaptor | f _{max} [kHz] | Adaptor | Equivalent (Note 2) | Alternative (Note 3) |
| SEMITRANS 2 | 22892300 | SKM150GAL12T4 | 150 | 5 | 1 | 1 | 0,85 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | SKM150GAL12V | |
| SEMITRANS 3 | 22892320 | SKM200GAL12T4 | 200 | 3,8 | 1 | 1 | 1,13 | 44,2 | L6100131 | 44,2 | L6100231 | 100,0 | L5059301 | | SKM400GAL12V |
| SEMITRANS 3 | 22892330 | SKM300GAL12T4 | 300 | 2,5 | 1,5 | 1,5 | 1,7 | 29,4 | L6100131 | 29,4 | L6100231 | 88,2 | L5059301 | | SKM400GAL12V |
| SEMITRANS 3 | 22892310 | SKM400GAL12T4 | 400 | 1,9 | 1 | 1 | 2,26 | 22,1 | L6100131 | 22,1 | L6100231 | 66,4 | L5059301 | SKM400GAL12V | |
| SEMITRANS 2 | 22892400 | SKM150GAR12T4 | 150 | 5 | 1 | 1 | 0,85 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | - | |
| SEMITRANS 3 | 22892410 | SKM400GAR12T4 | 400 | 1,9 | 1 | 1 | 2,26 | 22,1 | L6100131 | 22,1 | L6100231 | 66,4 | L5059301 | - | |
| SEMITRANS 3 | 22892067 | SKM200GB12E4 | 200 | 3,8 | 1 | 1 | 1,13 | 44,2 | L6100131 | 44,2 | L6100231 | 100,0 | L5059301 | SKM200GB12V | |
| SEMITRANS 3 | 22892077 | SKM300GB12E4 | 300 | 2,5 | 1,5 | 1,5 | 1,7 | 29,4 | L6100131 | 29,4 | L6100231 | 88,2 | L5059301 | SKM300GB12V | |
| SEMITRANS 3 | 22892087 | SKM400GB12E4 | 400 | 1,9 | 1 | 1 | 2,26 | 22,1 | L6100131 | 22,1 | L6100231 | 66,4 | L5059301 | SKM400GB12V | |
| SEMITRANS 4 | 22892124 | SKM300GA12E4 | 300 | 2,5 | 1,4 | 1,5 | 1,7 | 29,4 | L6100131 | 29,4 | L6100231 | 88,2 | L5059301 | SKM300GA12V | |
| SEMITRANS 4 | 22892104 | SKM400GA12E4 | 400 | 1,9 | 1 | 1 | 2,26 | 22,1 | L6100131 | 22,1 | L6100231 | 66,4 | L5059301 | SKM400GA12V | |
| SEMITRANS 4 | 22892114 | SKM600GA12E4 | 600 | 1,3 | 2 | 2 | 3,4 | 14,7 | L6100131 | 14,7 | L6100231 | 44,1 | L5059301 | SKM600GA12V | |
| SEMITRANS 3 | 22892304 | SKM200GAL12E4 | 200 | 3,8 | 1 | 1 | 1,13 | 44,2 | L6100131 | 44,2 | L6100231 | 100,0 | L5059301 | | SKM400GAL12V |
| SEMITRANS 3 | 22892334 | SKM300GAL12E4 | 300 | 2,5 | 1,5 | 1,5 | 1,7 | 29,4 | L6100131 | 29,4 | L6100231 | 88,2 | L5059301 | | SKM400GAL12V |
| SEMITRANS 3 | 22892314 | SKM400GAL12E4 | 400 | 1,9 | 1 | 1 | 2,26 | 22,1 | L6100131 | 22,1 | L6100231 | 66,4 | L5059301 | SKM400GAL12V | |
| SEMITRANS 3 | 22892420 | SKM200GAR12E4 | 200 | 3,8 | 1 | 1 | 1,13 | 44,2 | L6100131 | 44,2 | L6100231 | 100,0 | L5059301 | - | |
| SEMITRANS 3 | 22892418 | SKM300GAR12E4 | 300 | 2,5 | 1,5 | 1,5 | 1,7 | 29,4 | L6100131 | 29,4 | L6100231 | 88,2 | L5059301 | - | |
| SEMITRANS 3 | 22892414 | SKM400GAR12E4 | 400 | 1,9 | 1 | 1 | 2,26 | 22,1 | L6100131 | 22,1 | L6100231 | 66,4 | L5059301 | - | |
| SEMITRANS 2 | 22892003 | SKM50GB12V | 50 | 4 | 13 | 13 | 0,5 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | - | |
| SEMITRANS 2 | 22892013 | SKM75GB12V | 75 | 10 | 1,3 | 1,3 | 0,83 | 50,0 | L6100131 | 50,0 | L6100231 | 100,0 | L5059301 | - | |
| SEMITRANS 2 | 22892023 | SKM100GB12V | 100 | 7,5 | 1 | 1 | 1,15 | 43,5 | L6100131 | 43,5 | L6100231 | 100,0 | L5059301 | - | |
| SEMITRANS 2 | 22892043 | SKM150GB12V | 150 | 5 | 1,5 | 1,5 | 1,65 | 30,3 | L6100131 | 30,3 | L6100231 | 90,9 | L5059301 | - | |
| SEMITRANS 3 | 22892052 | SKM150GB12VG | 150 | 5 | 4 | 4 | 1,65 | 30,3 | L6100131 | 30,3 | L6100231 | 90,9 | L5059301 | - | |
| SEMITRANS 3 | 22892064 | SKM200GB12V | 200 | 3,8 | 3 | 3 | 2,21 | 22,6 | L6100131 | 22,6 | L6100231 | 67,9 | L5059301 | - | |
| SEMITRANS 3 | 22892073 | SKM300GB12V | 300 | 2,5 | 2,5 | 2,5 | 3,31 | 15,1 | L6100131 | 15,1 | L6100231 | 45,3 | L5059301 | - | |
| SEMITRANS 3 | 22892083 | SKM400GB12V | 400 | 1,9 | 3 | 3 | 4,42 | 11,3 | L6100131 | 11,3 | L6100231 | 33,9 | L5059301 | - | |
| SEMITRANS 4 | 22892123 | SKM300GA12V | 300 | 2,5 | 2,5 | 2,5 | 3,31 | 15,1 | L6100131 | 15,1 | L6100231 | 45,3 | L5059301 | - | |
| SEMITRANS 4 | 22892103 | SKM400GA12V | 400 | 1,9 | 3 | 3 | 4,42 | 11,3 | L6100131 | 11,3 | L6100231 | 33,9 | L5059301 | - | |
| SEMITRANS 4 | 22892113 | SKM600GA12V | 600 | 1,3 | 2,5 | 2,5 | 6,62 | 7,6 | L6100131 | 7,6 | L6100231 | 22,7 | L5059301 | - | |
| SEMITRANS 2 | 22892301 | SKM150GAL12V | 150 | 5 | 1,5 | 1,5 | 1,65 | 30,3 | L6100131 | 30,3 | L6100231 | 90,9 | L5059301 | - | |
| SEMITRANS 3 | 22892313 | SKM400GAL12V | 400 | 1,9 | 3 | 3 | 4,42 | 11,3 | L6100131 | 11,3 | L6100231 | 33,9 | L5059301 | - | |
| SEMiX 2s | 27890680 | SEMiX252GB126HDs | 150 | 5 | 3 | 3 | 1,2 | 41,7 | L6100141 | 41,7 | L6100241 | 100,0 | - | | SEMiX202GB12Vs |
| SEMiX 2s | 27890675 | SEMiX302GB126HDs | 200 | 3,75 | 2,8 | 2,8 | 1,6 | 31,3 | L6100141 | 31,3 | L6100241 | 93,8 | - | SEMiX202GB12Vs | |
| SEMiX 3s | 27890715 | SEMiX353GB126HDs | 225 | 3,33 | 2 | 2 | 1,8 | 27,8 | L6100151 | 27,8 | L6100251 | 83,3 | - | SEMiX223GB12Vs | |
| SEMiX 2s | 27890690 | SEMiX452GB126HDs | 300 | 2,5 | 2 | 2 | 2,4 | 20,8 | L6100141 | 20,8 | L6100241 | 62,5 | - | SEMiX302GB12Vs | |
| SEMiX 3s | 27890710 | SEMiX503GB126HDs | 300 | 2,5 | 2 | 2 | 2,4 | 20,8 | L6100151 | 20,8 | L6100251 | 62,5 | - | SEMiX303GB12Vs | |
| SEMiX 4s | 27890725 | SEMiX604GB126HDs | 400 | 1,88 | 2,2 | 2,2 | 3,2 | 15,6 | L6100161 | 15,6 | L6100261 | 46,9 | - | SEMiX404GB12Vs | |
| SEMiX 3s | 27890700 | SEMiX703GB126HDs | 450 | 1,67 | 1,6 | 1,6 | 3,6 | 13,9 | L6100151 | 13,9 | L6100251 | 41,7 | - | SEMiX453GB12Vs | |
| SEMiX 4s | 27890720 | SEMiX904GB126HDs | 600 | 1,25 | 1,6 | 1,6 | 4,8 | 10,4 | L6100161 | 10,4 | L6100261 | 31,3 | - | SEMiX604GB12Vs | |
| SEMiX 2s | 27890685 | SEMiX452GAL126HDs | 300 | 2,5 | 2 | 2 | 2,4 | 20,8 | L6100141 | 20,8 | L6100241 | 62,5 | - | - | |

| POWER MODULE | | | | | | | | SKYPER 32 R | SKYPER 32 PRO R | SKYPER 42 R | V-IGBT module | | | | |
|--------------|----------|---------------------|-----------------------|-----------------------|----------------------|-----------------------|---------------------|------------------------|-----------------|------------------------|---------------|------------------------|---------|---------------------|----------------------|
| Housing | Article | Product Description | I _{Cnom} [A] | R _{gint} [Ω] | R _{gon} [Ω] | R _{goff} [Ω] | Q _g [μC] | f _{max} [kHz] | Adaptor | f _{max} [kHz] | Adaptor | f _{max} [kHz] | Adaptor | Equivalent (Note 2) | Alternative (Note 3) |
| SEMiX 3s | 27890695 | SEMiX703GAL126HDs | 450 | 1,67 | 1,6 | 1,6 | 3,6 | 13,9 | L6100151 | 13,9 | L6100251 | 41,7 | - | - | |
| SEMiX 3s | 27890705 | SEMiX703GAR126HDs | 450 | 1,67 | 1,6 | 1,6 | 3,6 | 13,9 | L6100151 | 13,9 | L6100251 | 41,7 | - | - | |
| SEMiX 13 | 27890730 | SEMiX101GD126HDs | 75 | 10 | 2 | 2 | 0,6 | 50,0 | - | 50,0 | - | 100,0 | - | | SEMiX101GD12Vs |
| SEMiX 13 | 27890731 | SEMiX151GD126HDs | 100 | 7,5 | 1,7 | 1,7 | 0,8 | 50,0 | - | 50,0 | - | 100,0 | - | SEMiX101GD12Vs | |
| SEMiX 13 | 27890732 | SEMiX251GD126HDs | 150 | 5 | 1 | 1 | 1,2 | 41,7 | - | 41,7 | - | 100,0 | - | SEMiX151GD12Vs | |
| SEMiX 33c | 27890745 | SEMiX353GD126HDs | 225 | 3,33 | 2 | 2 | 1,8 | 27,8 | - | 27,8 | - | 83,3 | - | SEMiX223GD12Vc | |
| SEMiX 33c | 27890740 | SEMiX503GD126HDs | 300 | 2,5 | 2,2 | 2,2 | 2,4 | 20,8 | - | 20,8 | - | 62,5 | - | SEMiX303GD12Vc | |
| SEMiX 33c | 27890735 | SEMiX703GD126HDs | 450 | 1,67 | 1,6 | 1,6 | 3,6 | 13,9 | - | 13,9 | - | 41,7 | - | SEMiX453GD12Vc | |
| SEMiX 2s | 27890922 | SEMiX202GB128Ds | 100 | 2,5 | 6,8 | 6,8 | 0,96 | 50,0 | L6100141 | 50,0 | L6100241 | 100,0 | - | | SEMiX151GB12Vs |
| SEMiX 2s | 27890912 | SEMiX302GB128Ds | 150 | 2,5 | 4 | 4 | 1,42 | 35,2 | L6100141 | 35,2 | L6100241 | 100,0 | - | | SEMiX151GB12Vs |
| SEMiX 2s | 27890904 | SEMiX352GB128Ds | 200 | 2 | 3 | 3 | 1,92 | 26,0 | L6100141 | 26,0 | L6100241 | 78,1 | - | SEMiX202GB12Vs | |
| SEMiX 2s | 27890902 | SEMiX352GAL128Ds | 200 | 2 | 3 | 3 | 1,92 | 26,0 | L6100141 | 26,0 | L6100241 | 78,1 | - | - | |
| SEMiX 3s | 27890935 | SEMiX403GB128Ds | 225 | 1,67 | 4 | 4 | 2,13 | 23,5 | L6100151 | 23,5 | L6100251 | 70,4 | - | SEMiX223GB12Vs | |
| SEMiX 3s | 27890939 | SEMiX553GB128Ds | 300 | 1,33 | 3 | 3 | 2,88 | 17,4 | L6100151 | 17,4 | L6100251 | 52,1 | - | SEMiX303GB12Vs | |
| SEMiX 4s | 27890941 | SEMiX754GB128Ds | 400 | 1 | 2,5 | 2,5 | 3,84 | 13,0 | L6100161 | 13,0 | L6100261 | 39,1 | - | SEMiX404GB12Vs | |
| SEMiX 13 | 27890930 | SEMiX151GD128Ds | 75 | 5 | 5,5 | 5,5 | 0,71 | 50,0 | - | 50,0 | - | 100,0 | - | | SEMiX101GD12Vs |
| SEMiX 1s | 27890100 | SEMiX151GB12E4s | 150 | 5 | 1 | 1 | 0,85 | 50,0 | - | 50,0 | - | 100,0 | - | SEMiX151GB12Vs | |
| SEMiX 1s | 27890102 | SEMiX151GAL12E4s | 150 | 5 | 1 | 1 | 0,85 | 50,0 | - | 50,0 | - | 100,0 | - | - | |
| SEMiX 1s | 27890104 | SEMiX151GAR12E4s | 150 | 5 | 1 | 1 | 0,85 | 50,0 | - | 50,0 | - | 100,0 | - | - | |
| SEMiX 2s | 27890110 | SEMiX202GB12E4s | 200 | 3,75 | 2,4 | 2,4 | 1,13 | 44,2 | L6100141 | 44,2 | L6100241 | 100,0 | - | SEMiX202GB12Vs | |
| SEMiX 2s | 27890120 | SEMiX302GB12E4s | 300 | 2,5 | 1,9 | 1,9 | 1,7 | 29,4 | L6100141 | 29,4 | L6100241 | 88,2 | - | SEMiX302GB12Vs | |
| SEMiX 2s | 27890220 | SEMiX302GAL12E4s | 300 | 2,5 | 1,9 | 1,9 | 1,7 | 29,4 | L6100141 | 29,4 | L6100241 | 88,2 | - | - | |
| SEMiX 2s | 27890222 | SEMiX302GAR12E4s | 302 | 2,5 | 1,9 | 1,9 | 1,7 | 29,4 | L6100141 | 29,4 | L6100241 | 88,2 | - | - | |
| SEMiX 3s | 27890130 | SEMiX303GB12E4s | 300 | 2,5 | 1,8 | 1,8 | 1,695 | 29,5 | L6100151 | 29,5 | L6100251 | 88,5 | - | SEMiX303GB12Vs | |
| SEMiX 3s | 27890140 | SEMiX453GB12E4s | 450 | 1,67 | 1,9 | 1,9 | 2,55 | 19,6 | L6100151 | 19,6 | L6100251 | 58,8 | - | SEMiX453GB12Vs | |
| SEMiX 3s | 27890142 | SEMiX453GAR12E4s | 450 | 1,67 | 1,9 | 1,9 | 2,55 | 19,6 | L6100151 | 19,6 | L6100251 | 58,8 | - | - | |
| SEMiX 3s | 27890144 | SEMiX453GAL12E4s | 450 | 1,67 | 1,9 | 1,9 | 2,55 | 19,6 | L6100151 | 19,6 | L6100251 | 58,8 | - | - | |
| SEMiX 4s | 27890150 | SEMiX604GB12E4s | 600 | 1,25 | 1,7 | 6,9 | 3,4 | 14,7 | L6100161 | 14,7 | L6100261 | 44,1 | - | SEMiX604GB12Vs | |
| SEMiX 4s | 27890154 | SEMiX604GAL12E4s | 600 | 1,25 | 1,7 | 6,9 | 3,4 | 14,7 | L6100161 | 14,7 | L6100261 | 44,1 | - | - | |
| SEMiX 4s | 27890156 | SEMiX604GAR12E4s | 600 | 1,25 | 1,7 | 6,9 | 3,4 | 14,7 | L6100161 | 14,7 | L6100261 | 44,1 | - | - | |
| SEMiX 4s | 27890170 | SEMiX404GB12E4s | 400 | 1,88 | 1,7 | 1,7 | 2,26 | 22,1 | L6100161 | 22,1 | L6100261 | 66,4 | - | SEMiX404GB12Vs | |
| SEMiX 13 | 27890190 | SEMiX71GD12E4s | 75 | 10 | 1 | 1 | 0,425 | 50,0 | - | 50,0 | - | 100,0 | - | | SEMiX101GD12Vs |
| SEMiX 13 | 27890195 | SEMiX101GD12E4s | 100 | 7,5 | 1 | 1 | 0,565 | 50,0 | - | 50,0 | - | 100,0 | - | SEMiX101GD12Vs | |
| SEMiX 13 | 27890200 | SEMiX151GD12E4s | 150 | 5 | 1 | 1 | 0,85 | 50,0 | - | 50,0 | - | 100,0 | - | SEMiX151GD12Vs | |
| SEMiX 33c | 27890208 | SEMiX223GD12E4c | 225 | 3,33 | 1,5 | 1,5 | 1,275 | 39,2 | - | 39,2 | - | 100,0 | - | SEMiX223GD12Vc | |
| SEMiX 33c | 27890210 | SEMiX303GD12E4c | 300 | 2,5 | 1,8 | 1,8 | 1,695 | 29,5 | - | 29,5 | - | 88,5 | - | SEMiX303GD12Vc | |
| SEMiX 33c | 27890212 | SEMiX453GD12E4c | 450 | 1,67 | 2 | 2 | 2,55 | 19,6 | - | 19,6 | - | 58,8 | - | SEMiX453GD12Vc | |
| SEMiX 1s | 27890101 | SEMiX151GB12Vs | 150 | 5 | 1,5 | 1,5 | 1,65 | 30,3 | - | 30,3 | - | 90,9 | - | - | |
| SEMiX 2s | 27890111 | SEMiX202GB12Vs | 200 | 3,75 | 1,9 | 1,9 | 2,2 | 22,7 | L6100141 | 22,7 | L6100241 | 68,2 | - | - | |
| SEMiX 3s | 27890114 | SEMiX223GB12Vs | 220 | 3,33 | 2,1 | 2,1 | 2,46 | 20,3 | L6100151 | 20,3 | L6100251 | 61,0 | - | - | |

| POWER MODULE | | | | | | | | SKYPER 32 R | SKYPER 32 PRO R | SKYPER 42 R | V-IGBT module | | | | |
|--------------|----------|---------------------|-----------------------|-----------------------|----------------------|-----------------------|---------------------|------------------------|-----------------|------------------------|---------------|------------------------|----------|---------------------|----------------------|
| Housing | Article | Product Description | I _{Cnom} [A] | R _{gint} [Ω] | R _{gon} [Ω] | R _{goff} [Ω] | Q _g [μC] | f _{max} [kHz] | Adaptor | f _{max} [kHz] | Adaptor | f _{max} [kHz] | Adaptor | Equivalent (Note 2) | Alternative (Note 3) |
| SEMiX 2s | 27890121 | SEMiX302GB12Vs | 300 | 2,5 | 2,4 | 2,4 | 3,3 | 15,2 | L6100141 | 15,2 | L6100241 | 45,5 | - | - | - |
| SEMiX 3s | 27890131 | SEMiX303GB12Vs | 300 | 2,5 | 2,5 | 2,5 | 3,3 | 15,2 | L6100151 | 15,2 | L6100251 | 45,5 | - | - | - |
| SEMiX 3s | 27890141 | SEMiX453GB12Vs | 450 | 1,67 | 2,4 | 2,4 | 4,95 | 10,1 | L6100151 | 10,1 | L6100251 | 30,3 | - | - | - |
| SEMiX 4s | 27890151 | SEMiX604GB12Vs | 600 | 1,25 | 2,25 | 2,25 | 6,6 | 7,6 | L6100161 | 7,6 | L6100261 | 22,7 | - | - | - |
| SEMiX 4s | 27890171 | SEMiX404GB12Vs | 400 | 1,88 | 2,5 | 2,5 | 4,4 | 11,4 | L6100161 | 11,4 | L6100261 | 34,1 | - | - | - |
| SEMiX 13 | 27890191 | SEMiX101GD12Vs | 100 | 7,5 | 1 | 1 | 1,1 | 45,5 | - | 45,5 | - | 100,0 | - | - | - |
| SEMiX 13 | 27890201 | SEMiX151GD12Vs | 150 | 5 | 1,5 | 1,5 | 1,65 | 30,3 | - | 30,3 | - | 90,9 | - | - | - |
| SEMiX 33c | 27890209 | SEMiX223GD12Vc | 220 | 3,33 | 2,1 | 2,1 | 2,46 | 20,3 | - | 20,3 | - | 61,0 | - | - | - |
| SEMiX 33c | 27890211 | SEMiX303GD12Vc | 300 | 2,5 | 2,5 | 2,5 | 3,3 | 15,2 | - | 15,2 | - | 45,5 | - | - | - |
| SEMiX 33c | 27890219 | SEMiX453GD12Vc | 450 | 1,67 | 2,4 | 2,4 | 4,95 | 10,1 | - | 10,1 | - | 30,3 | - | - | - |
| SEMiX 3s | 27890114 | 2 // SEMiX223GB12Vs | 440 | | | | 4,92 | 10,2 | - | 10,2 | - | 30,5 | L5059201 | - | - |
| SEMiX 3s | 27890131 | 2 // SEMiX303GB12Vs | 600 | | | | 6,6 | 7,6 | - | 7,6 | - | 22,7 | L5059201 | - | - |
| SEMiX 3s | 27890141 | 2 // SEMiX453GB12Vs | 900 | | | | 9,9 | 5,1 | - | 5,1 | - | 15,2 | L5059201 | - | - |
| SEMiX 4s | 27890151 | 2 // SEMiX604GB12Vs | 1200 | | | | 13,2 | 3,8 | - | 3,8 | - | 11,4 | L6100261 | - | - |
| SEMiX 4s | 27890171 | 2 // SEMiX404GB12Vs | 800 | | | | 8,8 | 5,7 | - | 5,7 | - | 17,0 | L6100261 | - | - |

Модуль IGBT **SEMIKRON SKM400GB128D**

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Мы работаем только с юридическими лицами(организациями) и ИП и только по безналичному расчёту.

каталог, описание, технические, характеристики, datasheet, параметры, маркировка, габариты, фото

