

# SKKR 200/0.2 BVR



## SEMITRANS™ 5

### Shunt Modules

#### SKKR 200/0.2 BVR

#### Features

- Low inductance value
- Excellent long term stability
- Isolated copper baseplate using DCB (Direct Copper Bonding) Technology
- Large clearance (13 mm) and creepage distance (20 mm)
- Using BVR Shunts for extended lifetime
- UL recognized, file no. E63532

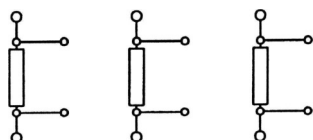
#### Typical Applications

- Current sensor for frequency converter

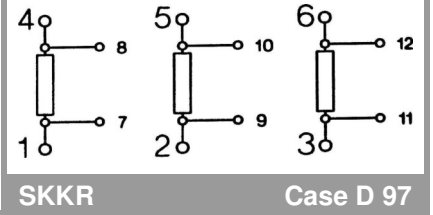
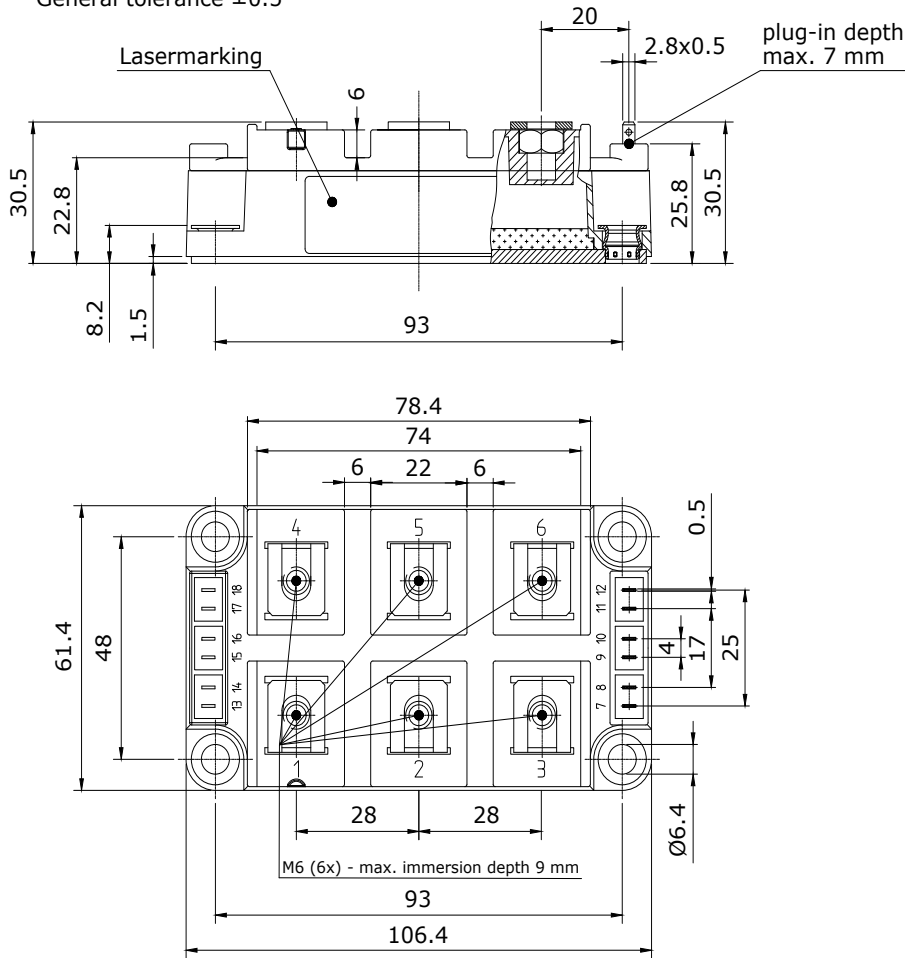
| Absolute Maximum Ratings |                                                        | $T_c = 25\text{ °C}$ , unless otherwise specified |            |
|--------------------------|--------------------------------------------------------|---------------------------------------------------|------------|
| Symbol                   | Conditions                                             | Values                                            | Units      |
| $I_{DCmax}$              | $T_{shunt} = 150\text{ °C}$ ; $T_c = 25(80)\text{ °C}$ | 135 (100)                                         | A          |
| $I_{SC}$                 | $t_{sc} = 10\text{ }\mu\text{s}$                       | 350                                               | A          |
| $R_{shunt}$              | Toleranz = $\pm 5\%$                                   | 1,06                                              | m $\Omega$ |
| $T_{cr(shunt)}$          | temperature coefficient (20-60) °C                     | 50                                                | ppm/K      |
| $P_{tot}$                | per shunt; $T_c = 25(80)\text{ °C}$                    | 18 (10)                                           | W          |
| $T_{stg}$                |                                                        | - 40 ... + 125                                    | °C         |
| $V_{isol}$               | AC, 1 min., $I_{ISO} = 1\text{ mA}$                    | 2500                                              | V          |
| humidity                 | IEC-EN 60 721-3-3                                      |                                                   |            |
| climate                  | IEC 68 T.1                                             | 40/126/56                                         |            |

| Characteristics         |                                                                          | $T_c = 25\text{ °C}$ , unless otherwise specified |           |      |       |
|-------------------------|--------------------------------------------------------------------------|---------------------------------------------------|-----------|------|-------|
| Symbol                  | Conditions                                                               | min.                                              | typ.      | max. | Units |
| $V_{7-8}$               | $IDC = 200\text{ A}$ ; $TC = 25(125)\text{ °C}$                          | 210                                               | 213 (211) | 216  | mV    |
| $V_{9-10}$              | $IDC = 200\text{ A}$ ; $TC = 25(125)\text{ °C}$                          | 210                                               | 213 (211) | 216  | mV    |
| $V_{11-12}$             | $IDC = 200\text{ A}$ ; $TC = 25(125)\text{ °C}$                          | 210                                               | 213 (211) | 216  | mV    |
| $C_{shunt/C}$           |                                                                          |                                                   | 280       |      | pF    |
| $L_{tray}$              | $I_C = 100\text{ A}$ ; $V_{CE} = 600\text{ V}$<br>(turn off single IGBT) |                                                   |           | 0,4  | nF    |
| Thermal characteristics |                                                                          |                                                   |           |      |       |
| $R_{th(j-c)}$           |                                                                          |                                                   |           | 7,0  | K/W   |

| Mechanical Data |                            |      |      |        |                  |
|-----------------|----------------------------|------|------|--------|------------------|
| Symbol          | Conditions                 | min. | typ. | max.   | Units            |
| $M_1$           | to heatsink, SI Units (M6) | 3    |      | 5      | Nm               |
|                 | to heatsink, US Units      | 27   |      | 44     | lb.in.           |
| $M_2$           | to heatsink, SI Units (M6) | 2,5  |      | 5      | Nm               |
|                 | to heatsink, US Units      | 22   |      | 44     | lb.in.           |
| $a$             |                            |      |      | 5x9,81 | m/s <sup>2</sup> |
| $w$             |                            |      |      | 420    | g                |



Dimensions in mm  
General tolerance  $\pm 0.5$



Case D 97

This is an electrostatic discharge sensitive device (ESDS) according to international standard IEC 61340.

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