



SEMIPONT® 4

Power Bridge Rectifiers

SKD 160

Features

- Robust plastic case with screw terminals
- Large, isolated base plate
- Blocking voltage up to 1800 V
- High surge currents
- Three phase bridge rectifier
- Easy chassis mounting
- UL recognized, file no. E 63 532

Typical Applications

- Three phase rectifiers for power supplies
- Input rectifiers for variable frequency drives
- Rectifiers for DC motor field supplies
- Battery charger rectifiers

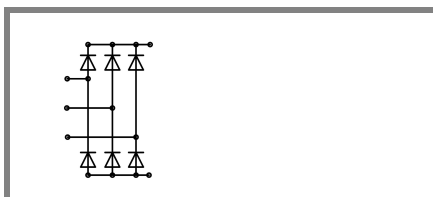
1) Available in limited quantities

2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm;

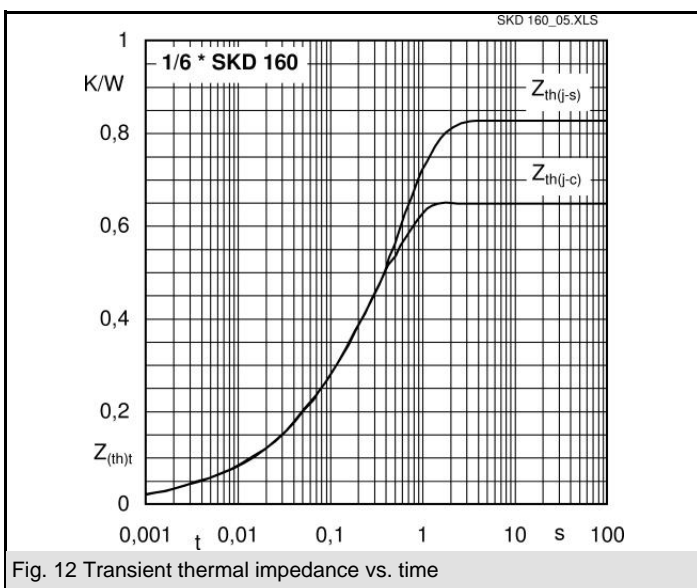
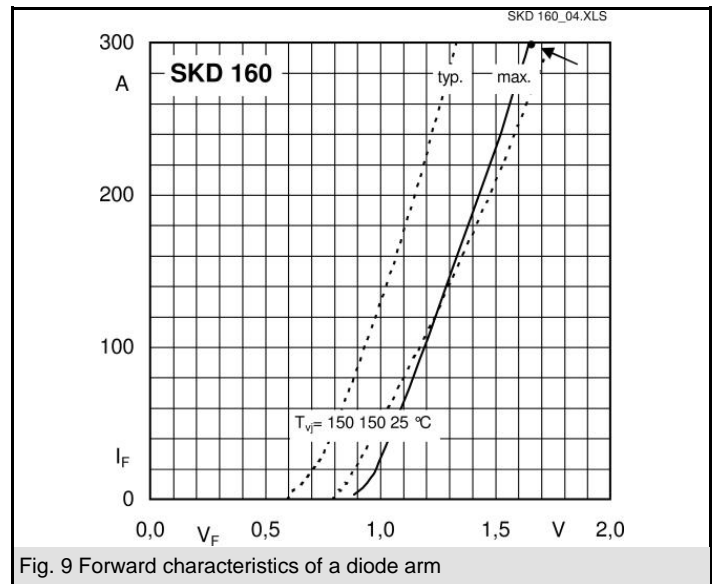
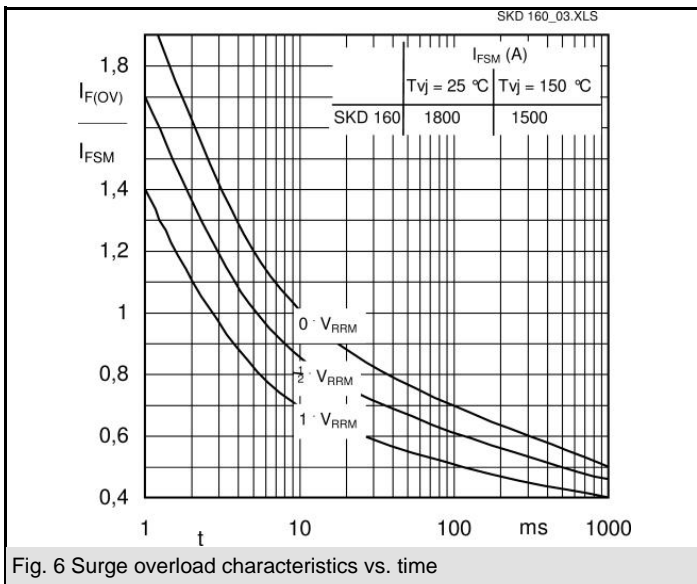
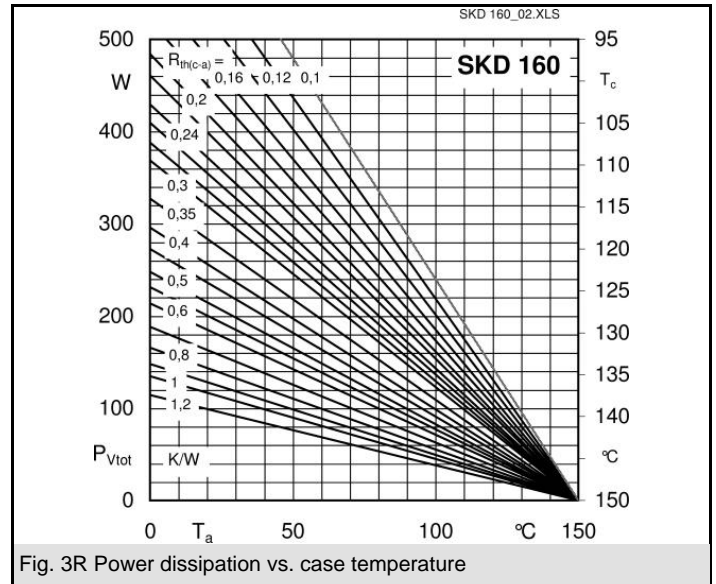
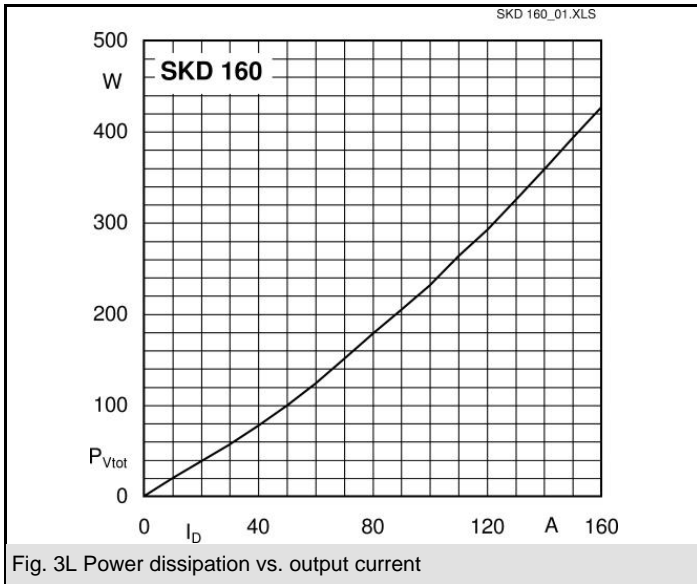
$$R_{th(c-a)} = 1,8 \text{ K/W}$$

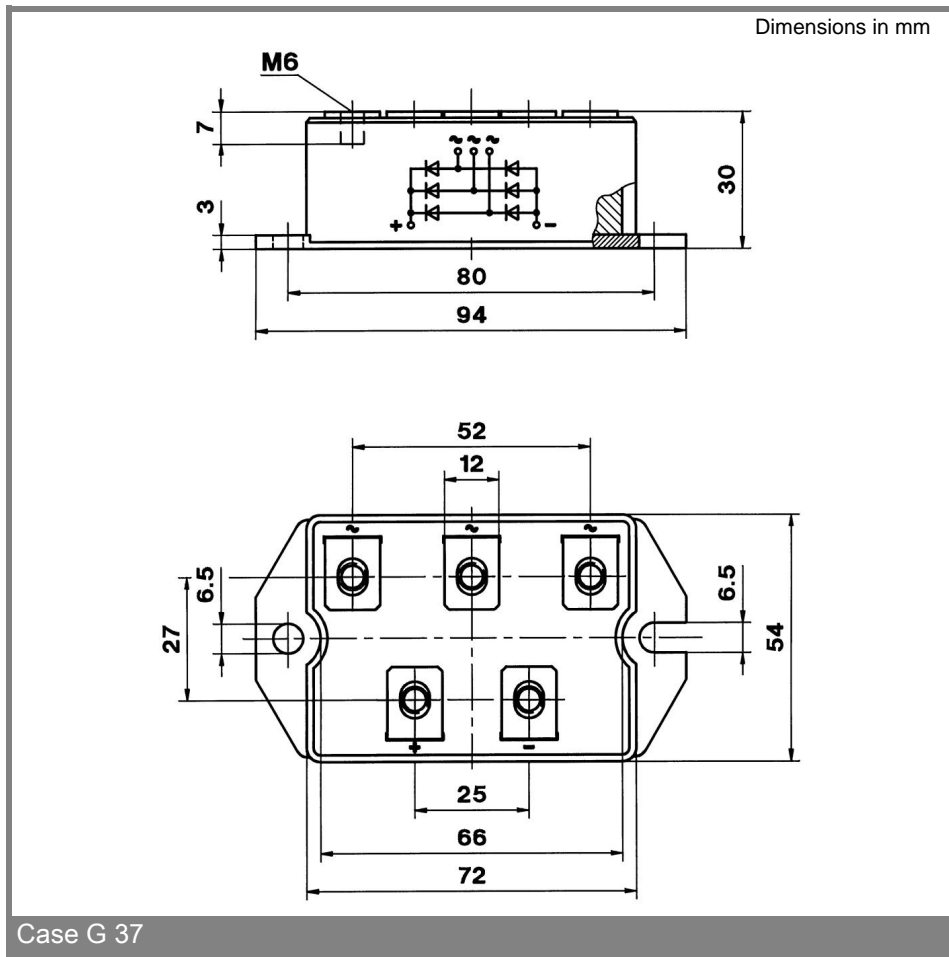
| V_{RSM} V | V_{RRM}, V_{DRM} V | $I_D = 160 \text{ A (full conduction)}$ ($T_c = 100 \text{ °C}$) |
|----------------|-------------------------|---|
| 400 | 400 | SKD 160/04 |
| 800 | 800 | SKD 160/08 |
| 1200 | 1200 | SKD 160/12 |
| 1400 | 1400 | SKD 160/14 |
| 1600 | 1600 | SKD 160/16 |
| 1800 | 1800 | SKD 160/18 ¹⁾ |

| Symbol | Conditions | Values | Units |
|---------------|---|----------------|------------------|
| I_D | $T_c = 85 \text{ °C}$ | 205 | A |
| | $T_a = 45 \text{ °C; chassis } ^2)$ | 30 | A |
| | $T_a = 45 \text{ °C; P1/200}$ | 75 | A |
| | $T_a = 35 \text{ °C; P1/120F}$ | 145 | A |
| | $T_a = 35 \text{ °C; P3/120F}$ | 146 | A |
| I_{FSM} | $T_{vj} = 25 \text{ °C; 10 ms}$ | 1800 | A |
| | $T_{vj} = 150 \text{ °C; 10 ms}$ | 1500 | A |
| i^2t | $T_{vj} = 25 \text{ °C; 8,3 ... 10 ms}$ | 16200 | A ² s |
| | $T_{vj} = 150 \text{ °C; 8,3 ... 10 ms}$ | 11200 | A ² s |
| V_F | $T_{vj} = 25 \text{ °C; } I_F = 300 \text{ A}$ | max. 1,65 | V |
| $V_{(TO)}$ | $T_{vj} = 150 \text{ °C}$ | max. 0,85 | V |
| r_T | $T_{vj} = 150 \text{ °C}$ | max. 3 | mΩ |
| I_{RD} | $T_{vj} = 25 \text{ °C; } V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$ | max. 0,5 | mA |
| | $T_{vj} = 150 \text{ °C; } V_{RD} = V_{RRM}$ | 6 | mA |
| $R_{th(j-c)}$ | per diode | 0,65 | K/W |
| | total | 0,11 | K/W |
| $R_{th(c-s)}$ | total | 0,03 | K/W |
| | | | |
| T_{vj} | | - 40 ... + 150 | °C |
| T_{stg} | | - 40 ... + 125 | °C |
| V_{isol} | a. c. 50 Hz; r.m.s.; 1 s / 1 min. | 3600 (3000) | V |
| M_s | to heatsink | 5 ± 15 % | Nm |
| M_t | to terminals | 5 ± 15 % | Nm |
| m | | 270 | g |
| Case | | G 37 | |



SKD





Case G 37

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