



SEMIPONT® 3

Power Bridge Rectifiers

SKB 72

Features

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

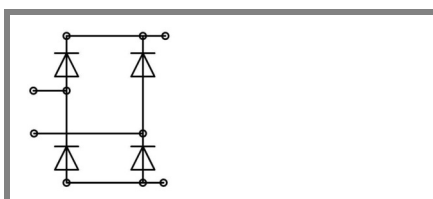
Typical Applications*

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

- 1) Freely suspended or mounted on an isolator
- 2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm;
 $R_{th(s-a)} = 1,8 \text{ K/W}$

| V_{RSM} V | V_{RRM}, V_{DRM} V | $I_D = 70 \text{ A}$ (full conduction) ($T_c = 101 \text{ }^\circ\text{C}$) |
|----------------|-------------------------|--|
| 400 | 400 | SKB 72/04 |
| 800 | 800 | SKB 72/08 |
| 1200 | 1200 | SKB 72/12 |
| 1400 | 1400 | SKB 72/14 |
| 1600 | 1600 | SKB 72/16 |
| 1800 | 1800 | SKB 72/18 |

| Symbol | Conditions | Values | Units |
|---------------|--|---------------|------------------|
| I_D | $T_c = 85 \text{ }^\circ\text{C}$ resistive / inductive load | 86 | A |
| | $T_a = 45 \text{ }^\circ\text{C}$; isolated ¹⁾ | 10 | A |
| | $T_a = 45 \text{ }^\circ\text{C}$; chassis ²⁾ | 23,5 | A |
| | $T_a = 45 \text{ }^\circ\text{C}$; P1A/120 (P1A/200) | 48 (54) | A |
| I_{FSM} | $T_{vj} = 25 \text{ }^\circ\text{C}$; 10 ms | 750 | A |
| | $T_{vj} = 150 \text{ }^\circ\text{C}$; 10 ms | 640 | A |
| i^2t | $T_{vj} = 25 \text{ }^\circ\text{C}$; 8,3 ... 10 ms ms | 2800 | A ² s |
| | $T_{vj} = 150 \text{ }^\circ\text{C}$; 8,3 ... 10 ms ms | 2000 | A ² s |
| V_F | $T_{vj} = 25 \text{ }^\circ\text{C}$; $I_F = 150 \text{ A}$ | max. 1,6 | V |
| $V_{(TO)}$ | $T_{vj} = 150 \text{ }^\circ\text{C}$ | max. 0,85 | V |
| r_T | $T_{vj} = 150 \text{ }^\circ\text{C}$ | max. 5 | mΩ |
| I_{RD} | $T_{vj} = 25 \text{ }^\circ\text{C}$; $V_{DD} = V_{DRM}$; $V_{RD} = V_{RRM}$ | max. 0,5 | mA |
| | $T_{vj} = 150 \text{ }^\circ\text{C}$; $V_{RD} = V_{RRM}$ | 6 | mA |
| $R_{th(j-c)}$ | per diode | 1,1 | K/W |
| | total | 0,275 | K/W |
| $R_{th(c-s)}$ | per diode | 0,07 | K/W |
| | total | 0,07 | K/W |
| T_{vj} | | -40 ... + 150 | $^\circ\text{C}$ |
| T_{stg} | | -40 ... + 125 | $^\circ\text{C}$ |
| V_{isol} | a. c. 50 Hz; r.m.s.; 1 s / 1 min. | 3600 (3000) | V |
| M_s | to heatsink | $5 \pm 15\%$ | Nm |
| M_t | to terminals | $5 \pm 15\%$ | Nm |
| m | | 165 | g |
| Case | | G 35 | |



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