Power Bridge Rectifiers

SKD 35

Features
- Square plastic case with isolated metal base plate and fast-on connectors
- Blocking voltage up to 1600 V
- High surge currents
- Notch moulded in casing for easy polarity identification
- Easy chassis mounting

Typical Applications
- Three phase rectifier for power supplies
- Input rectifiers for variable frequency drives
- Rectifier for DC motor field supplies
- Battery charger rectifiers
- Recommended snubber network: RC: 50 Ω, 0.1 µF (P_R = 1 W)

Symbol | Condition | Values | Units
--- | --- | --- | ---
I_D | T_a = 45 °C, P1/120 natural cooling | 28 | A
T_a = 45 °C, chassis | 14.5 | A
I_DCL | T_a = 45 °C, P1/120 forced cooling | 36 | A
T_a = 45 °C, P1/120 natural cooling | 28 | A
T_a = 45 °C, chassis | 14.5 | A

V_RSM, V_RRM (V) | I_D = 36 A (T_a = 70 °C) | Types
--- | --- | ---
400 | 125 | SKD 35/04
800 | 250 | SKD 35/08
1000 | 310 | SKD 35/10
1200 | 400 | SKD 35/12
1400 | 440 | SKD 35/14
1600 | 500 | SKD 35/16

1) Freely suspended or mounted on an insulator
2) Mounted on a painted metal sheet of min. 250 x 250 x 1 mm
3) Recommended
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Fig. 01 Power dissipation vs. output current

Fig. 02 Power dissipation vs. case temperature

Fig. 04 Forward characteristics of a diode arm (typical)

Fig. 05 Transient thermal impedance vs. time
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