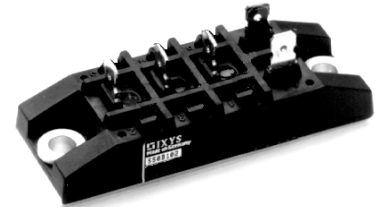
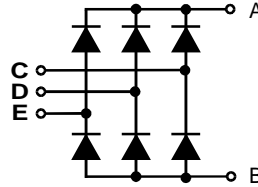


Three Phase Rectifier Bridge

$I_{dAV} = 100 \text{ A}$
 $V_{RRM} = 800-1600 \text{ V}$

Preliminary data

| V_{RSM} V | V_{RRM} V | Types |
|----------------|----------------|---------------|
| 800 | 800 | VUO 100-08NO7 |
| 1200 | 1200 | VUO 100-12NO7 |
| 1400 | 1400 | VUO 100-14NO7 |
| 1600 | 1600 | VUO 100-16NO7 |



| Symbol | Test Conditions | Maximum Ratings |
|-------------|---|--|
| I_{dAV} ① | $T_C = 100^\circ\text{C}$, module | 100 A |
| I_{FSM} | $T_{VJ} = 45^\circ\text{C}$; $V_R = 0$ | t = 10 ms (50 Hz), sine 1000 A |
| | | t = 8.3 ms (60 Hz), sine 1100 A |
| | $T_{VJ} = T_{VJM}$ $V_R = 0$ | t = 10 ms (50 Hz), sine 700 A |
| | | t = 8.3 ms (60 Hz), sine 750 A |
| I^2t | $T_{VJ} = 45^\circ\text{C}$ $V_R = 0$ | t = 10 ms (50 Hz), sine 5000 A ² s |
| | | t = 8.3 ms (60 Hz), sine 5020 A ² s |
| | $T_{VJ} = T_{VJM}$ $V_R = 0$ | t = 10 ms (50 Hz), sine 2450 A ² s |
| | | t = 8.3 ms (60 Hz), sine 2330 A ² s |
| T_{VJ} | | -40...+150 °C |
| T_{VJM} | | 150 °C |
| T_{stg} | | -40...+125 °C |
| V_{ISOL} | 50/60 Hz, RMS $I_{ISOL} \leq 1 \text{ mA}$ | t = 1 min 2500 V~ |
| | | t = 1 s 3000 V~ |
| M_d | Mounting torque (M5) (10-32 UNF) | 5 ± 15 % Nm |
| | | 44 ± 15 % lb.in. |
| Weight | typ. | 110 g |

Features

- Package with copper base plate
- Isolation voltage 3000 V~
- Planar passivated chips
- Low forward voltage drop
- ¼" fast-on power terminals

Applications

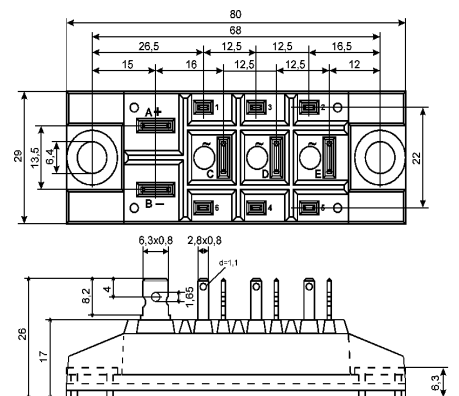
- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling capability
- Small and light weight

| Symbol | Test Conditions | Characteristic Values |
|------------|--|--------------------------------------|
| I_R | $V_R = V_{RRM}$; $V_R = V_{RRM}$ | $T_{VJ} = 25^\circ\text{C}$ ≤ 0.5 mA |
| | | $T_{VJ} = T_{VJM}$ ≤ 10 mA |
| V_F | $I_F = 150 \text{ A}$; $T_{VJ} = 25^\circ\text{C}$ | ≤ 1.4 V |
| V_{T0} | For power-loss calculations only | 0.8 V |
| r_T | | 5 mΩ |
| R_{thJC} | per diode; DC current | per module 1.12 K/W |
| | | per module 0.28 K/W |
| R_{thJH} | per diode; DC current | per module 1.5 K/W |
| | | per module 0.375 K/W |
| d_s | Creeping distance on surface | 16.1 mm |
| d_A | Creepage distance in air | 7.5 mm |
| a | Max. allowable acceleration | 50 m/s ² |

Dimensions in mm (1 mm = 0.0394")



Data according to IEC 60747 refer to a single diode unless otherwise stated

① for resistive load at bridge output. IXYS reserves the right to change limits, test conditions and dimensions.