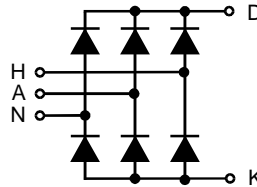


# Three Phase Rectifier Bridge

**$I_{dAV} = 28 \text{ A}$**   
 **$V_{RRM} = 600-1200 \text{ V}$**

Preliminary data

| $V_{RSM}$<br>V | $V_{RRM}$<br>V | Type         |
|----------------|----------------|--------------|
| 700            | 600            | VUO 28-06NO7 |
| 900            | 800            | VUO 28-08NO7 |
| 1300           | 1200           | VUO 28-12NO7 |



| Symbol      | Test Conditions   | Maximum Ratings                              |
|-------------|---|--|
| $I_{dAV}$ ① | $T_C = 100^\circ\text{C}$ , module                              | 28 A   |
| $I_{FSM}$   | $T_{VJ} = 45^\circ\text{C}$ ;<br>$V_R = 0$                      | t = 10 ms (50 Hz), sine 100 A                |
|             |   | t = 8.3 ms (60 Hz), sine 106 A               |
| $I^2t$      | $T_{VJ} = T_{VJM}$<br>$V_R = 0$                                 | t = 10 ms (50 Hz), sine 85 A                 |
|             |   | t = 8.3 ms (60 Hz), sine 90 A                |
| $I^2t$      | $T_{VJ} = 45^\circ\text{C}$<br>$V_R = 0$                        | t = 10 ms (50 Hz), sine 50 A <sup>2</sup> s  |
|             |   | t = 8.3 ms (60 Hz), sine 47 A <sup>2</sup> s |
| $T_{VJ}$    | $T_{VJ} = T_{VJM}$<br>$V_R = 0$                                 | t = 10 ms (50 Hz), sine 36 A <sup>2</sup> s  |
|             |   | t = 8.3 ms (60 Hz), sine 33 A <sup>2</sup> s |
| $T_{VJ}$    |   | -40...+150 °C                                |
| $T_{VJM}$   |   | 150 °C                                       |
| $T_{stg}$   |   | -40...+125 °C                                |
| $V_{ISOL}$  | 50/60 Hz, RMS t = 1 min<br>$I_{ISOL} \leq 1 \text{ mA}$ t = 1 s | 2500 V~                                      |
|             |   | 3000 V~                                      |
| $M_d$       | Mounting torque (M4)  | 1.5 - 2 Nm<br>14 - 18 lb.in.                 |
| Weight      | typ.  | 18 g   |

## Features

- Package with DCB ceramic base plate
- Isolation voltage 3000 V~
- Planar passivated chips
- Low forward voltage drop
- Leads suitable for PC board soldering

## Applications

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

## Advantages

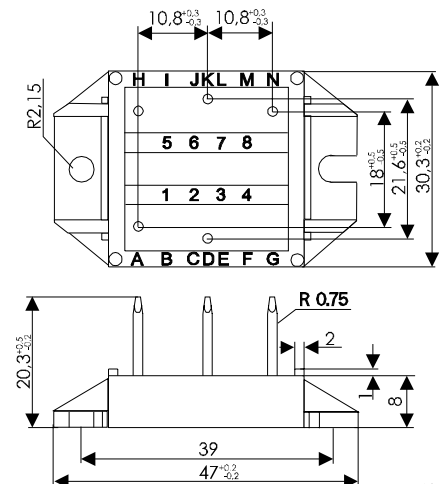
- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling capability
- Small and light weight

| Symbol     | Test Conditions                                      | Characteristic Values                |
|------------|--|--------------------------------------|
| $I_R$      | $V_R = V_{RRM}$ ;<br>$V_R = V_{RRM}$                 | $T_{VJ} = 25^\circ\text{C}$ ≤ 0.3 mA |
|            |  | $T_{VJ} = T_{VJM}$ ≤ 5 mA            |
| $V_F$      | $I_F = 7 \text{ A}$ ;<br>$T_{VJ} = 25^\circ\text{C}$ | ≤ 1.12 V                             |
| $V_{T0}$   | For power-loss calculations only                     | 0.8 V                                |
| $r_T$      |  | 40 mΩ                                |
| $R_{thJC}$ | per diode; DC current                                | 2.3 K/W                              |
|            | per module   | 0.39 K/W                             |
| $R_{thJH}$ | per diode; DC current                                | 2.8 K/W                              |
|            | per module   | 0.47 K/W                             |
| $d_s$      | Creeping distance on surface                         | 11.2 mm                              |
| $d_A$      | Creepage distance in air                             | 9.7 mm                               |
| $a$        | Max. allowable acceleration                          | 50 m/s <sup>2</sup>                  |

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.

## Dimensions in mm (1 mm = 0.0394")



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