

# BRIDGE RECTIFIERS MD6TU50



## FEATURES

- ☞ **Reverse voltage up to 1600V**
- ☞ **Heat transfer and isolation through DBC**
- ☞ **Large, isolated copper base plate**
- ☞ **Easy chassis mounting**

## TYPICAL APPLICATIONS

- ☞ **Three phase rectifiers for power supplies**
- ☞ **Input rectifiers for variable frequency drivers**
- ☞ **Rectifiers for DC motor**
- ☞ **Battery chargers**

**BRIDGE  
RECTIFIERS**  
**MD6TU50**



TECHNICAL DATA

**DEVICE TYPE**

$V_{RRM}$   
(V)

$V_{RSM}$   
(V)

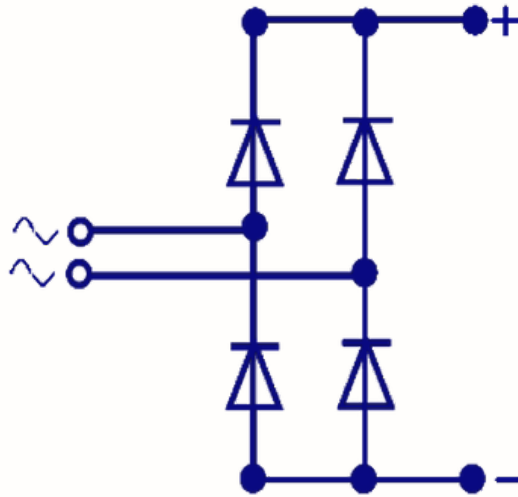
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|------------|------|------|
| MD6TU50/04 | 400  | 500  |
| MD6TU50/12 | 1200 | 1300 |
| MD6TU50/16 | 1600 | 1700 |

| SYMBOL  | CONDITIONS   | VALUES                                   |
|---|--|--|
| $I_{F(AV)}$                                   | Ta = 45 °C inductive load.   | 60A                                      |
| $V_{FM}$                                      | Maximum peak forward Voltage drop @ 150 AP   | 1.6 V                                    |
| $I_{FSM}$                                     | Maximum peak one cycle (non-rep.) surge current 10 msec  | 750 A                                    |
| $I^2t$  | Max. $I^2t$ rating (non-rep.) for 10 msec  | 2800A <sup>2</sup> Sec                   |
| $I_{RRM}$                                     | Peak reverse current at Tvj = 175°C  | 10 mA                                    |
| $V_0$<br>$R_0$                                | Tvj=max  | 0.85 V<br>8 m Ω                          |
| $R_{th(j-c)}$<br>$R_{th(j-c)}$<br>Tvj<br>Tstg | Maximum thermal resistance ( Junction to case)<br>Maximum thermal resistance ( Case to heat sink)<br>Junction temperature<br>Storage temperature | 0.45°C/W<br>0.06°C/W<br>150 °C<br>150 °C |
| Mounting torque                               |  | 5 Nm/Bolt                                |
| Weight  | Approx.  | 250 gms                                  |
| Package Outline                               |  | IR-23                                    |

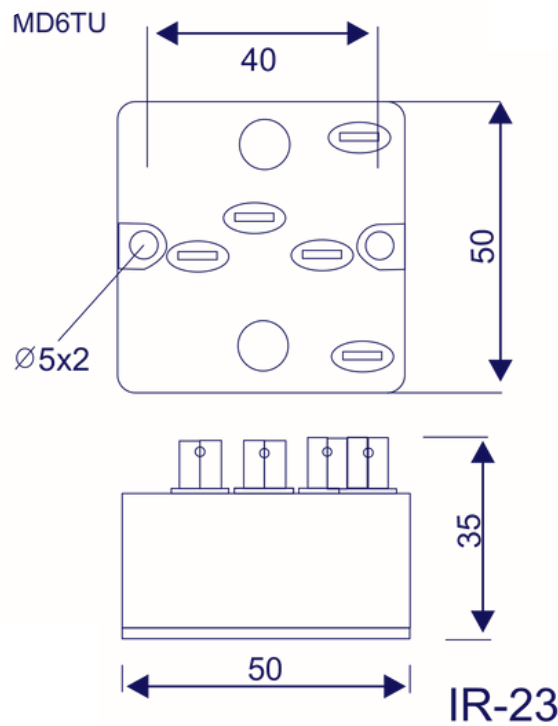
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CIRCUIT DIAGRAM



PACKAGE OUTLINE



all dimensions in mm