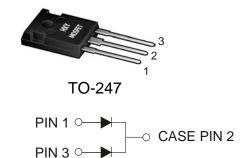


#### **Features**

- High Surge Capability
- Low Forward Voltage Drop
- High Current Capability
- Super Fast Switching Speed For High Efficiency



### Maxmim Ratings (Ta=25<sup>°</sup>C unless otherwise noted)

| Parameter  |          | Symbol           | Value      | Unit |
|--|----------|------------------|------------|------|
| Maximum Recurrent Peak Reverse Voltage   |          | VRRM             | 200        |      |
| Maximum RMS Voltage  |          | VRMS             | 140        | V    |
| Maximum DC Blocking Voltage  |          | VR(DC)           | 200        |      |
| Maximum Average Forward Current  |          | IF(AV)           | 30         |      |
| Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method) |          | IFSM             | 250        | A    |
| Maximum Forward Voltage at 15A per leg   |          | VF               | 0.9        | V    |
| Maximum DC Reverse<br>Current at Rated DC<br>Blocking Voltage                                    | Tj=25°C  | IR               | 0.2        | - mA |
|  | Tj=125°C |                  | 5          |      |
| Maximum Operating Junction Temperature   |          | Tj               | 150        | °C   |
| Storage Temperature  |          | T <sub>stg</sub> | -35 ~ +150 |      |
| Typical Thermal Resistance   |          | Rejc             | 1.5        | °C/W |

# **Typical Characteristics**

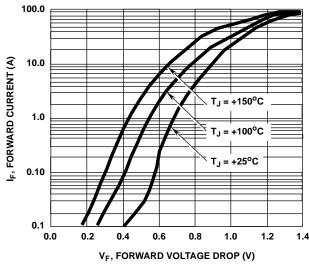


FIGURE 3. FORWARD VOLTAGE vs FORWARD CURRENT CHARACTERISTIC

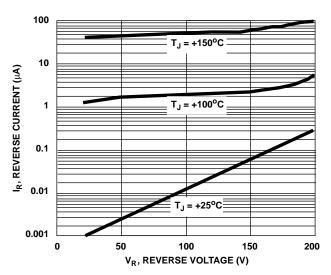


FIGURE 4. REVERSE VOLTAGE VS REVERSE CURRENT CHARACTERISTIC

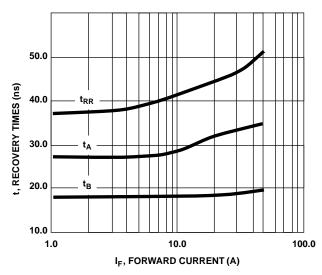


FIGURE 5. TYPICAL  $t_{RR}$ ,  $t_A$  AND  $t_B$  CURVES vs FORWARD CURRENT

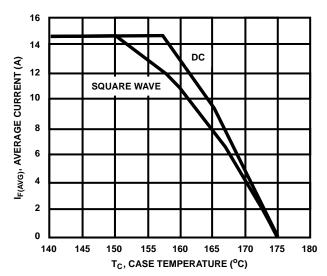
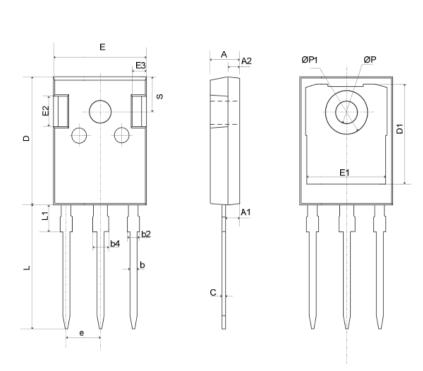


FIGURE 6. TYPICAL CURRENT DERATING CURVE vs CASE TEMPERATURE

# **TO-247 Package Information**



#### **COMMON DIMENSIONS**

|        | MM      |       |  |  |
|--------|---------|-------|--|--|
| SYMBOL | MIN     | MAX   |  |  |
| А      | 4.80    | 5.20  |  |  |
| A1     | 2.21    | 2.61  |  |  |
| A2     | 1.85    | 2.15  |  |  |
| b      | 1.11    | 1.36  |  |  |
| b2     | 1.91    | 2.21  |  |  |
| b4     | 2.91    | 3.21  |  |  |
| С      | 0.51    | 0.75  |  |  |
| D      | 20.70   | 21.30 |  |  |
| D1     | 16.25   | 16.85 |  |  |
| E      | 15.50   | 16.10 |  |  |
| E1     | 13.00   | 13.60 |  |  |
| E2     | 4.80    | 5.20  |  |  |
| E3     | 2.30    | 2.70  |  |  |
| е      | 5.44BSC |       |  |  |
| L      | 19.62   | 20.22 |  |  |
| L1     | _       | 4.30  |  |  |
| ØР     | 3.40    | 3.80  |  |  |
| ØP1    | _       | 7.30  |  |  |
| s      | 6.15BSC |       |  |  |



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