

**SUPER FAST DIODE MODULE TYPES 200A**

**Features**

- High Surge Capability
- Types up to 600V  $V_{RRM}$
- Isolation Type Package
- Electrically Isolation base plate

**Maximum Ratings**

Junction Operating Temperature : -55 °C to+175 °C  
Storage Temperature : -55 °C to+175 °C

| Part Number   | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---------------|--|---------------------|-----------------------------|
| MURT20020(R)  | 200V                                   | 140V                | 200V                        |
| MURT20040(R)  | 400V                                   | 280V                | 400V                        |
| MURT200A60(R) | 600V                                   | 420V                | 600V                        |

**Electrical Characteristics @ 25 °C Unless Otherwise Specified**

|   |                 |  |   |
|---|-----------------|--|---|
| Average Forward Current<br>(Per pkg)  | $I_{F(AV)}$     | 200A   | $T_C = 140^\circ C$                       |
| Peak Forward Surge Current<br>(Per diode)   | $I_{FSM}$       | 2000A  | 8.3ms , half sine                         |
| Maximum Instantaneous Forward Voltage *<br>(Per diode)                            | $V_F$           | 200V : 1.00V<br>400V : 1.30V<br>600V : 1.45V | $I_{FM}=100A;$<br>$T_J = 25^\circ C$      |
| Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage*<br>(Per diode) | $I_R$           | 25 $\mu A$<br>1 mA                           | $T_J = 25^\circ C$<br>$T_J = 125^\circ C$ |
| Maximum Reverse Recovery Time<br>(Per diode)                                      | $T_{rr}$        | 75ns<br>90ns<br>110ns                        | $I_F = 0.5A, I_R=1.0A,$<br>$I_{RR}=0.25A$ |
| Isolation Voltage   | $V_{isol}$      | 2500 V                                       | A.C. 1minute                              |
| Maximum Thermal Resistance Junction To Case<br>(Per diode)                        | $R_{\theta jc}$ | 0.45°C/W                                     |   |
| Weight  |                 | 103g   |   |

\*Pulse Test: Pulse Width 300  $\mu sec$ , Duty Cycle < 2%

**THREE TOWER**



Dimensions in mm (1 mm = 0.0394")

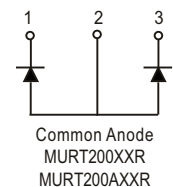
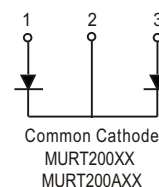
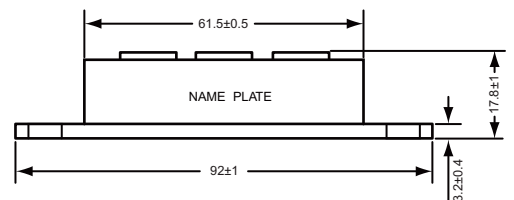
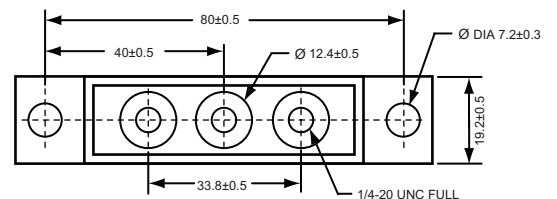




Figure .1- Typical Forward Characteristics

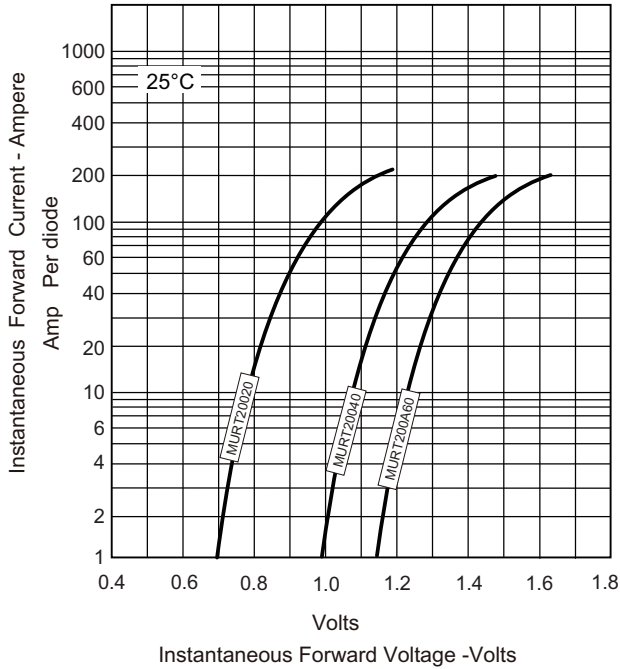


Figure .2-Forward Derating Curve

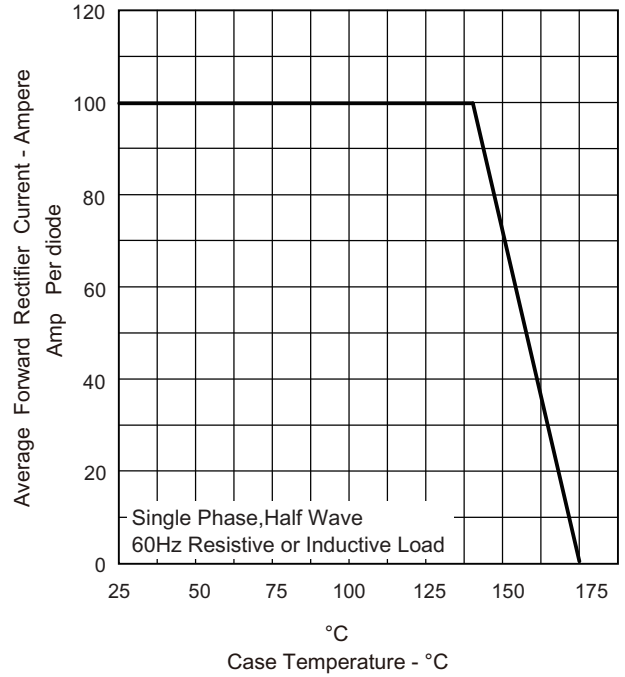


Figure .3- Peak Forward Surge Current

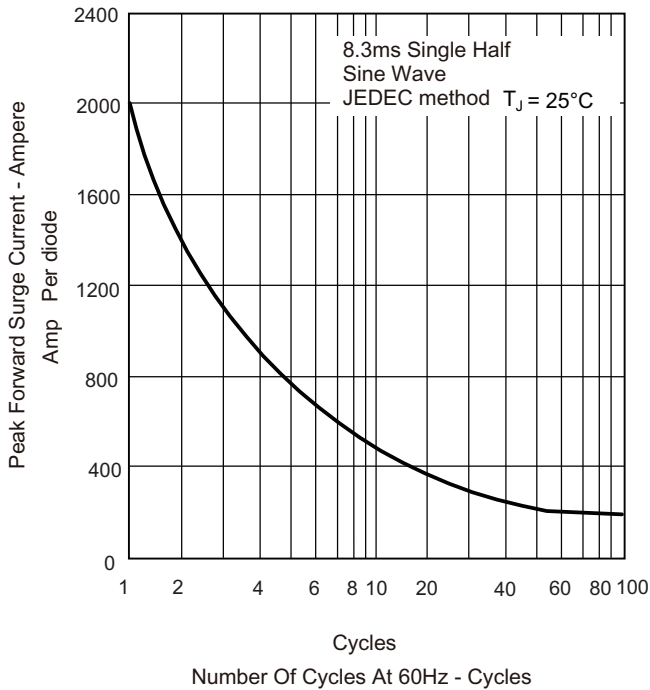
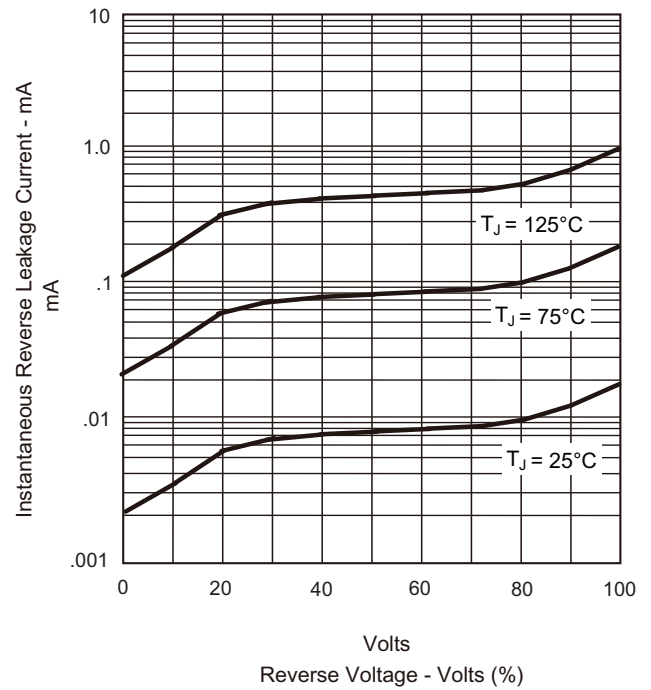


Figure .4- Typical Reverse Characteristics





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