



**HIGH POWER DIODE MODULE TYPES 200A**

**Features**

- High Surge Capability
- Types up to 1600V  $V_{RRM}$
- Isolation Type Package
- Electrically Isolation base plate

**Maximum Ratings**

Operating Temperature : -40°C to +175°C

Storage Temperature : -40°C to +175°C

| Part Number         | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|---------------------|--|---------------------|-----------------------------|
| MSRTTA20060(A)D(R)  | 600V                                   | 420V                | 600V                        |
| MSRTTA20080(A)D(R)  | 800V                                   | 560V                | 800V                        |
| MSRTTA200100(A)D(R) | 1000V                                  | 700V                | 1000V                       |
| MSRTTA200120(A)D(R) | 1200V                                  | 840V                | 1200V                       |
| MSRTTA200140(A)D(R) | 1400V                                  | 980V                | 1400V                       |
| MSRTTA200160(A)D(R) | 1600V                                  | 1120V               | 1600V                       |

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

|   |                 |                        |   |
|---|-----------------|------------------------|---|
| Average Forward Current<br>(Per leg)  | $I_{F(AV)}$     | 200A                   | $T_c = 125^\circ C$                       |
| Peak Forward Surge Current<br>(Per leg)   | $I_{FSM}$       | 3000A                  | 8.3ms , half sine                         |
| Maximum Instantaneous Forward Voltage *   | $V_F$           | 1.10V                  | $I_{FM}=200A; T_J = 25^\circ C$           |
| Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage*<br>(Per leg) | $I_R$           | 10 $\mu A$<br>5mA      | $T_J = 25^\circ C$<br>$T_J = 150^\circ C$ |
| Isolation Voltage   | $V_{isol}$      | 2500V                  | A.C. 1minute                              |
| Maximum Thermal Resistance Junction To Case<br>(Per leg)                        | $R_{\theta jc}$ | 0.35°C/W               |   |
| Mounting torque   |                 | 5 ± 0.5Nm<br>3 ± 0.5Nm | to heatsink<br>to terminals               |

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



Dimensions in mm (1 mm = 0.0394")

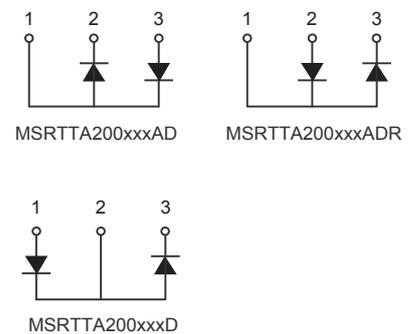
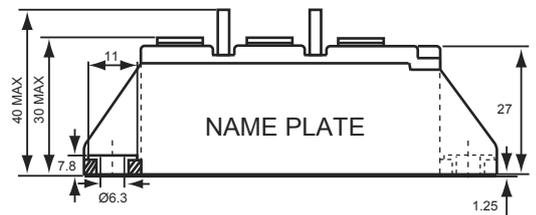
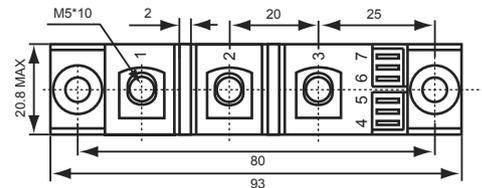




Figure .1- Typical Forward Characteristics

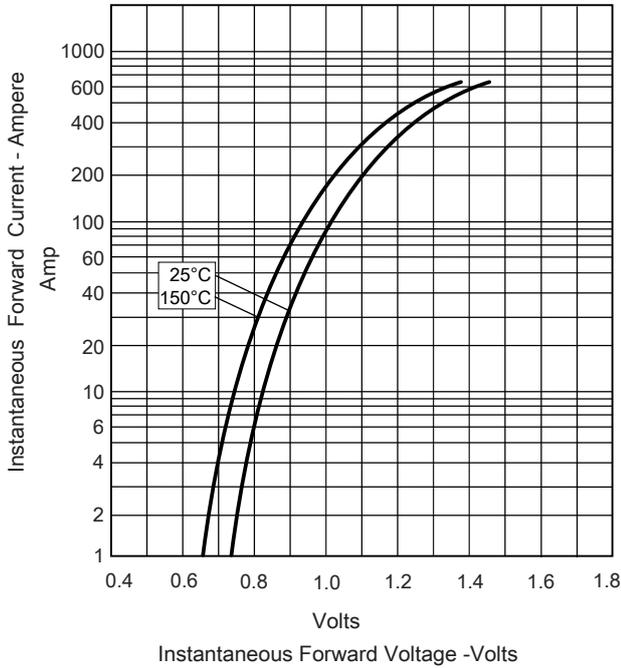


Figure .2-Forward Derating Curve

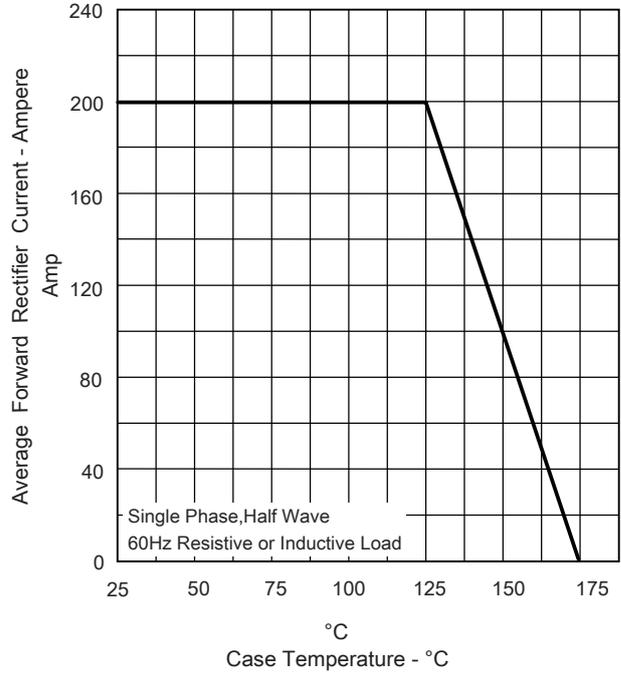


Figure .3-Peak Forward Surge Current

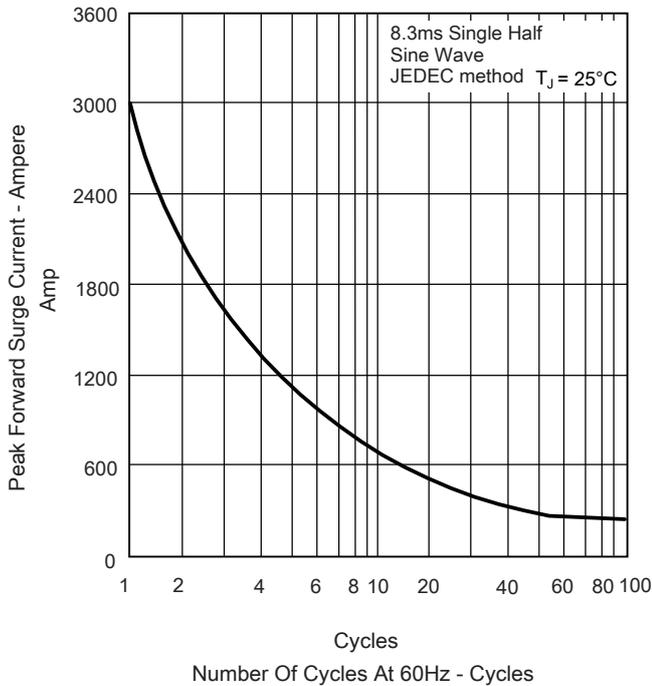


Figure .4-Typical Reverse Characteristics

