



**SCHOTTKY DIODE MODULE TYPE 600A**

**Features**

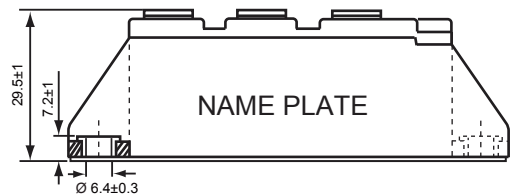
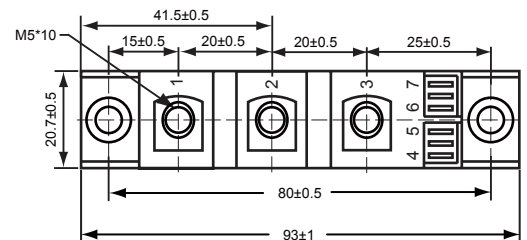
- High Surge Capability
- Type 100V  $V_{RRM}$
- Isolation Type Package
- Electrically Isolation Base Plate

**Maximum Ratings**

Junction Operating Temperature : -55°C to +150°C  
 Storage Temperature : -55°C to +150°C



Dimensions in mm (1 mm = 0.0394")



| Part Number          | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|----------------------|--|---------------------|-----------------------------|
| MBRTT600100(A)(D)(R) | 100V                                   | 70V                 | 100V                        |

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

|   |                 |                                |   |
|---|-----------------|--------------------------------|---|
| Average Forward Current<br>(Per pkg)<br>(Per diode)                               | $I_{F(AV)}$     | 600A<br>300A                   | $T_c = 125^\circ C$   |
| Peak Forward Surge Current<br>(Per diode)   | $I_{FSM}$       | 4000A                          | 8.3ms , half sine   |
| Maximum Instantaneous Forward Voltage *<br>(Per diode)                            | $V_F$           | 0.76V<br>0.86V                 | $I_{FM} = 300A; T_J = 125^\circ C$<br>$I_{FM} = 300A; T_J = 25^\circ C$ |
| Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage*<br>(Per diode) | $I_R$           | 1mA<br>8mA<br>15mA             | $T_J = 25^\circ C$<br>$T_J = 125^\circ C$<br>$T_J = 150^\circ C$        |
| Isolation Voltage   | $V_{iso}$       | 2500V                          | A.C. 1 minute   |
| Maximum Thermal Resistance Junction To Case<br>(Per diode)                        | $R_{\theta jc}$ | 0.28°C/W                       |   |
| Mounting Torque   |                 | $4 \pm 0.5Nm$<br>$3 \pm 0.5Nm$ | to heatsink<br>to terminals   |

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

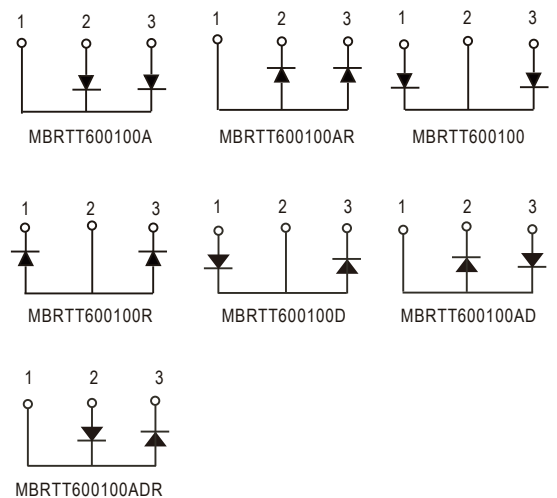




Figure .1- Typical Forward Characteristics

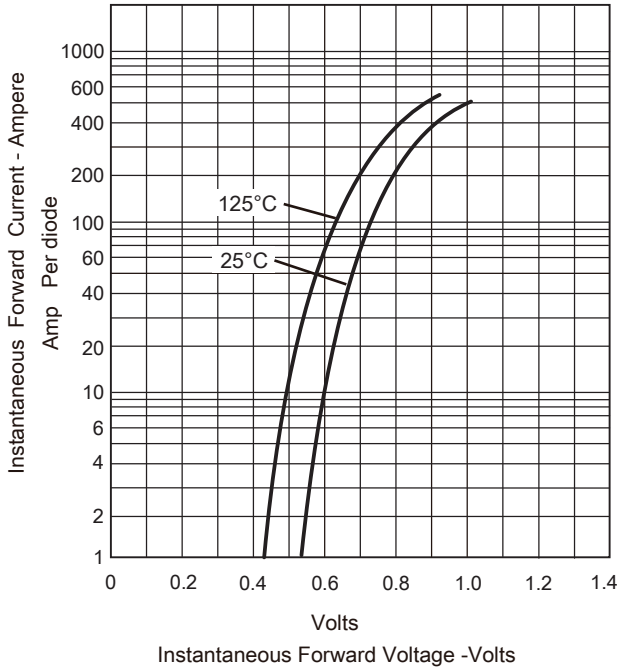


Figure .2-Forward Derating Curve

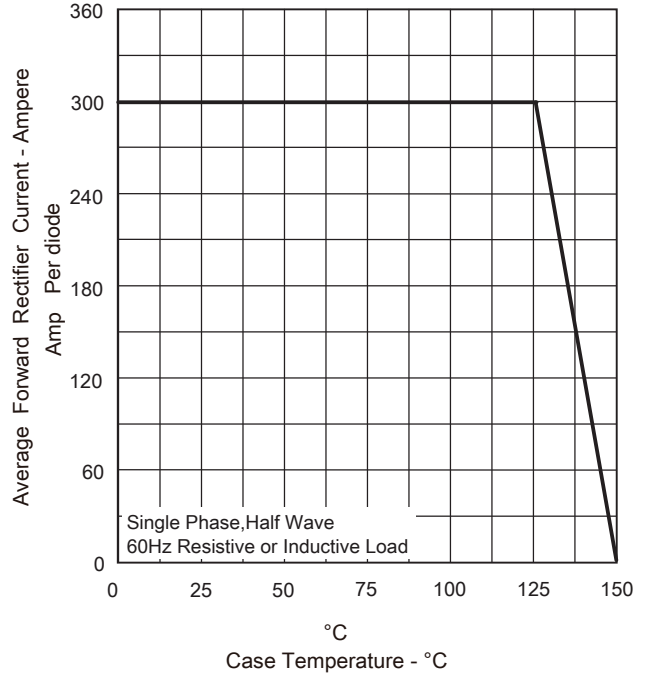


Figure .3- Peak Forward Surge Current

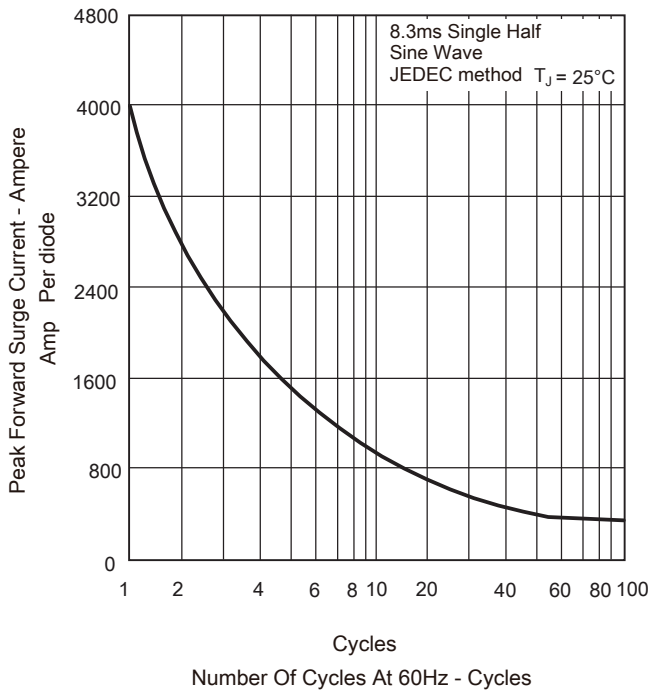
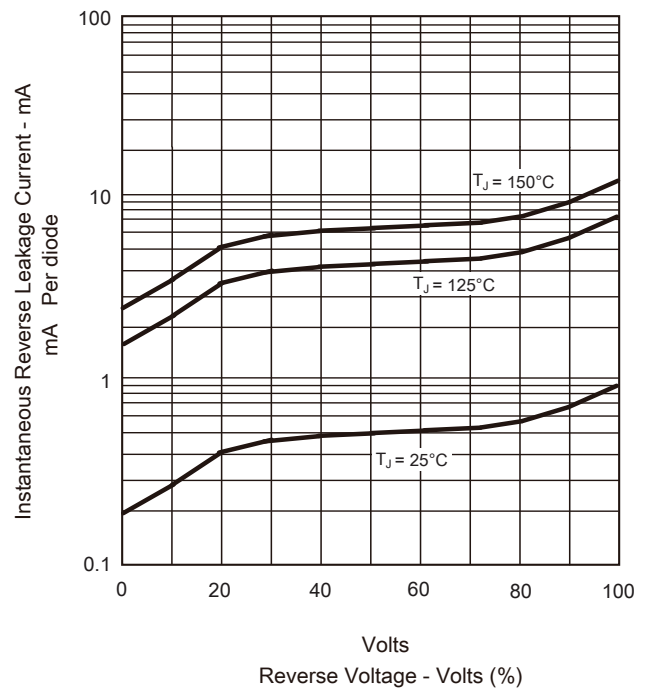


Figure .4-Typical Reverse Characteristics





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