



**SCHOTTKY DIODE MODULE TYPES
300A / 20V-45V**

Features

- High Surge Capability
- Types Up to 45V 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

| Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------|--|---------------------|-----------------------------|
| MBRT30020(R) | 20V | 14V | 20V |
| MBRT30030(R) | 30V | 21V | 30V |
| MBRT30035(R) | 35V | 25V | 35V |
| MBRT30040(R) | 40V | 28V | 40V |
| MBRT30045(R) | 45V | 32V | 45V |

Electrcal Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|--|-----------------|-----------------------|--|
| Average Forward Current (Per pkg) | $I_{F(AV)}$ | 300A | $T_C = 125^\circ\text{C}$ |
| Peak Forward Surge Current (Per diode) | I_{FSM} | 2000A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage* | V_F | 0.70V | $I_{FM} = 150\text{A}; T_J = 25^\circ\text{C}$ |
| Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage* (Per diode) | I_R | 1 mA 8 mA 40 mA | $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ $T_J = 150^\circ\text{C}$ |
| Isolation Voltage | V_{iso} | 2500V | A.C. 1 minute |
| Maximum Thermal Resistance Junction To Case (Per diode) | $R_{\theta jc}$ | 0.40°C/W | |
| Weight | | 103g | |

*Pulse Test: Pulse Width 300 μsec , Duty Cycle < 2%



Dimensions in mm (1 mm = 0.0394")

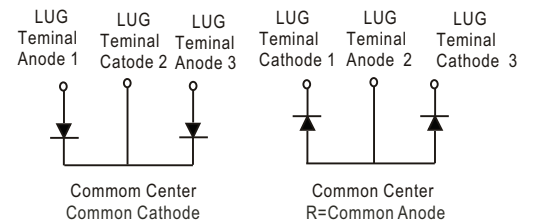
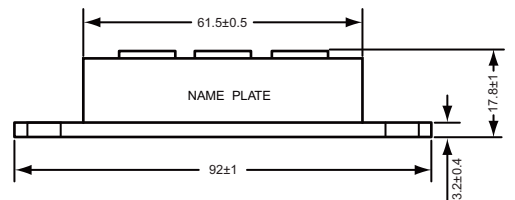
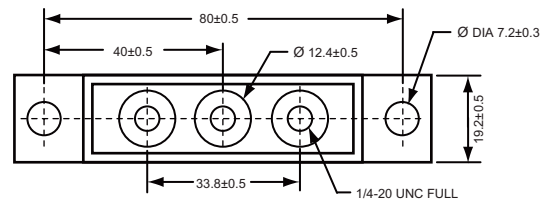




Figure .1- Typical Forward Characteristics

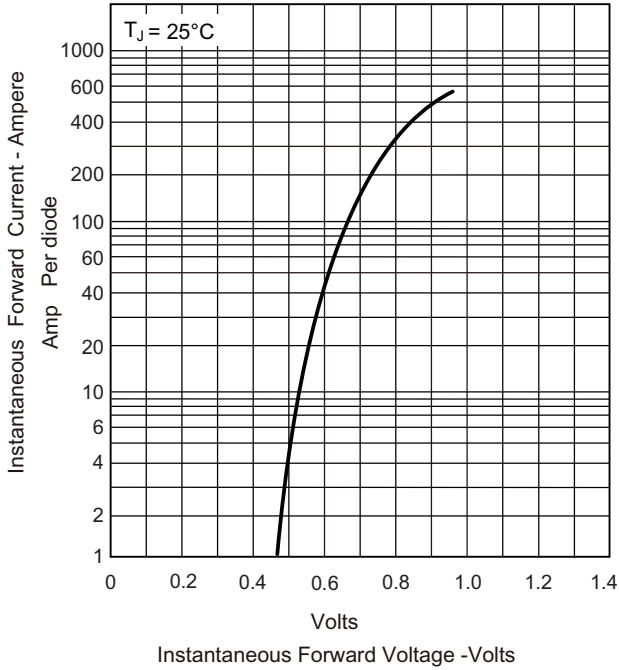


Figure .2-Forward Derating Curve

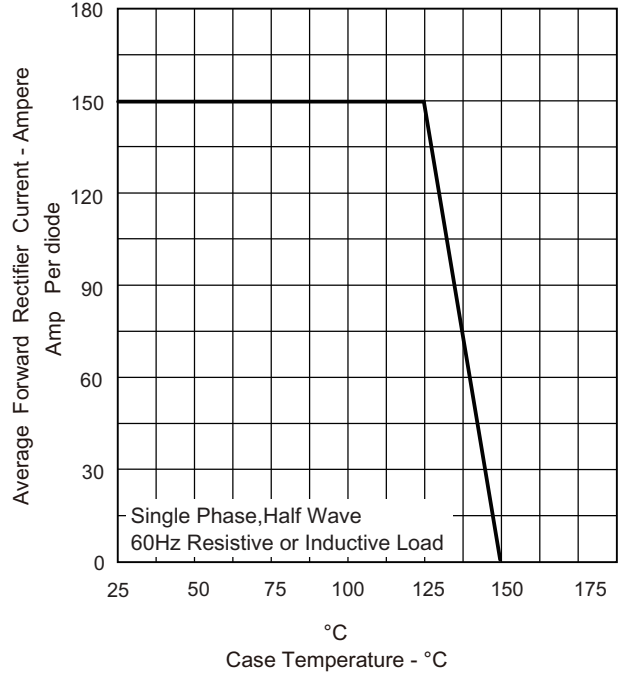


Figure .3-Peak Forward Surge Current

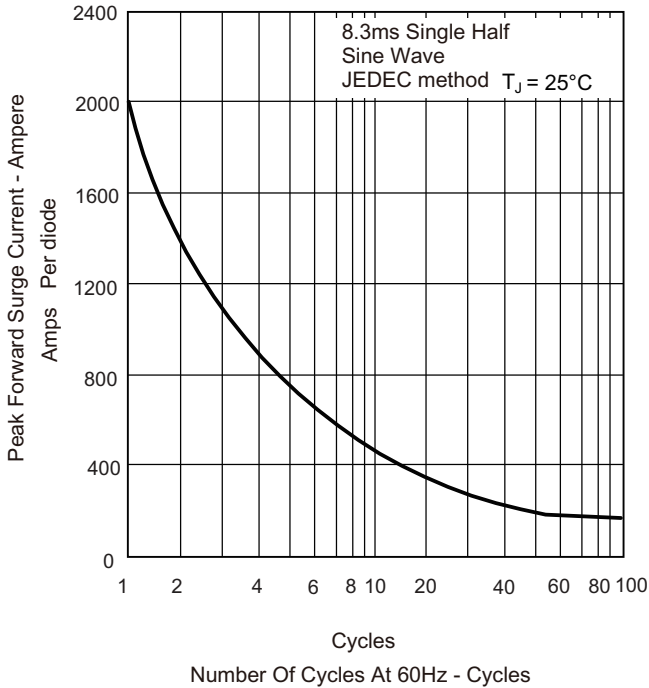
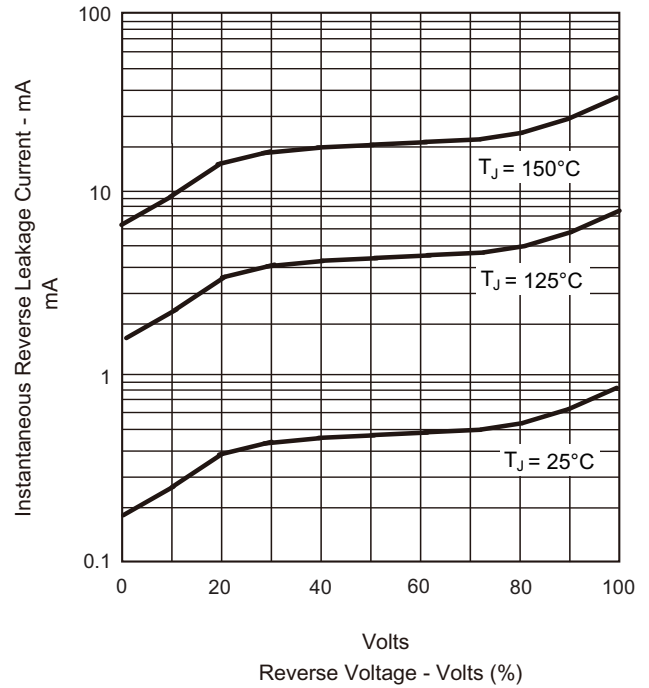


Figure .4-Typical Reverse Characteristics





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