



**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

Electrical 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")

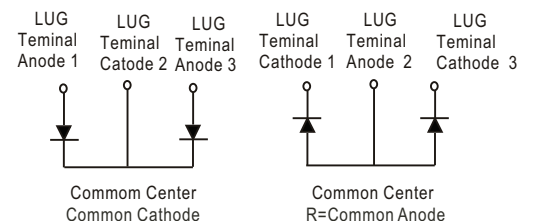
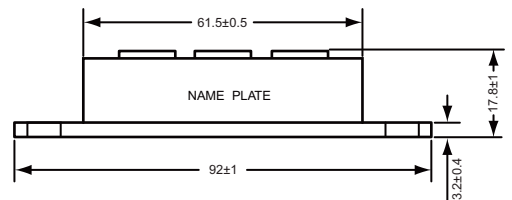
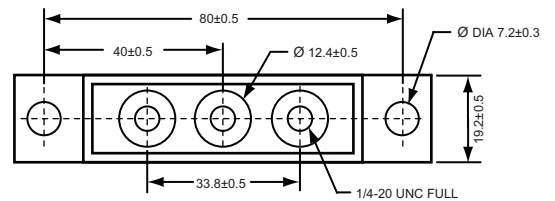




Figure .1- Typical Forward Characteristics

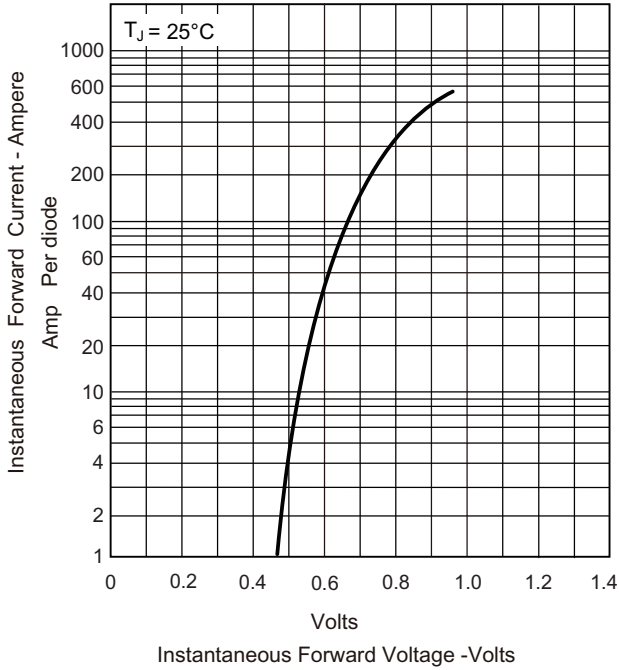


Figure .2-Forward Derating Curve

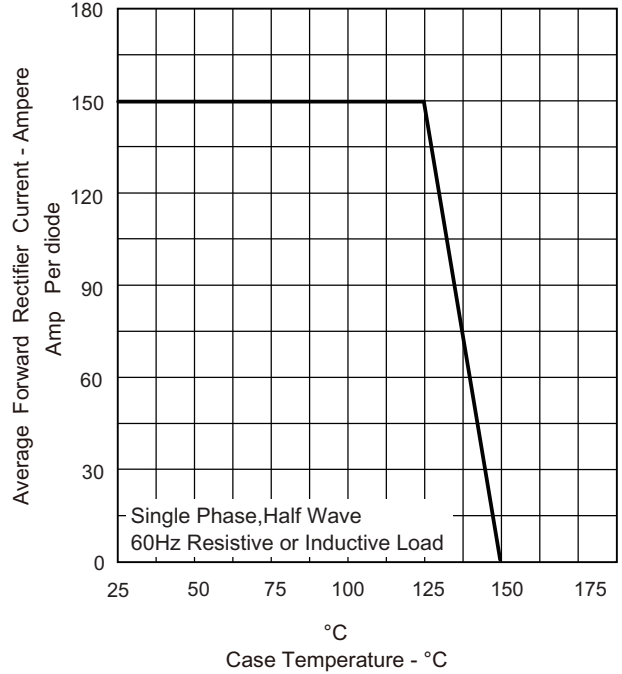


Figure .3-Peak Forward Surge Current

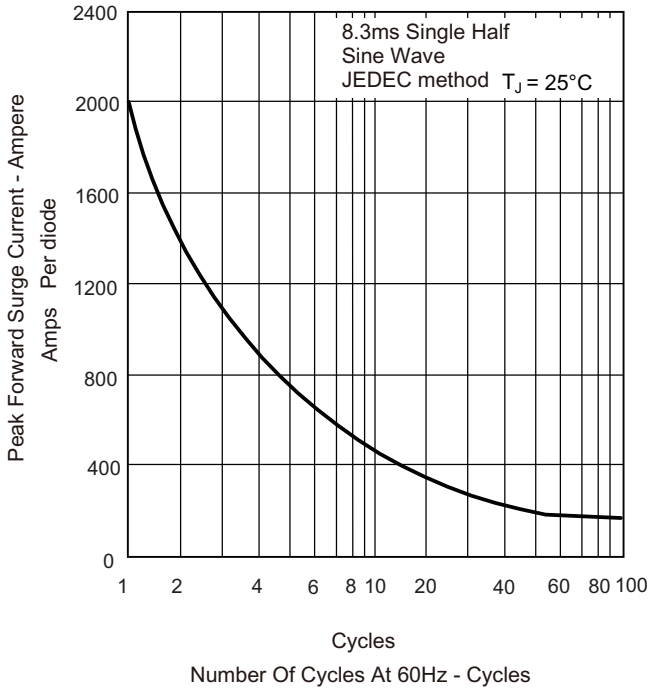
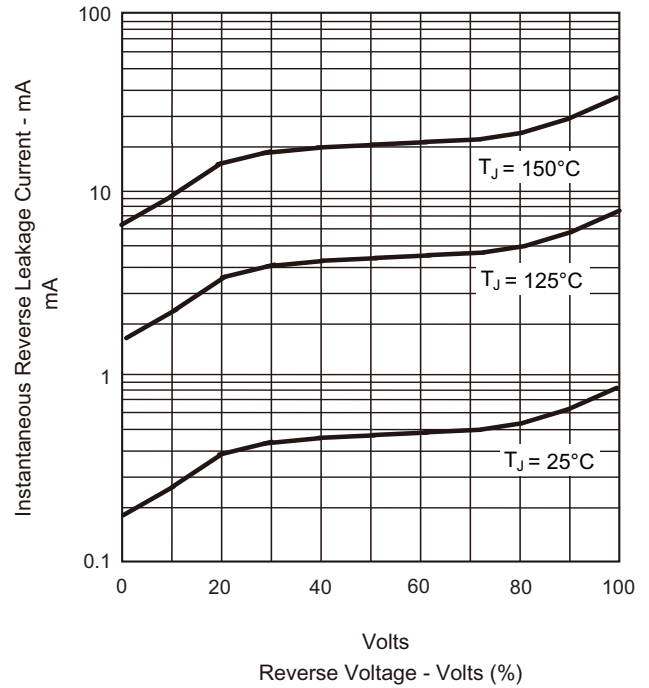


Figure .4-Typical Reverse Characteristics





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