

**SCHOTTKY DIODE MODULE TYPES
300A / 80-100V**

Features

High Surge Capability
Types up to 100V V_{RRM}

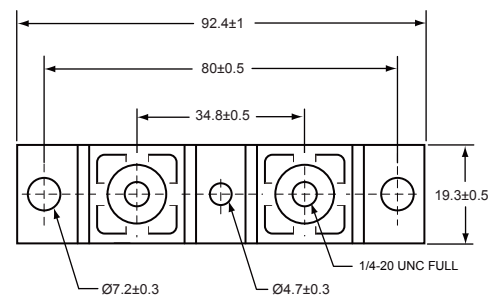
Maximum Ratings

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
MBR30080CT(R)	80V	56V	80V
MBR30090CT(R)	90V	63V	90V
MBR300100CT(R)	100V	70V	100V

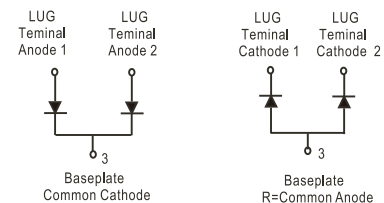
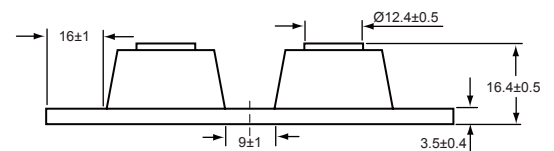


Dimensions in mm (1 mm = 0.0394")



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* (Per diode)	V_F	0.76V 0.84V	$I_{FM}=150A; T_J = 125^\circ\text{C}$ $I_{FM}=150A; T_J = 25^\circ\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage* (Per diode)	I_R	1mA 8mA 15mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ $T_J = 150^\circ\text{C}$
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.40°C/W	
Mounting torque		35-40 In-lb 30-40 In-lb 8-10 In-lb	Terminal Torque Outside holes Center hole
Weight		84g	



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



Figure .1- Typical Forward Characteristics

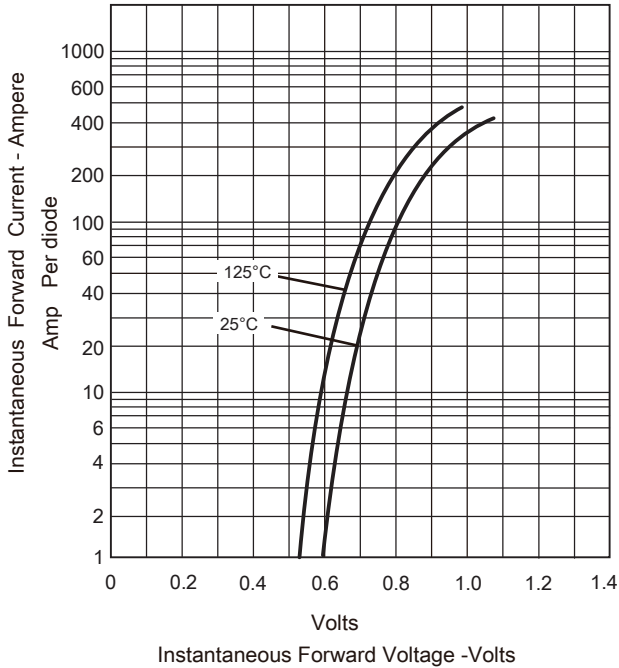


Figure .2-Forward Derating Curve

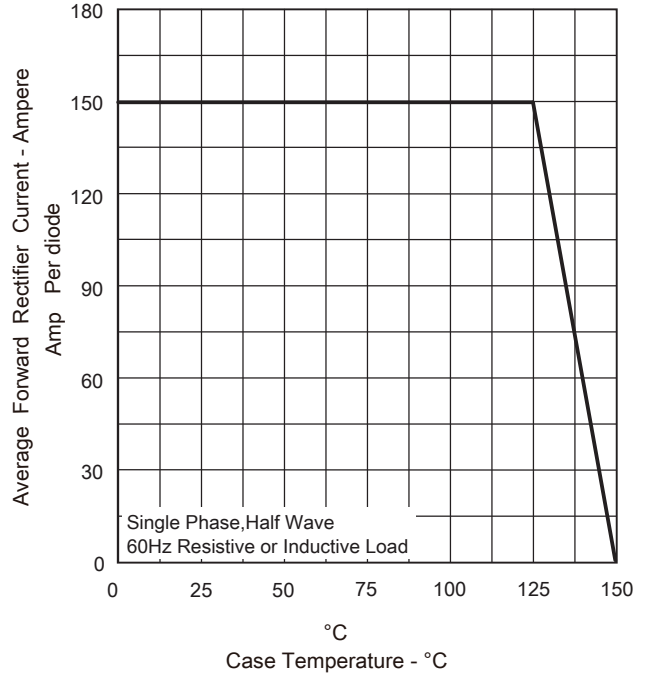


Figure .3- Peak Forward Surge Current

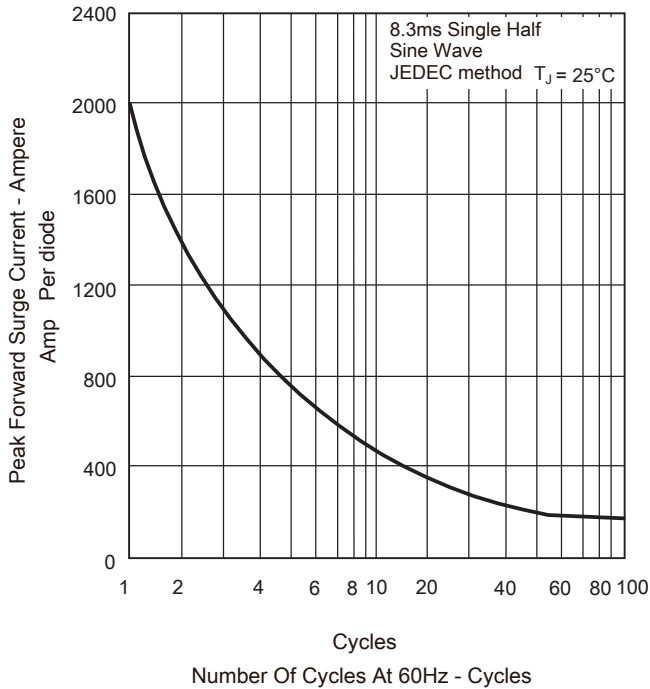
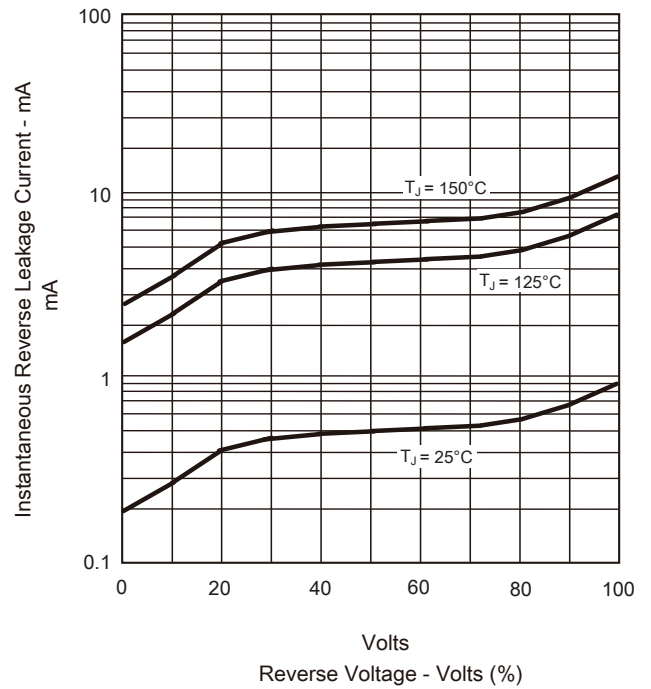


Figure .4-Typical Reverse Characteristics





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