



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

**Features**

High Surge Capability  
Types up to 45V  $V_{RRM}$

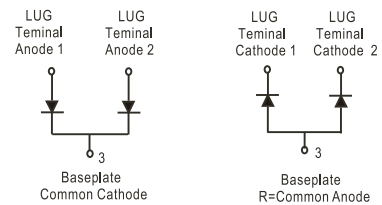
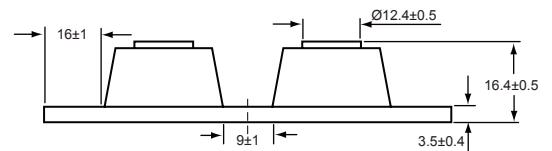
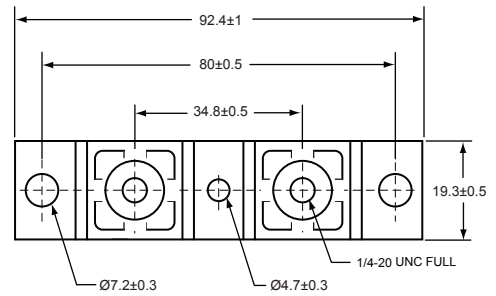
**Maximum Ratings**

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
MBR30020CT(R)	20V	14V	20V
MBR30030CT(R)	30V	21V	30V
MBR30035CT(R)	35V	25V	35V
MBR30040CT(R)	40V	28V	40V
MBR30045CT(R)	45V	32V	45V



Dimensions in mm (1 mm = 0.0394")



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

Average Forward Current (Per pkg)	$I_{F(AV)}$	300A	$T_C = 125^\circ C$
Peak Forward Surge Current (Per diode)	$I_{FSM}$	2000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage* (Per diode)	$V_F$	0.65V 0.70V	$I_{FM}=150A; T_J = 125^\circ C$ $I_{FM}=150A; T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage* (Per diode)	$I_R$	1mA 8mA 40mA	$T_J = 25^\circ C$ $T_J = 125^\circ C$ $T_J = 150^\circ C$
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 300  $\mu$ sec, Duty Cycle < 2%



Figure .1- Typical Forward Characteristics

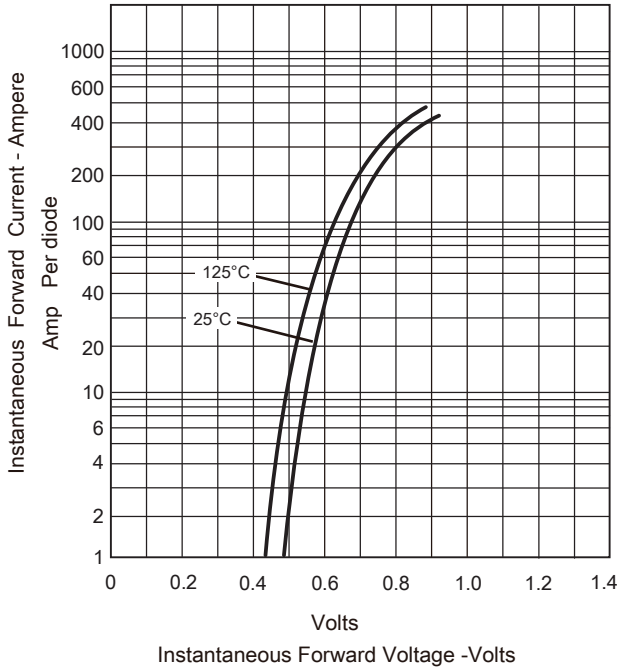


Figure .2-Forward Derating Curve

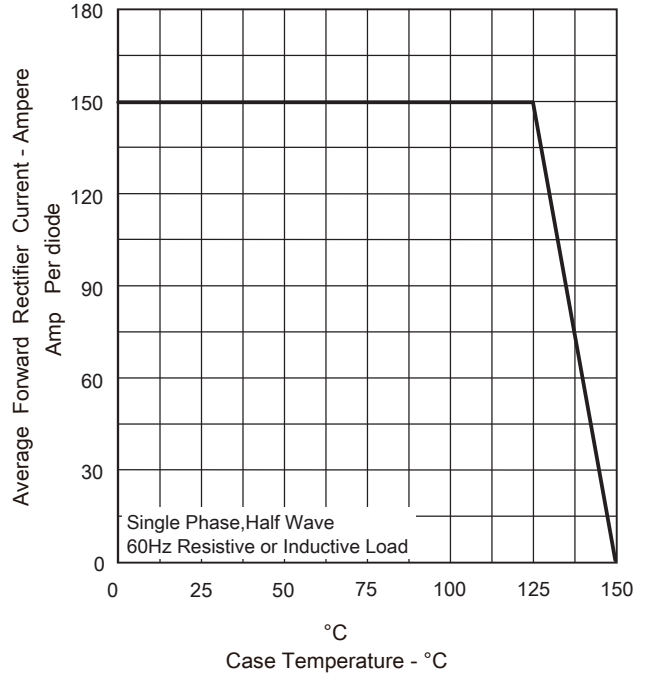


Figure .3- Peak Forward Surge Current

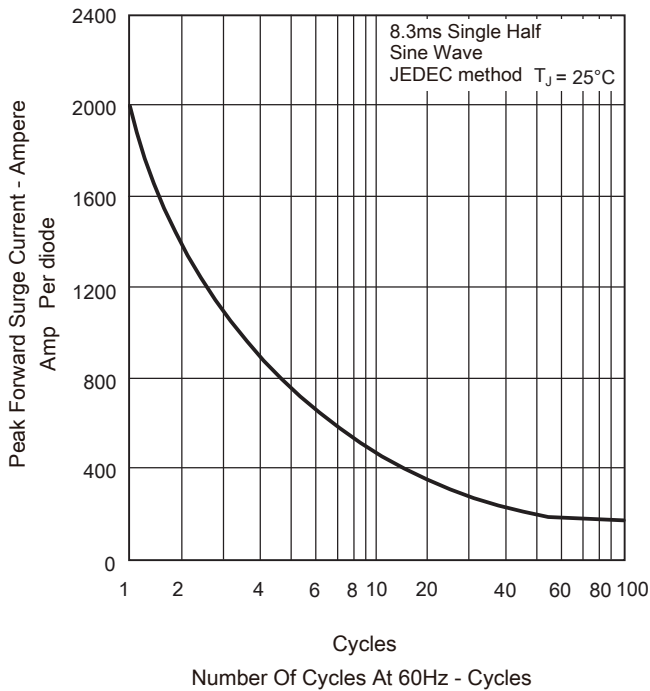
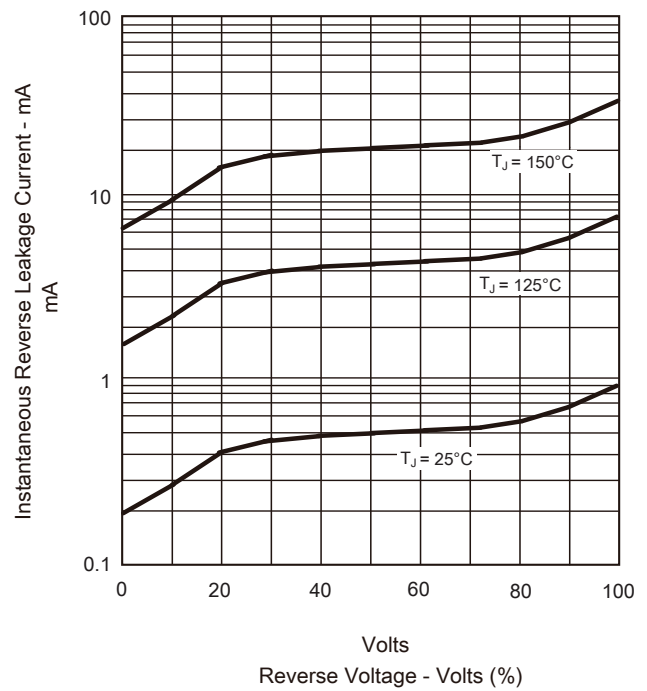


Figure .4-Typical Reverse Characteristics





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