



LOW VF SCHOTTKY DIODE MODULE TYPE
500A / 45V

Features

High Surge Capability
Type 45V V_{RRM}

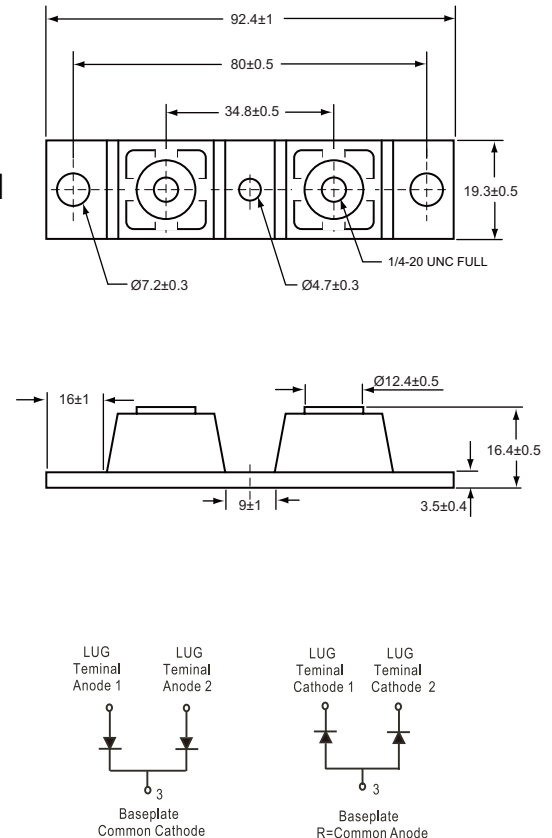


Maximum Ratings

Junction Operating Temperature : -55°C to +100°C
Storage Temperature : -55°C to +150°C

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR50145CT(R)L	45V	32V	45V

Dimensions in mm (1 mm = 0.0394")



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	500A	$T_C = 100^\circ C$
Peak Forward Surge Current (Per diode)	I_{FSM}	5000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage* (Per diode)	V_F	0.54V	$I_{FM}=250A; T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode)	I_R	2.0 A 8.0mA	$T_J = 125^\circ C$ $T_J = 25^\circ C$
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.30°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 µsec, Duty Cycle < 2%



Figure.1 - Typical Forward Characteristics

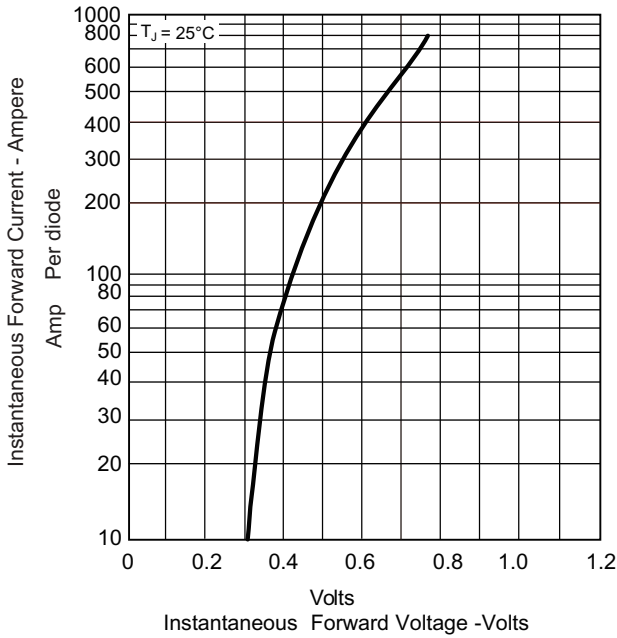


Figure.2 - Forward Derating Curve

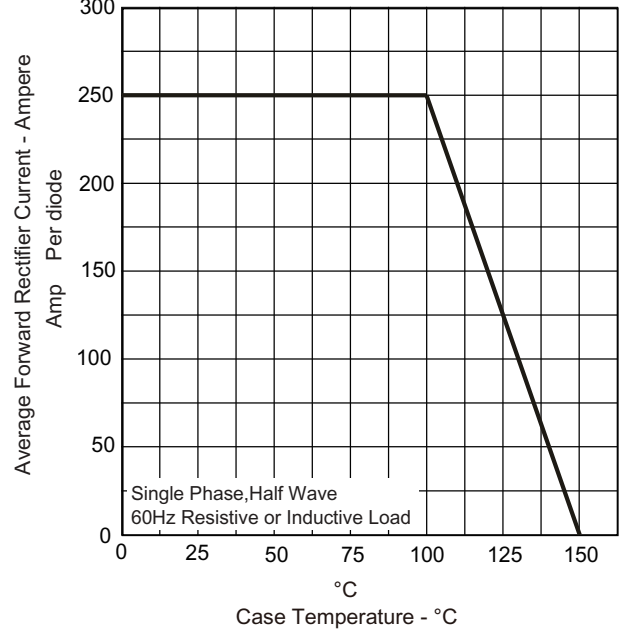


Figure.3 - Peak Forward Surge Current

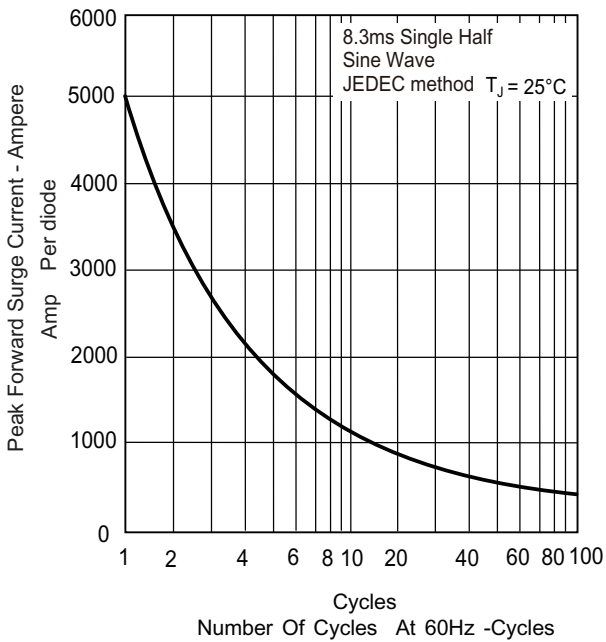
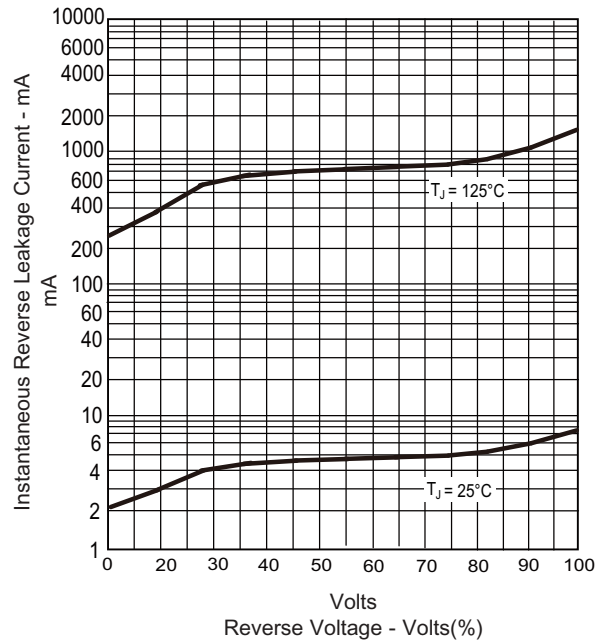


Figure.4 - Typical Reverse Characteristics





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