



HIGH POWER DIODE MODULE TYPES 100A

Features

- High Surge Capability
- Types up to 1600V V_{RRM}
- Isolation Type Package
- Electrically Isolation base plate

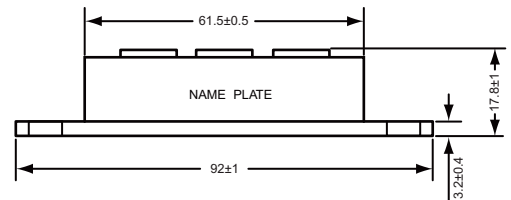
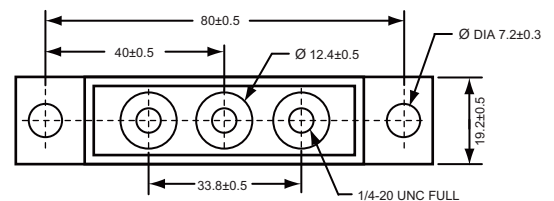
Maximum Ratings

Junction Operating Temperature : -40 °C to+175 °C
Storage Temperature : -40 °C to+175 °C



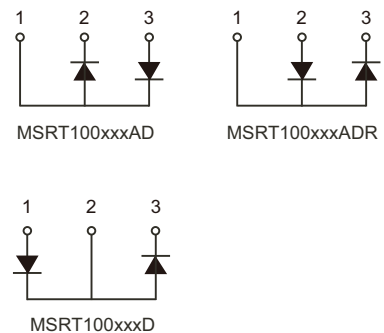
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MSRT10060(A)D(R)	600V	420V	600V
MSRT10080(A)D(R)	800V	560V	800V
MSRT100100(A)D(R)	1000V	700V	1000V
MSRT100120(A)D(R)	1200V	840V	1200V
MSRT100140(A)D(R)	1400V	980V	1400V
MSRT100160(A)D(R)	1600V	1120V	1600V

Dimensions in mm (1 mm = 0.0394")



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg) (Per diode)	$I_{F(AV)}$	200A 100A	$T_c = 140^\circ C$
Peak Forward Surge Current (Per diode)	I_{FSM}	2000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage * (Per diode)	V_F	1.10V	$I_{FM}=100A; T_J = 25^\circ C$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per diode)	I_R	10 μA 5mA	$T_J = 25^\circ C$ $T_J = 150^\circ C$
Isolation Voltage	V_{isol}	2500V	A.C. 1minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.45°C/W	
Weight		103g	



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



Figure .1- Typical Forward Characteristics

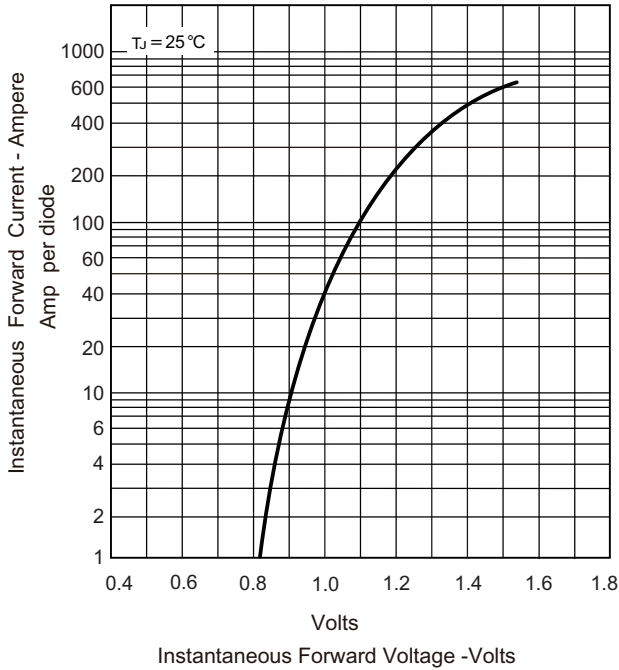


Figure .2-Forward Derating Curve

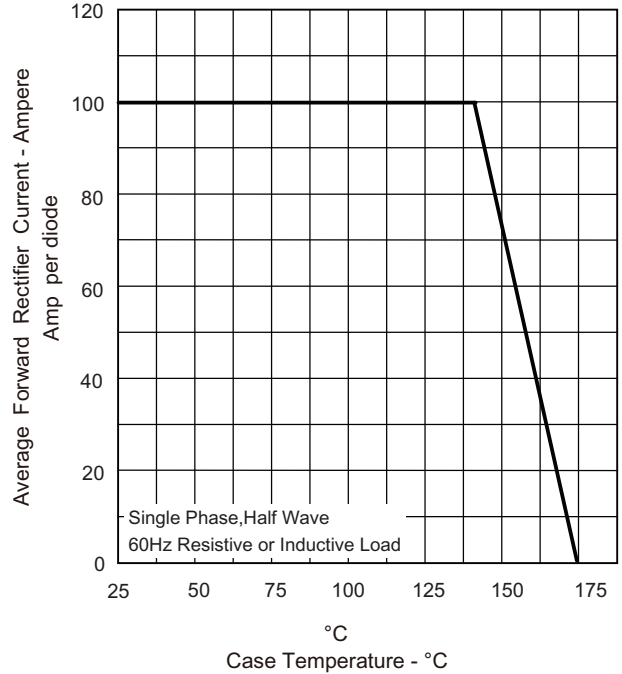


Figure .3-Peak Forward Surge Current

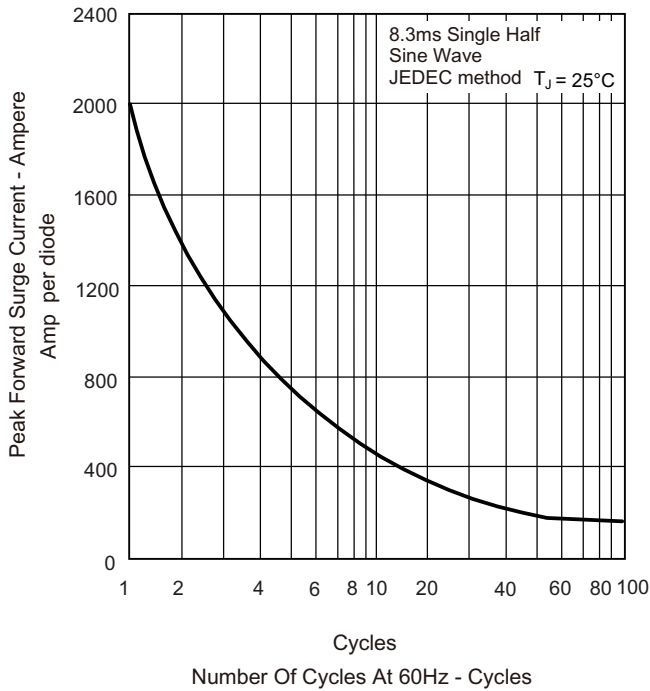
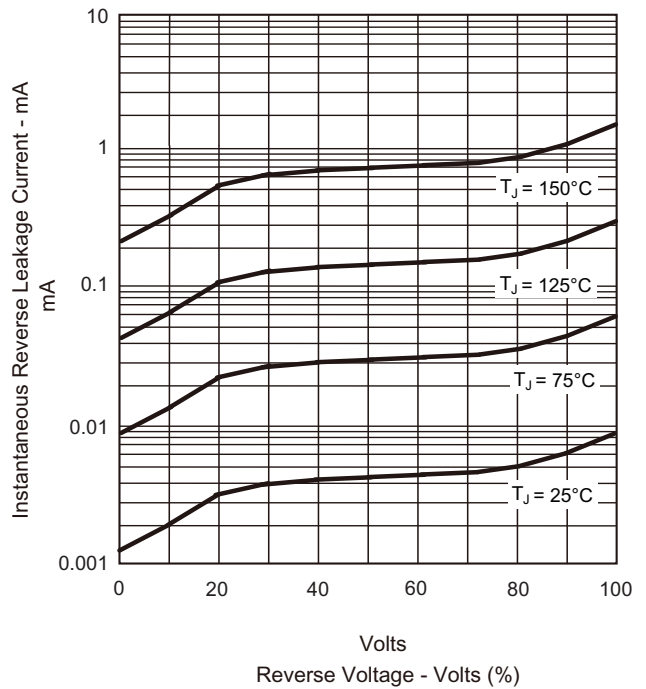


Figure .4-Typical Reverse Characteristics





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