

**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
MSRTT10060(A)D(R)	600V	420V	600V
MSRTT10080(A)D(R)	800V	560V	800V
MSRTT100100(A)D(R)	1000V	700V	1000V
MSRTT100120(A)D(R)	1200V	840V	1200V
MSRTT100140(A)D(R)	1400V	980V	1400V
MSRTT100160(A)D(R)	1600V	1120V	1600V

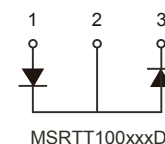
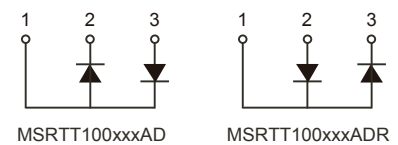
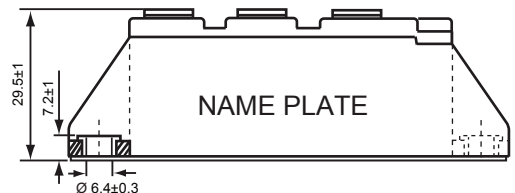
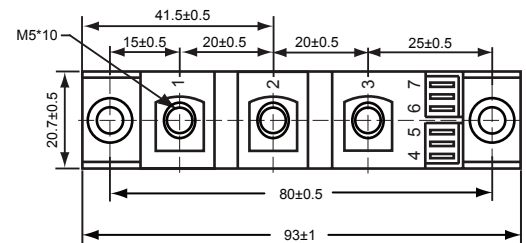
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current (Per diode)	$I_{F(AV)}$	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 $\mu A$ 5mA	$T_J = 25^\circ C$ $T_J = 150^\circ C$
Isolation Voltage (between All Terminals and Baseplate)	$V_{isol}$	2500V	A.C. 1minute
Maximum Thermal Resistance Junction To Case (Per diode)	$R_{\theta jc}$	0.45°C/W	
Mounting Torque		5 ± 0.5Nm 3 ± 0.5Nm	to heatsink to terminals

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



Dimensions in mm (1 mm = 0.0394")



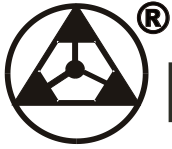


Figure .1- Typical Forward Characteristics

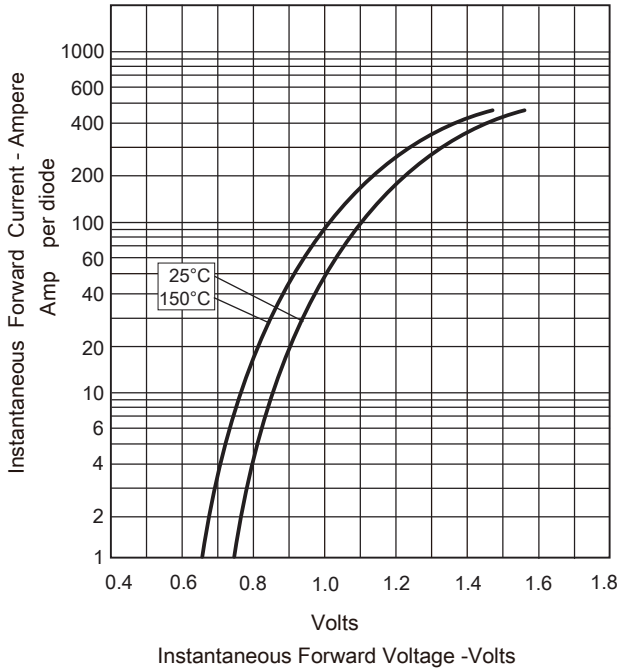


Figure .2-Forward Derating Curve

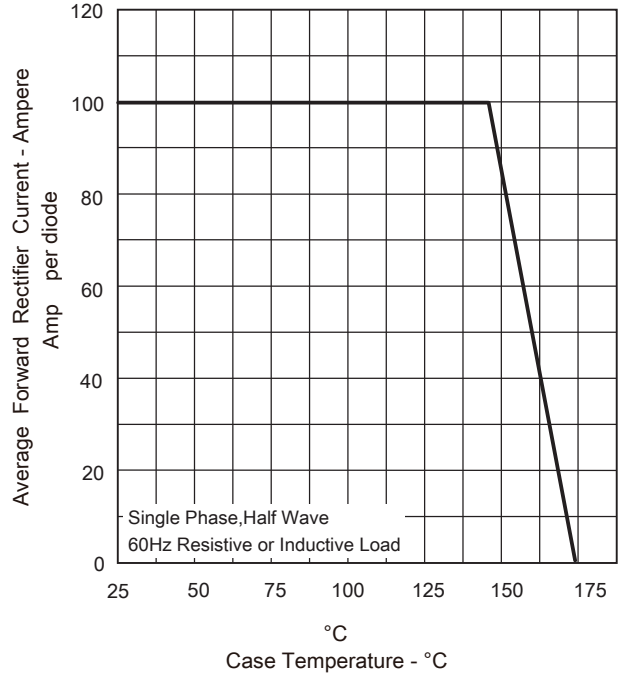


Figure .3-Peak Forward Surge Current

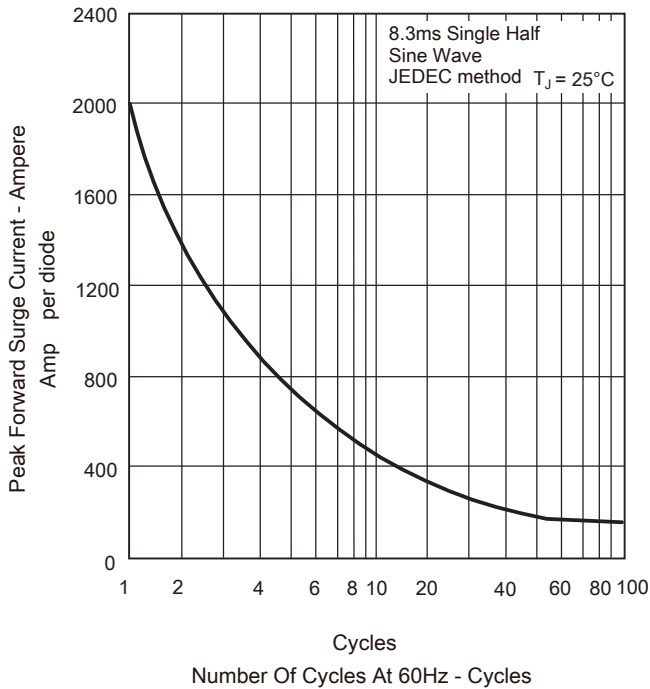
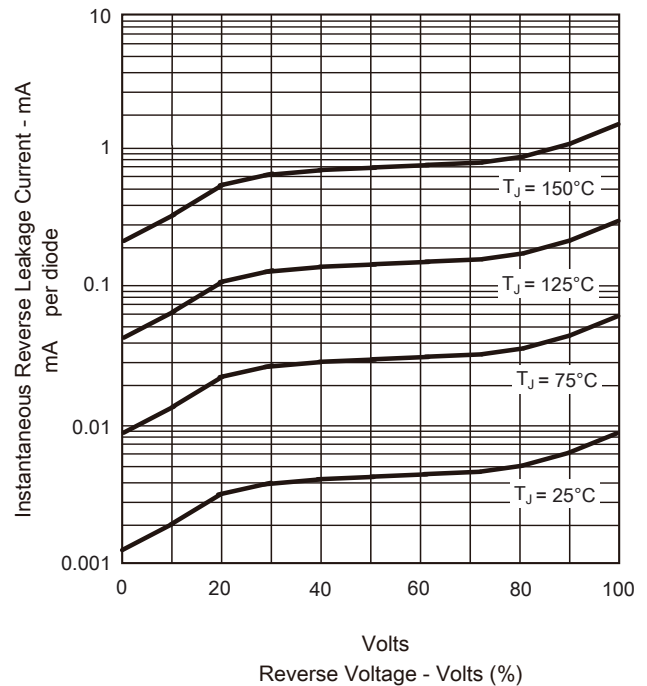


Figure .4-Typical Reverse Characteristics





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