

HIGH POWER DIODE MODULE TYPES 100A / 600-1600V

Features

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

Maximum Ratings

- Operating Temperature : -40°C to $+175^{\circ}\text{C}$
- Storage Temperature : -40°C to $+175^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MSRTTA10060(A)D(R)	600V	420V	600V
MSRTTA10080(A)D(R)	800V	560V	800V
MSRTTA100100(A)D(R)	1000V	700V	1000V
MSRTTA100120(A)D(R)	1200V	840V	1200V
MSRTTA100140(A)D(R)	1400V	980V	1400V
MSRTTA100160(A)D(R)	1600V	1120V	1600V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (Per leg)	$I_{F(AV)}$	100A	$T_C = 140^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	2000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage *	V_F	1.10V	$I_{FM}=100\text{A}; T_J = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blockig Voltage* (Per leg)	I_R	$10\mu\text{A}$ 5mA	$T_J = 25^{\circ}\text{C}$ $T_J = 150^{\circ}\text{C}$
Isolation Voltage	V_{isol}	2500V	A.C. 1minute
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.45°C/W	
Mounting torque		$5 \pm 0.5\text{Nm}$ $3 \pm 0.5\text{Nm}$	to heatsink to terminals

*Pulse Test: Pulse Width $300\mu\text{sec}$, Duty Cycle 2%



Dimensions in mm (1 mm = 0.0394")

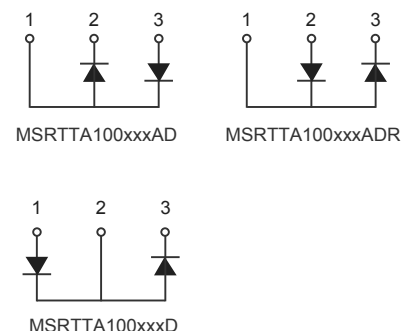
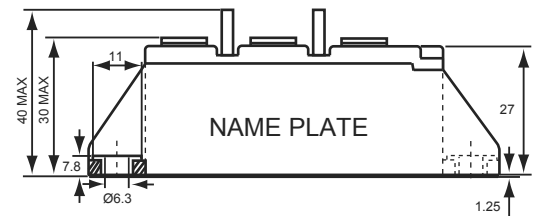
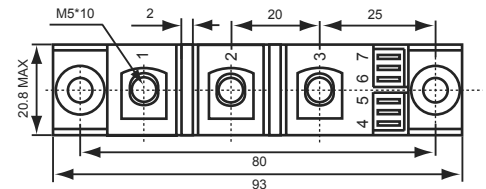




Figure .1- Typical Forward Characteristics

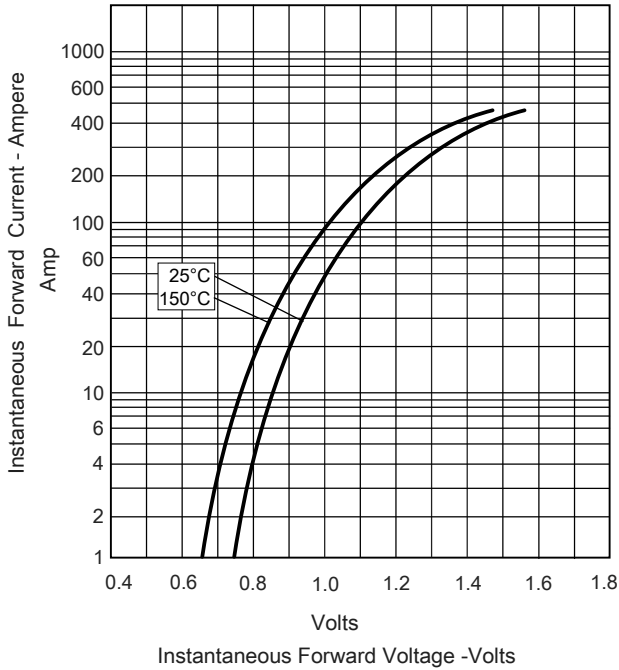


Figure .2-Forward Derating Curve

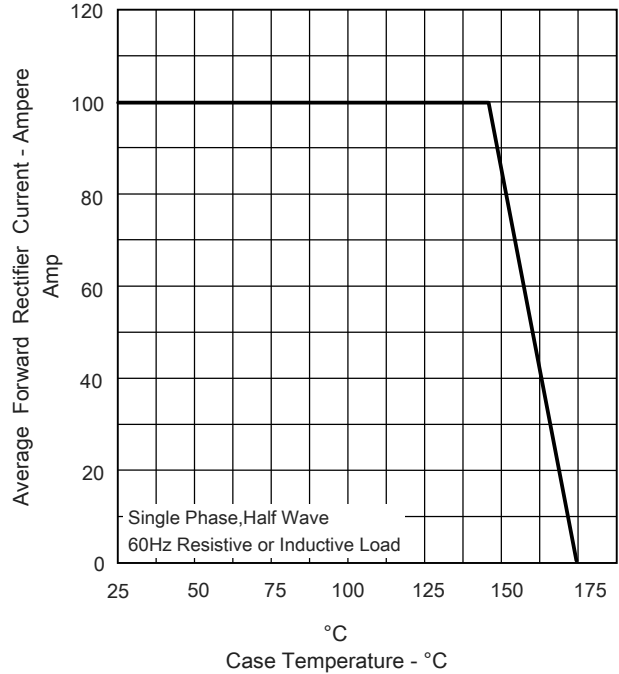


Figure .3-Peak Forward Surge Current

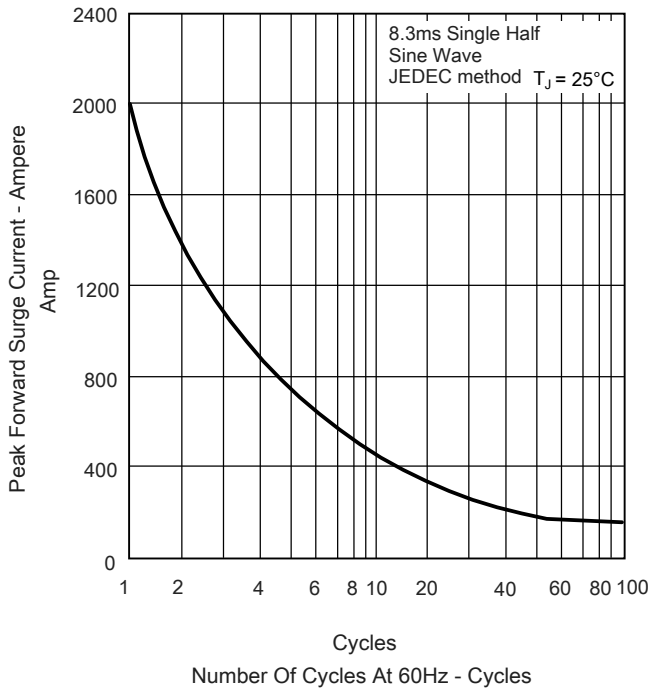
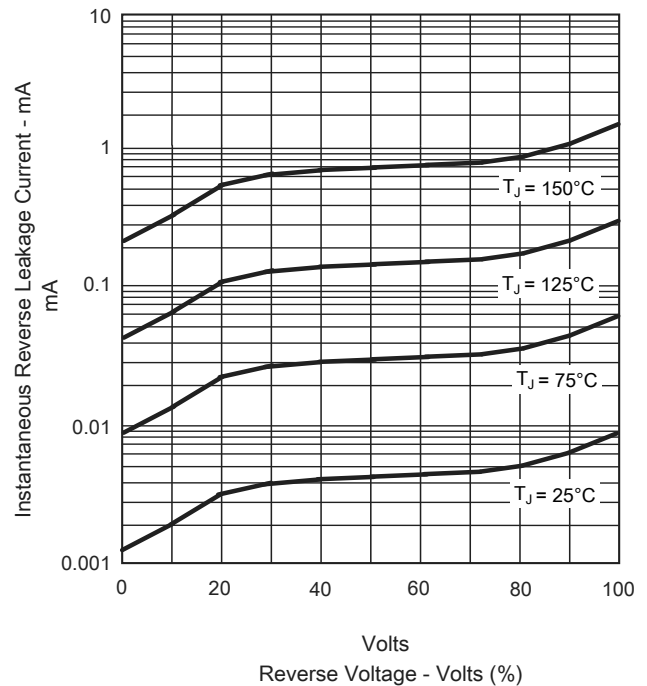


Figure .4-Typical Reverse Characteristics





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