

# HIGH POWER DIODE MODULE TYPES 200A / 600-1600V

## Features

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

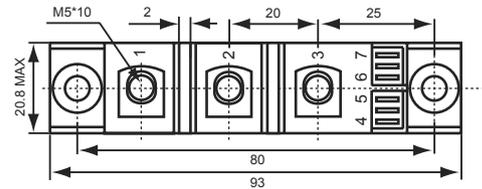
## Maximum Ratings

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



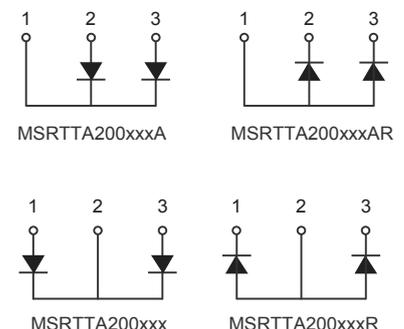
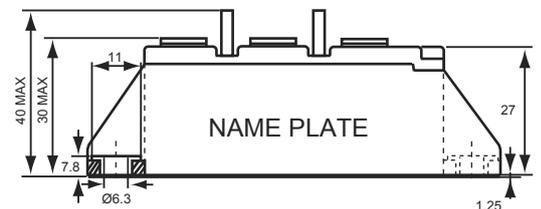
Dimensions in mm (1 mm = 0.0394")

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MSRTTA20060(A)(R)	600V	420V	600V
MSRTTA20080(A)(R)	800V	560V	800V
MSRTTA200100(A)(R)	1000V	700V	1000V
MSRTTA200120(A)(R)	1200V	840V	1200V
MSRTTA200140(A)(R)	1400V	980V	1400V
MSRTTA200160(A)(R)	1600V	1120V	1600V



## Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	200A	$T_C = 140^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	$I_{FSM}$	2000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage * (Per leg)	$V_F$	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)	$R_{\theta jc}$	$0.45^{\circ}\text{C/W}$	
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%



Figure .1- Typical Forward Characteristics

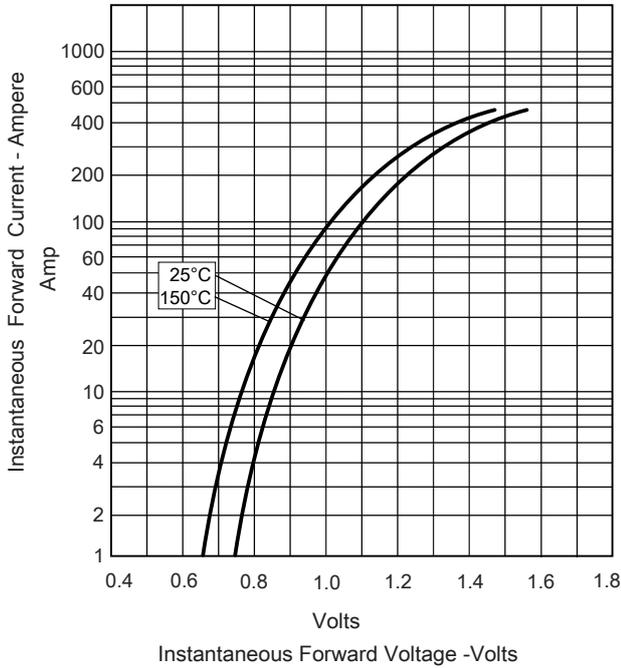


Figure .2-Forward Derating Curve

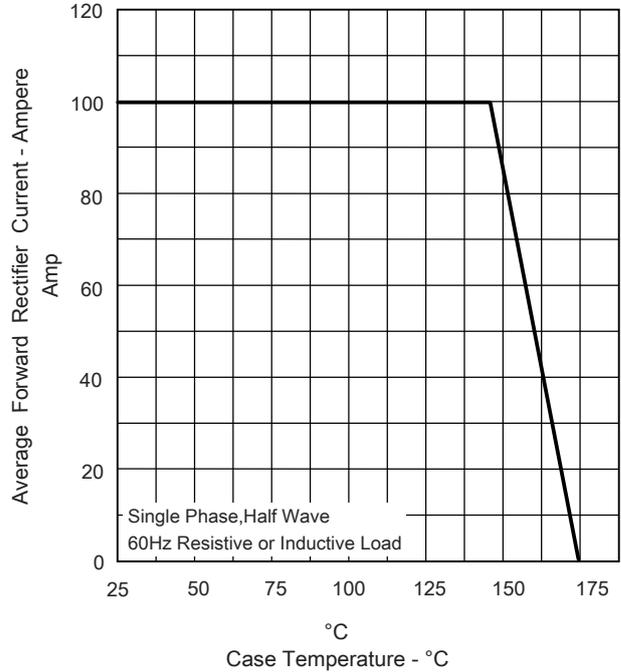


Figure .3-Peak Forward Surge Current

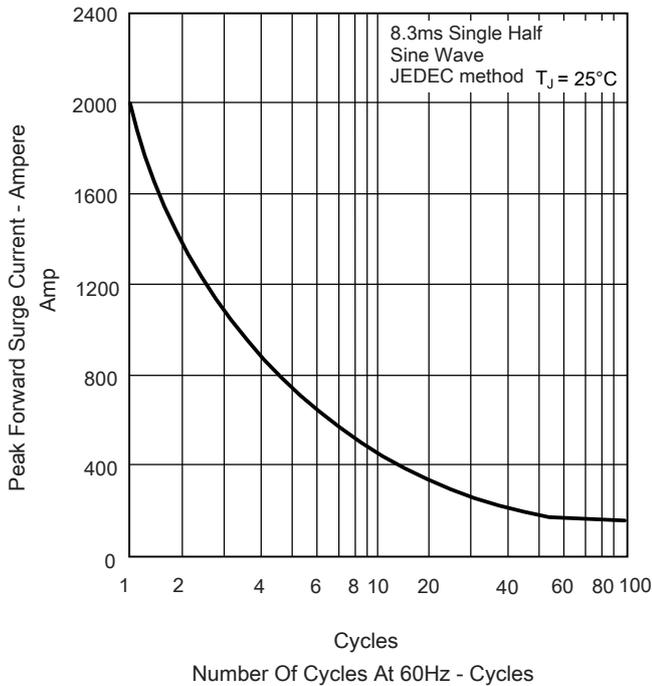
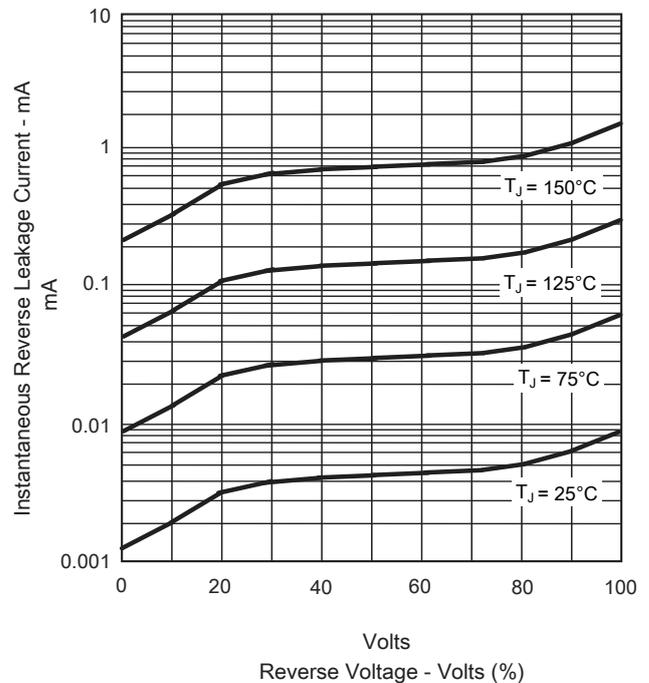


Figure .4-Typical Reverse Characteristics





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