



HIGH POWER DIODE MODULE TYPES 100A

Features

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

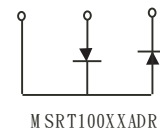
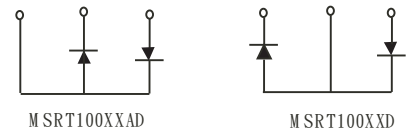
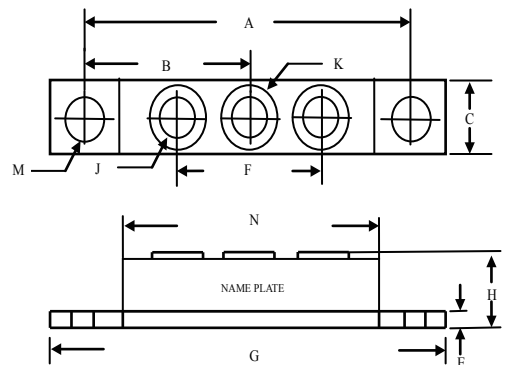
**100 Amp Rectifier
600-1600 Volts**

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
MSRT10060(A)D	600V	424V	600V
MSRT10080(A)D	800V	566V	800V
MSRT100100(A)D	1000V	707V	1000V
MSRT100120(A)D	1200V	848V	1200V
MSRT100140(A)D	1400V	990V	1400V
MSRT100160(A)D	1600V	1131V	1600V

THREE TOWER



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per leg)	$I_{F(AV)}$	100 A	$T_C = 140^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	2000A	8.3ms, half sine
Maximum Instantaneous Forward Voltage* (Per leg)	V_F	1.1V	$I_{FM} = 100\text{A}; T_J = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg)	I_R	10 uA 5 mA	$T_J = 25^{\circ}\text{C}$ $T_J = 150^{\circ}\text{C}$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.45°C/W	

DIM	DIMENSIONS				NOTE
	IN CHES		MM		
A	3.150	NOM	80.01	NOM	
B	1.565	1.585	39.75	40.26	
C	.700	.800	17.78	20.32	
E	.119	.132	3.02	3.35	
F	1.327	REF	33.72	REF	
G	3.55	3.65	90.17	92.71	
H	---	.73	---	18.30	
J	1/4 - 20 UNC FULL				
K	.472	.511	12	13	∅
M	.275	.295	6.99	7.49	∅
N	2.38	2.46	60.5	62.5	

NOTE :

(1) Pulse Test: Pulse Width 300 μ sec. Duty Cycle < 2%



Figure .1- Typical Forward Characteristics

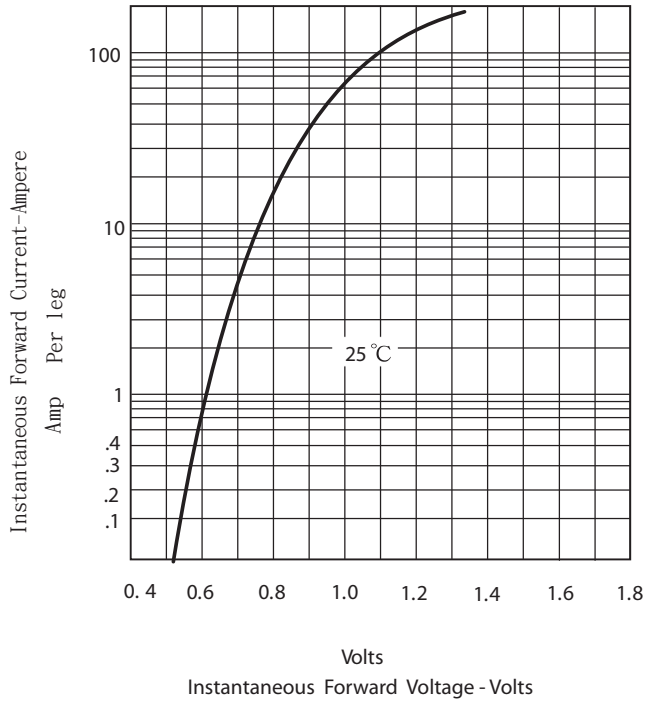


Figure.2 Forward Derating Curve

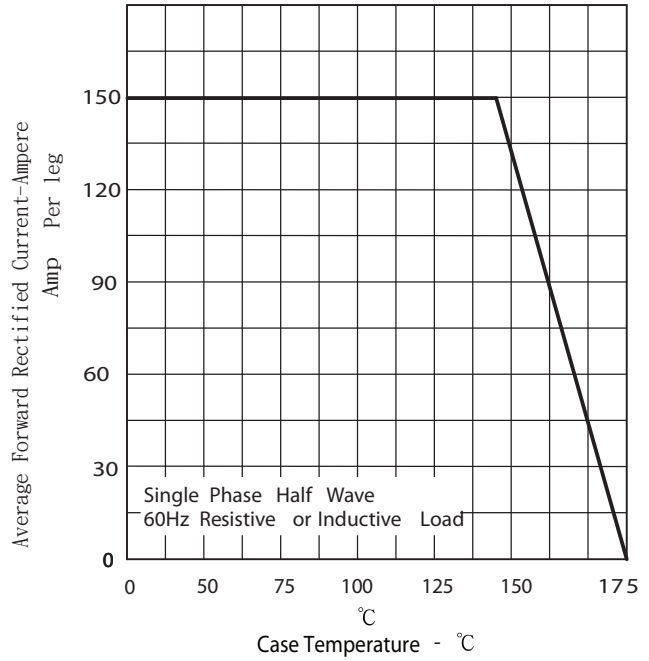


Figure .4-Typical Reverse Characteristics

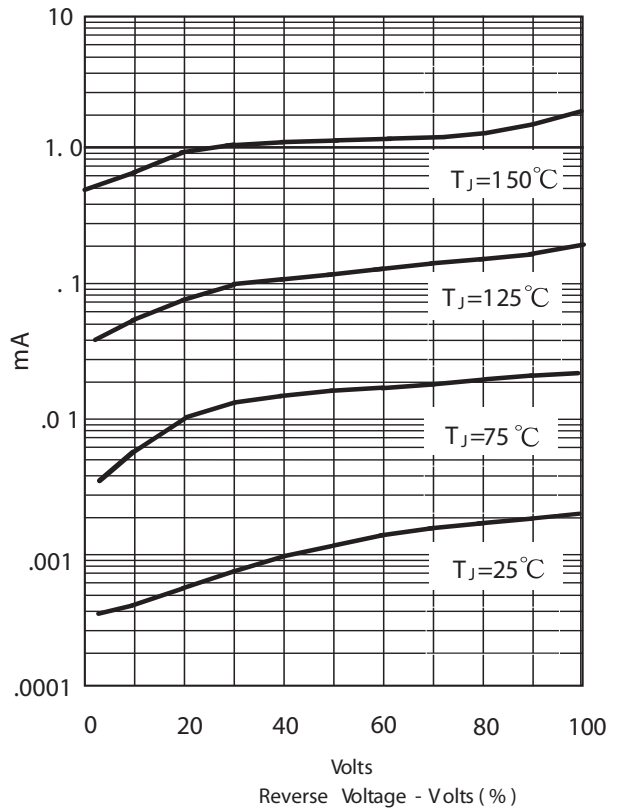


Figure.3-Peak Forward Surge Current

