



HIGH POWER DIODE MODULE TYPES 300A

Features

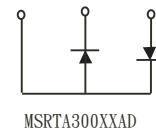
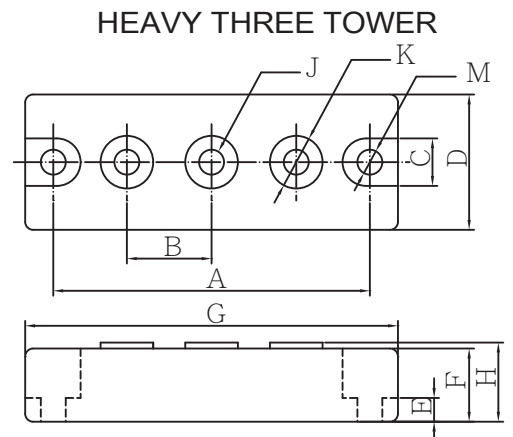
- High Surge Capability
- Types Up to 1600V V_{RRM}
- Isolation Type Package
- Electrically Isolation base plate

300 Amp Rectifier
600-1600 Volts

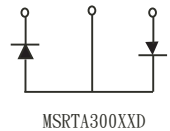
Maximum Ratings

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

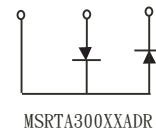
Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
MSRTA30060(A)D	600V	600V
MSRTA30080(A)D	800V	800V
MSRTA300100(A)D	1000V	1000V
MSRTA300120(A)D	1200V	1200V
MSRTA300140(A)D	1400V	1400V
MSRTA300160(A)D	1600V	1600V



MSRTA300XXAD



MSRTA300XXD



MSRTA300XXADR

Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current Per leg	$I_{F(AV)}$	300 A	$T_C = 125^{\circ}\text{C}$
Peak Forward Surge Current Per leg	I_{FSM}	3800A	8.3ms , half sine
Maximum Instantaneous Forward Voltage * Per leg	V_F	1.1V	$I_{FM} = 300\text{A};$ $T_J = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Per leg	I_R	20 uA 10mA	$T_J = 25^{\circ}\text{C}$ $T_J = 150^{\circ}\text{C}$
Maximum Thermal Resistance Junction To Case Per leg	$R_{\theta jc}$	0.28°C/W	

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	3.150	NOM	80.01	NOM	
B	.872	.892	22.15	22.65	
C	.465	.479	11.82	12.18	
D	1.337	1.356	33.95	34.45	
E	.230	.234	5.84	6.16	
F	.725	REF	18.42	REF	
G	3.668	3.768	93.17	95.71	
H	---	.791	---	20.10	
J	1/4-20 UNC FULL				
K	.509	.538	12.92	13.68	∅
M	.238	.258	6.05	6.55	∅

*Pulse Test: Pulse Width 300 μ sec , Duty Cycle 2%



Figure .1- Typical Forward Characteristics

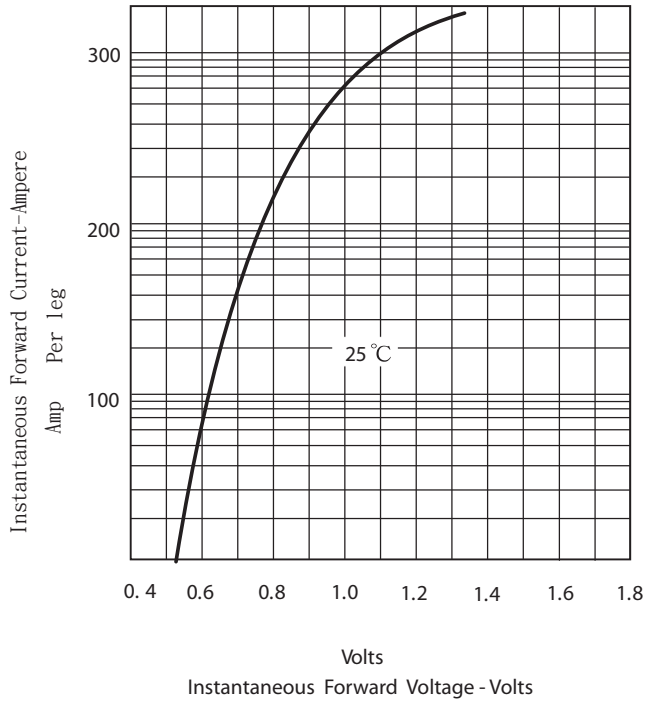


Figure.2 Forward Derating Curve

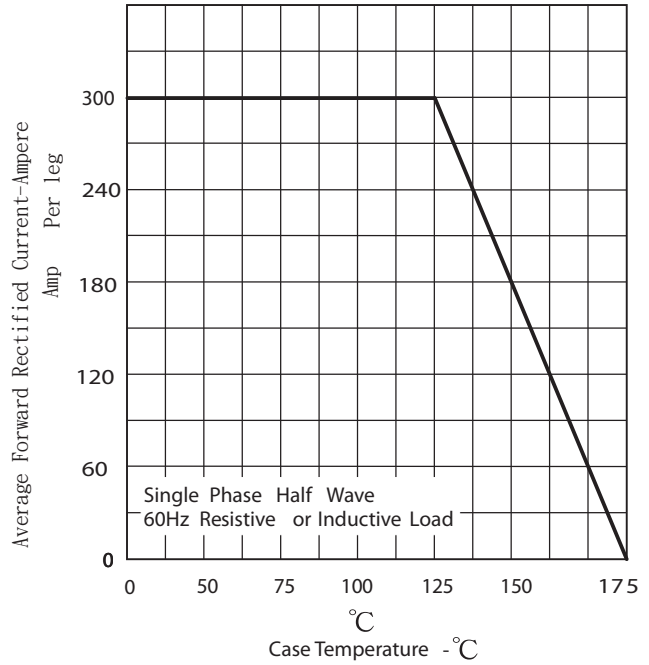


Figure .4 -Typical Reverse Characteristics

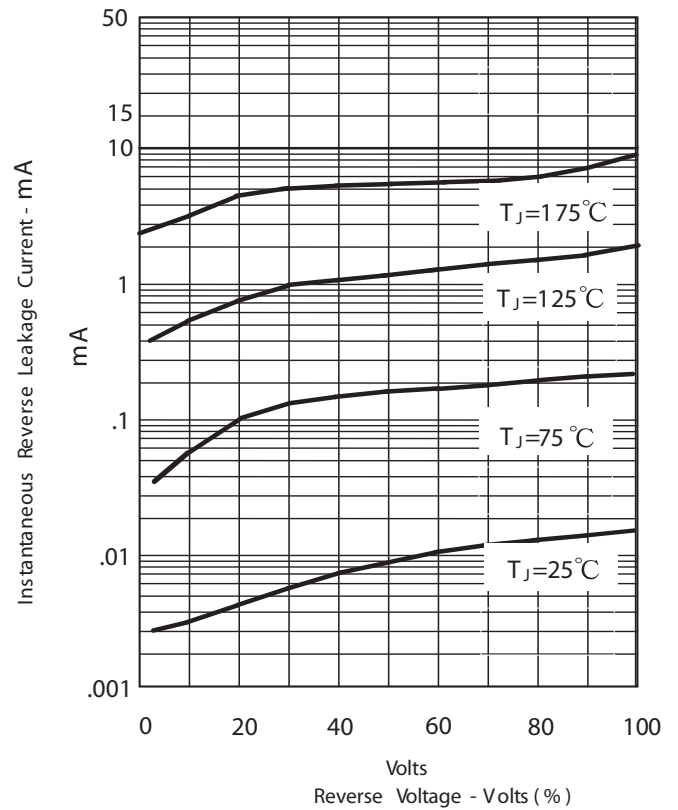


Figure.3-Peak Forward Surge Current

