



SUPER FAST DIODE MODULE TYPE 500A

Features

- High Surge Capability
- Isolation Type Package
- Electrically Isolation base plate

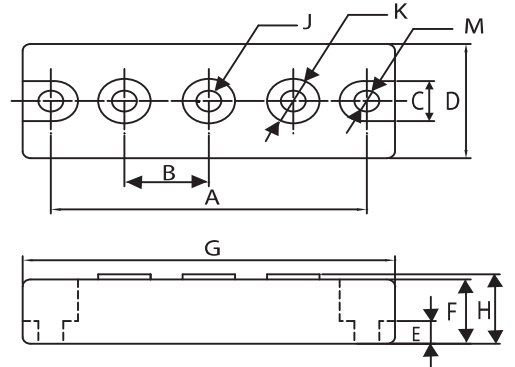
500 Amp Rectifier
1200 Volt

Maximum Ratings

Operating Temperature: -55°C to $+175^{\circ}\text{C}$
Storage Temperature: -55°C to $+175^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum DC Blocking Voltage
MURTA500120(R)	1200V	1200V

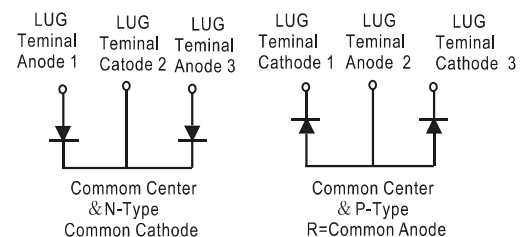
HEAVY THREE TOWER



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	500 A	$T_C = 100^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	3800A	8.3ms , half Sine
Maximum Instantaneous Forward Voltage* (Per leg)	V_F	2.6V	$I_{FM} = 250\text{A};$ $T_J = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg)	I_R	$25 \mu\text{A}$ 5 mA	$T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$
Maximum Reverse Recovery Time (Per leg)	T_{rr}	250ns	$I_F = 0.5\text{A}, I_R = 1.0\text{A},$ $I_{RR} = 0.25\text{A}$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	$0.30^{\circ}\text{C}/\text{W}$	

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



DIM	DIMENSIONS			
	Inches		Millimeters	
	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



Figure .1- Typical Forward Characteristics

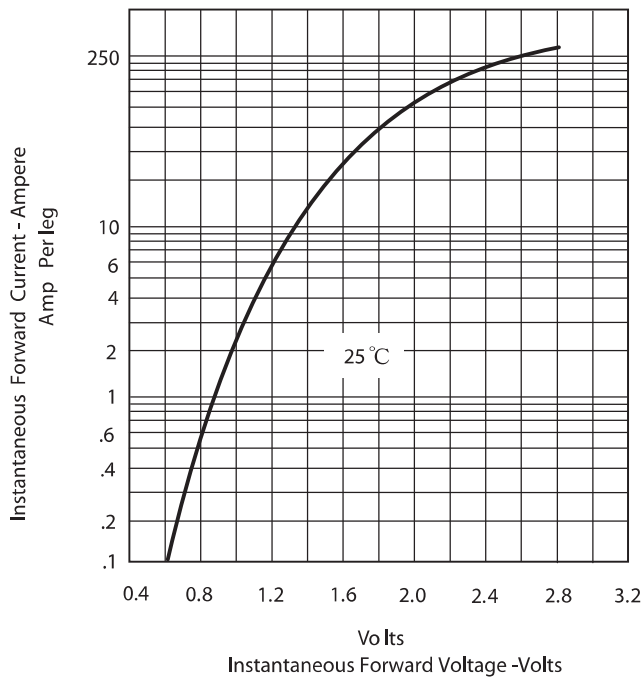


Figure .2- Forward Derating Curve

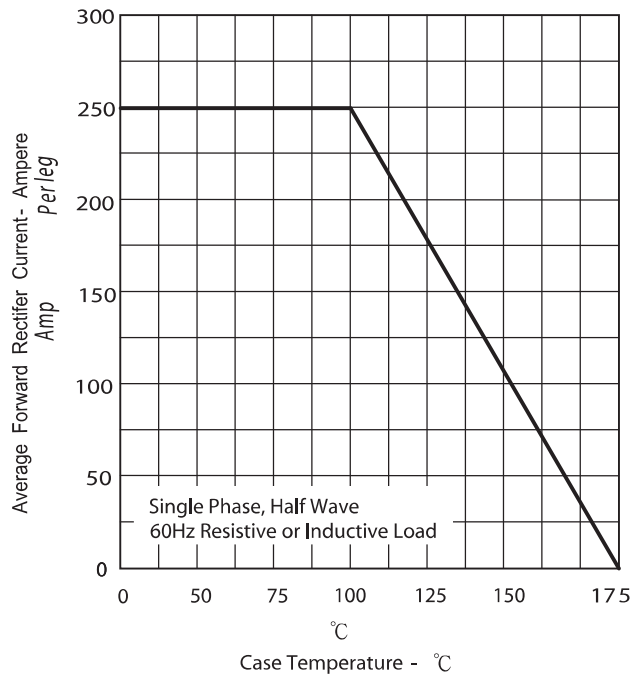


Figure .4 -Typical Reverse Characteristics

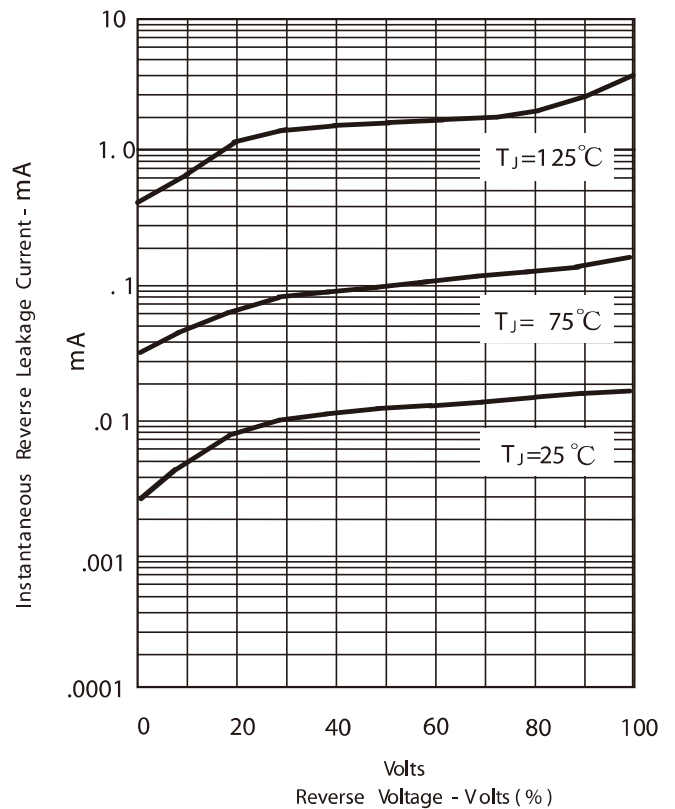


Figure .3- Peak Forward Surge Current

