



SUPER FAST DIODE MODULE TYPES 500A

Features

- High Surge Capability
- Types Up to 600V V_{RRM}
- Isolation Type Package
- Electrically Isolation base plate

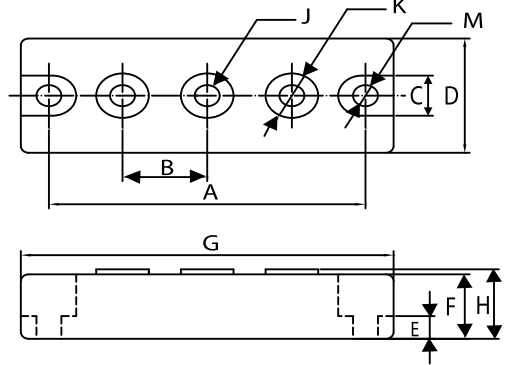
500 Amp Rectifier
200~600 Volts

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 RMS Voltage	Maximum DC Blocking Voltage
MURTA50020(R)	200V	141V	200V
MURTA50040(R)	400V	283V	400V
MURTA50060(R)	600V	424V	600V

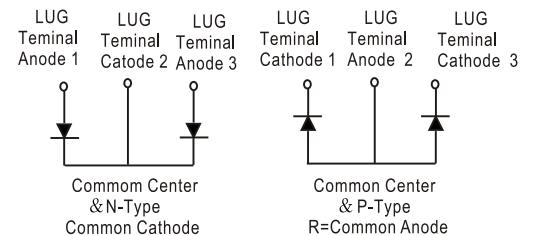
HEAVY THREE TOWER



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	200V: 1.0V 400V: 1.3V 600V: 1.7V	$I_{FM} = 250A;$ $T_J = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg)	I_R	25 μA 5 mA	$T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$
Maximum Reverse Recovery Time (Per leg)	T_{rr}	200ns 200ns 250ns	$I_F = 0.5A, I_R = 1.0A,$ $I_{RR} = 0.25A$
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

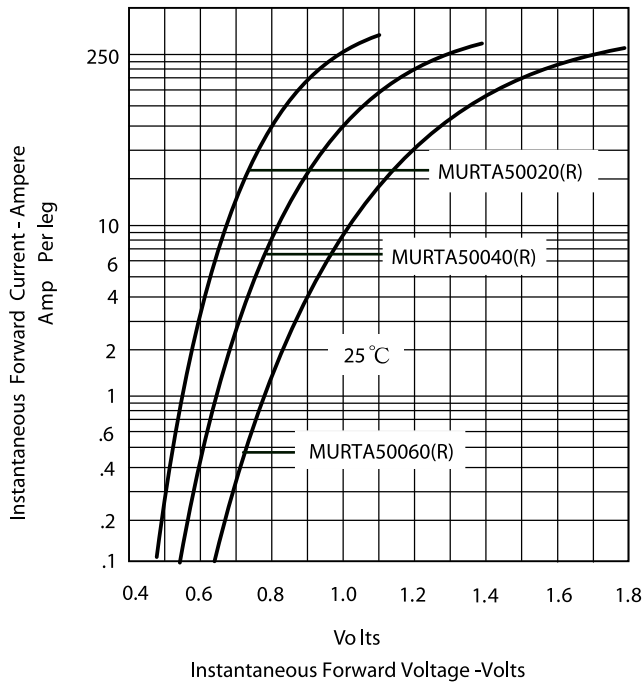


Figure .2- Forward Derating Curve

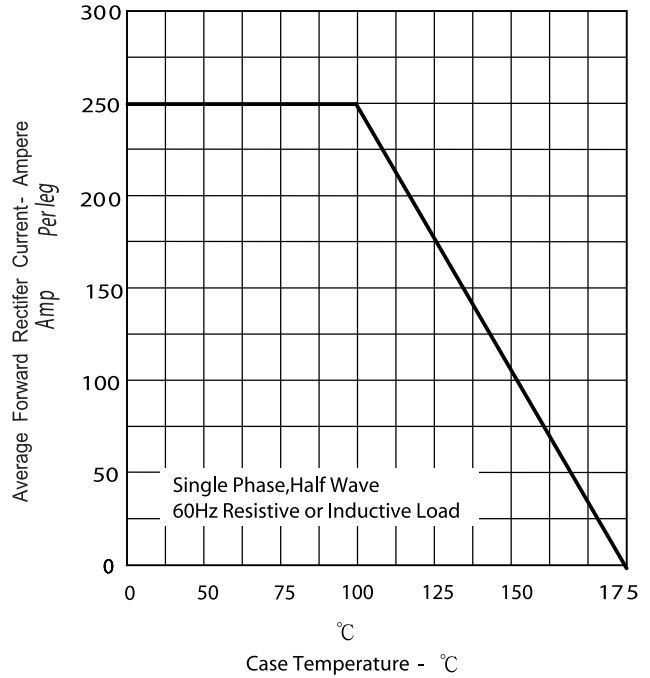


Figure .3- Peak Forward Surge Current

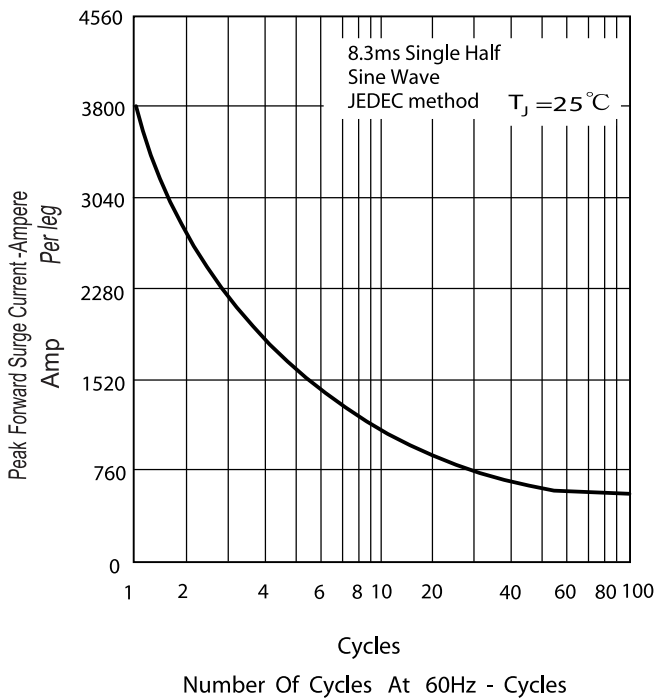


Figure .4-Typical Reverse Characteristics

