



SUPER FAST DIODE MODULE TYPES 100A

Features

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

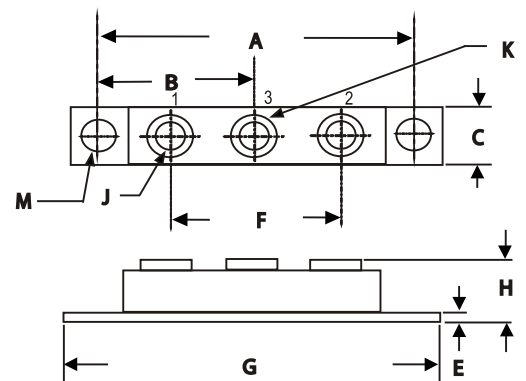
**100 Amp Rectifier
50~600 Volts**

THREE TOWER

Maximum Ratings

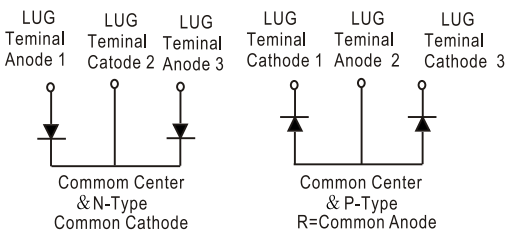
Operating Temperature: -55°C to $+175^{\circ}\text{C}$
Storage Temperature: -55°C to $+175^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MURT10005(R)	50V	35V	50V
MURT10010(R)	100V	71V	100V
MURT10020(R)	200V	141V	200V
MURT10040(R)	400V	283V	400V
MURT10060(R)	600V	424V	600V



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	100 A	$T_C = 140^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	1500A	8.3ms , half sine
Maximum Instantaneous Forward Voltage * 10005~10020 10040 10060 (Per leg)	V_F	1.0 V 1.3 V 1.7 V	$I_{FM} = 50A$; $T_J = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg)	I_R	25 μA 1 mA	$T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$
Maximum Reverse Recovery Time 10005~10020 10040 10060 (Per leg)	T_{rr}	75 ns 90 ns 110 ns	$I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	1.0 $^{\circ}\text{C/W}$	



DIM	Inches		Millimeters	
	Min	Max	Min	Max
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	3.550	3.65	90.17	92.71
H	---	.73	---	18.30
J	1/4-20 UNC FULL			
K	.472	.511	12.00	13.00
M	.275	.295	6.99	7.49
N	2.380	2.46	60.50	62.50

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



Figure .1- Typical Forward Characteristics

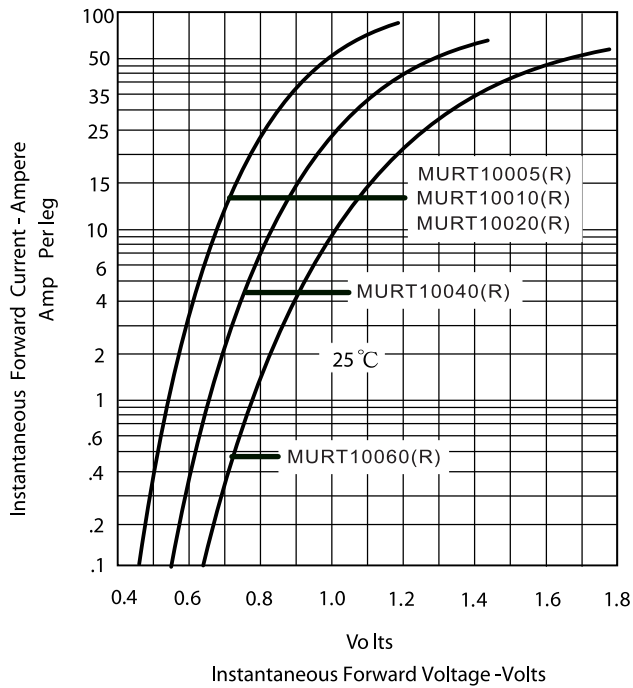


Figure .2- Forward Derating Curve

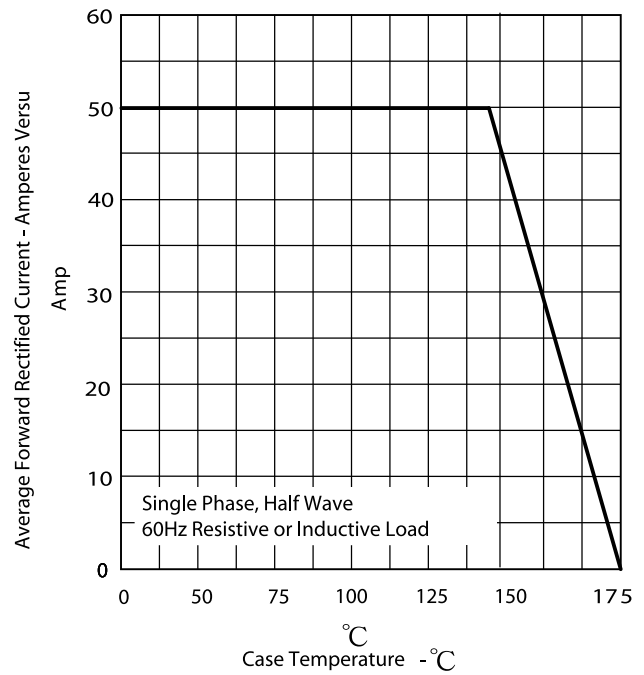


Figure.3- Peak Forward Surge Current

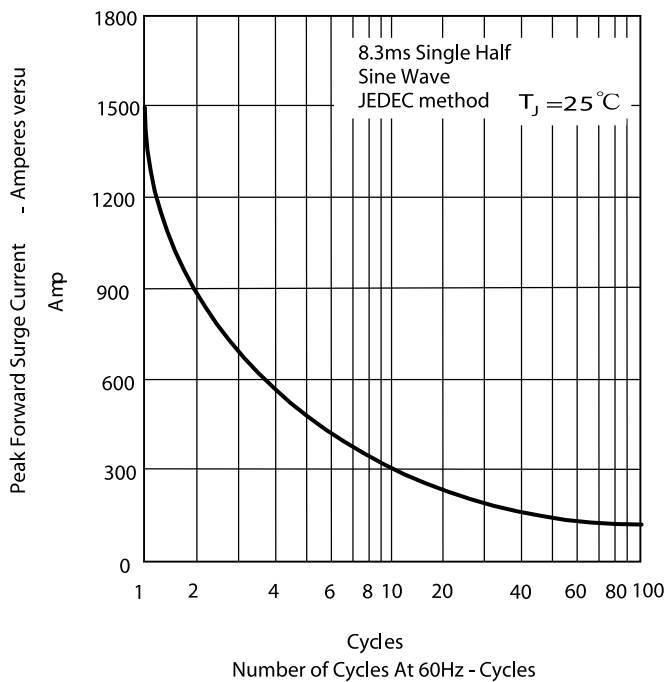


Figure .4-Typical Reverse Characteristics

