



SUPER FAST DIODE MODULE TYPES 100A

**Features**

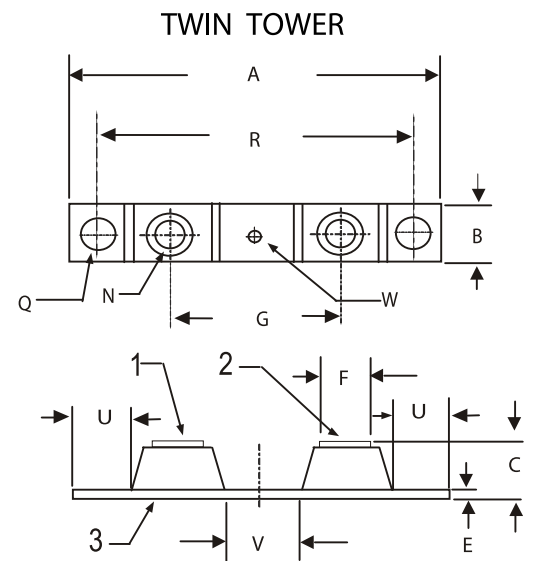
High Surge Capability  
Types Up to 600V  $V_{RRM}$

100 Amp Rectifier  
50-600 Volts

**Maximum Ratings**

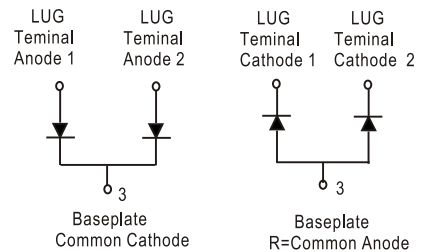
Operating Temperature:  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$   
Storage Temperature:  $-55^{\circ}\text{C}$  to  $+175^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR10005CT(R)	50V	35V	50V
MUR10010CT(R)	100V	70V	100V
MUR10020CT(R)	200V	140V	200V
MUR10040CT(R)	400V	280V	400V
MUR10060CT(R)	600V	420V	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)	$I_{FSM}$	1500 A	8.3ms , half sine
Maximum Instantaneous Forward Voltage * 10005~10020 10040 10060 (Per leg)	$V_F$	1.0V 1.3V 1.7V	$I_{FM} = 50A;$ $T_J = 25^{\circ}\text{C}$
Maximum Reverse Current At Rated DC Blocking Voltage (Per leg)	$I_R$	25 uA 3 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 °C/W	



DIM	Inches		Millimeters	
	Min	Max	Min	Max
A	---	3.630	---	92.40
B	0.700	0.800	17.78	20.32
C	---	0.650	---	16.51
E	0.130	0.141	3.30	3.60
F	0.482	0.490	12.25	12.45
G	1.368	BSC	34.75	BSC
N	1/4-20 UNC FULL			
Q	0.275	0.290	6.99	7.37
R	3.150	BSC	80.01	BSC
U	0.600	---	15.24	---
V	0.312	0.370	7.92	9.40
W	0.180	0.195	4.57	4.95

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



Figure .1- Typical Forward Characteristics

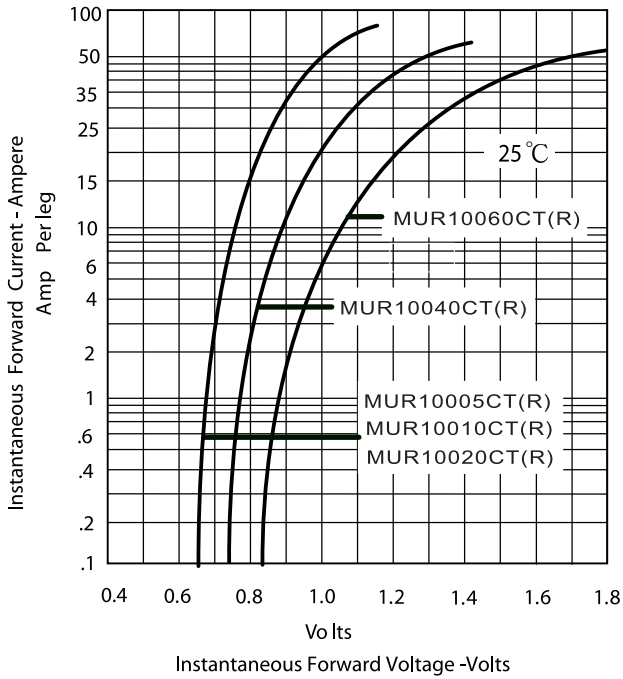


Figure .2- Forward Derating Curve

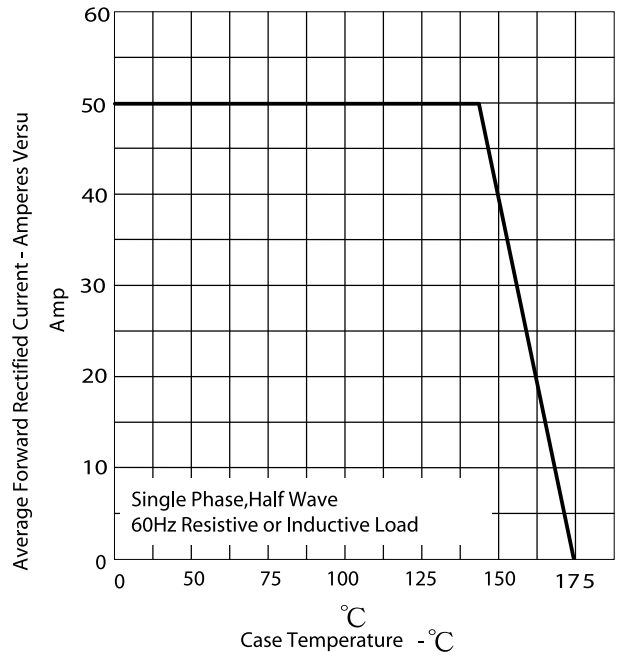


Figure.3- Peak Forward Surge Current

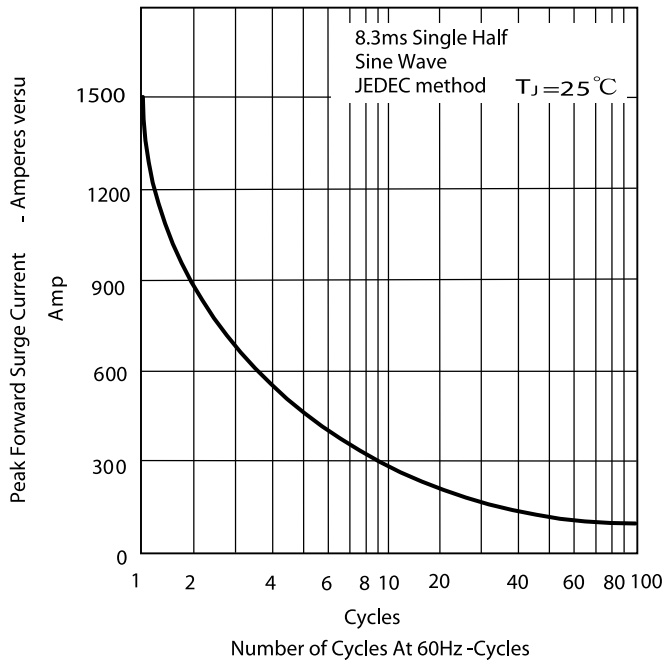


Figure .4 -Typical Reverse Characteristics

