



SUPER FAST DIODE MODULE TYPES 300A

Features

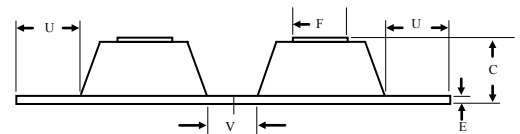
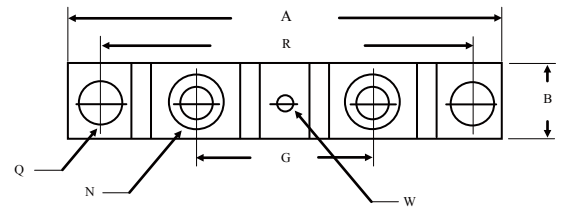
High Surge Capability  
Types Up to 600V  $V_{RRM}$

300 Amp Rectifier  
50-600 Volts

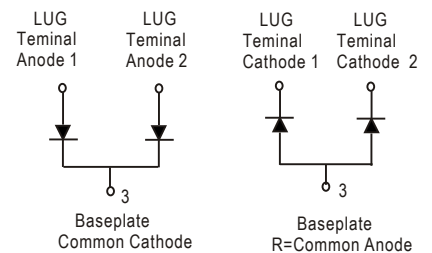
TWIN TOWER

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
MUR30005CT(R)	50V	35V	50V
MUR30010CT(R)	100V	70V	100V
MUR30020CT(R)	200V	140V	200V
MUR30040CT(R)	400V	280V	400V
MUR30060CT(R)	600V	420V	600V



Electrical Characteristics @  $25^{\circ}\text{C}$  Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	300 A	$T_C = 125^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	$I_{FSM}$	2750 A	8.3ms , half sine
Maximum Instantaneous Forward Voltage * 30005~30020 30040 30060 (Per leg)	$V_F$	1.0V 1.3V 1.7V	$I_{FM} = 150\text{A};$ $T_J = 25^{\circ}\text{C}$
Maximum Reverse Current At Rated DC Blocking Voltage (Per leg)	$I_R$	25 $\mu\text{A}$ 3 mA	$T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$
Maximum Reverse Recovery Time 30005~30020 30040 30060 (Per leg)	$T_{rr}$	100 ns 110 ns 150 ns	$I_F = 0.5\text{A}, I_R = 1.0\text{A},$ $I_{RR} = 0.25\text{A}$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.40 $^{\circ}\text{C}/\text{W}$	

Marking Notes :

1. R= Stud Reverse Polarity : Anode to Stud
2. None = Stud normal Polarity : Cathode to Stud

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  $\mu$  sec,Duty Cycle 2%



Figure .1- Typical Forward Characteristics

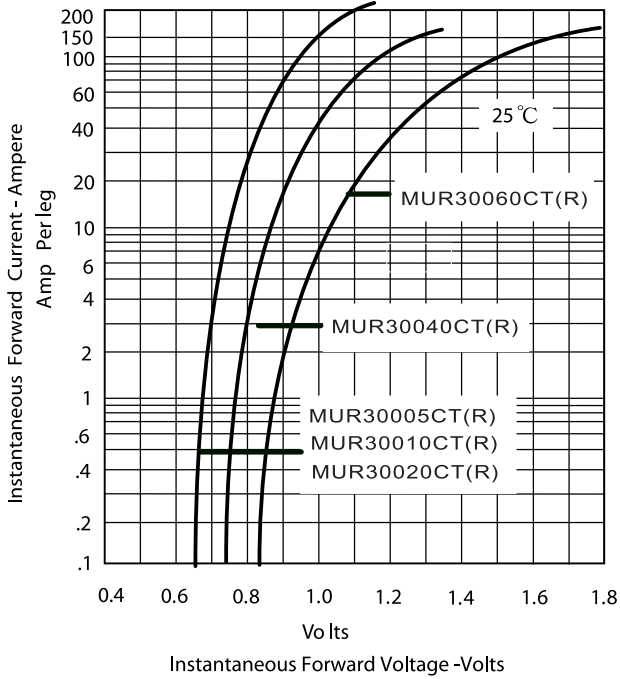


Figure .2- Forward Derating Curve

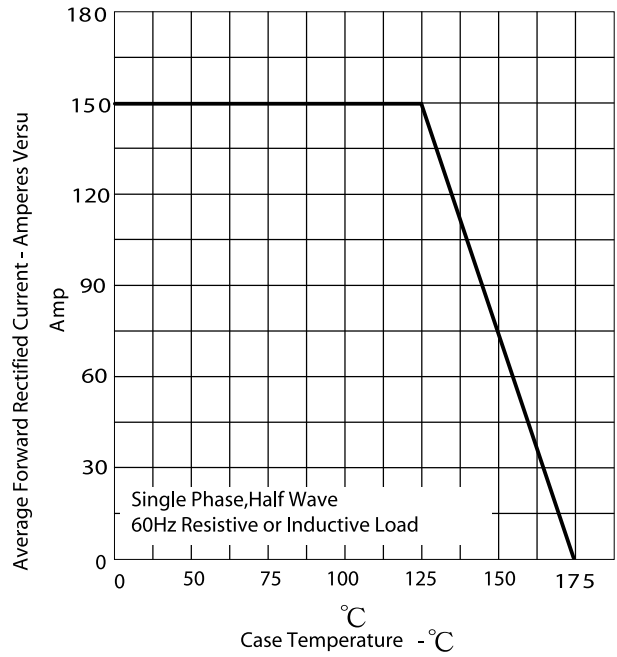


Figure.3- Peak Forward Surge Current

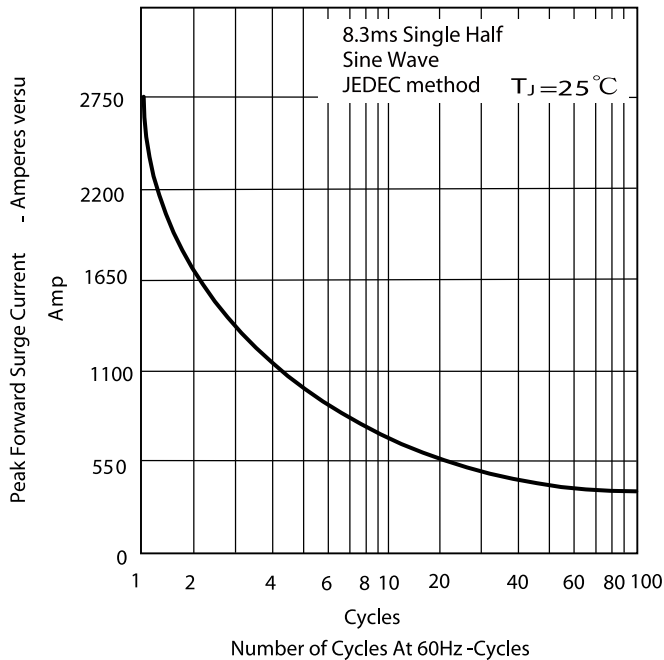


Figure .4-Typical Reverse Characteristics

