



SUPER FAST DIODE MODULE TYPES 400A

Features

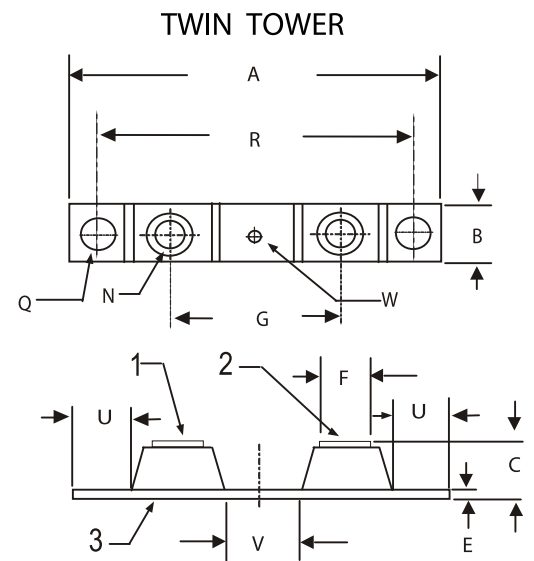
High Surge Capability
Types Up to 600V V_{RRM}

400 Amp Rectifier
50-600 Volts

Maximum Ratings

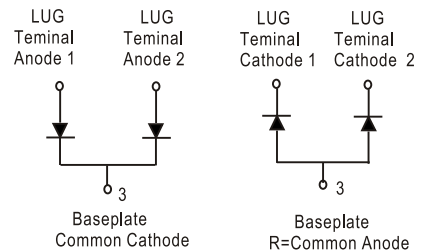
Operating Temperature: -55°C to $+175^{\circ}\text{C}$
Storage Temperature: -55°C to $+175^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MUR40005CT(R)	50V	35V	50V
MUR40010CT(R)	100V	70V	100V
MUR40020CT(R)	200V	140V	200V
MUR40040CT(R)	400V	280V	400V
MUR40060CT(R)	600V	420V	600V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	400 A	$T_C = 125^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	3300 A	8.3ms , half sine
Maximum Instantaneous Forward Voltage * 40005~40020 40040 40060 (Per leg)	V_F	1.0V 1.3V 1.7V	$I_{FM} = 200A;$ $T_J = 25^{\circ}\text{C}$
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 40005~40020 40040 40060 (Per leg)	T_{rr}	150 ns 180 ns 240 ns	$I_F = 0.5A, I_R = 1.0A,$ $I_{RR} = 0.25A$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.35°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

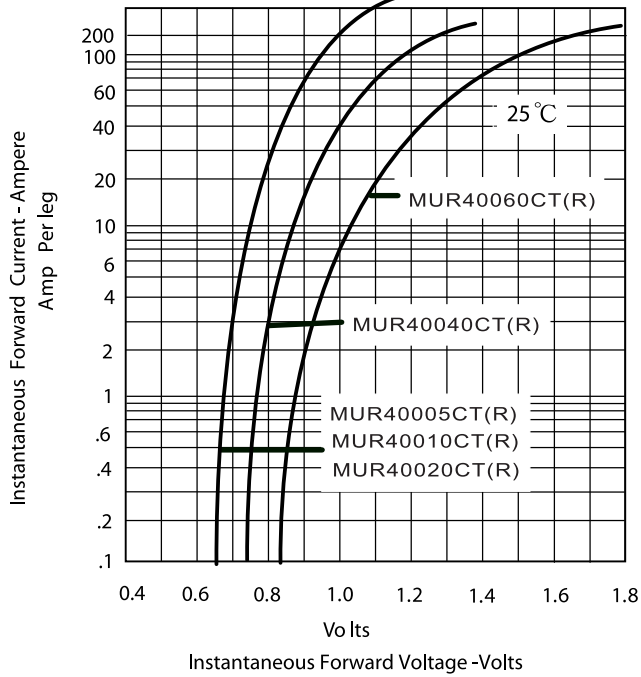


Figure .2- Forward Derating Curve

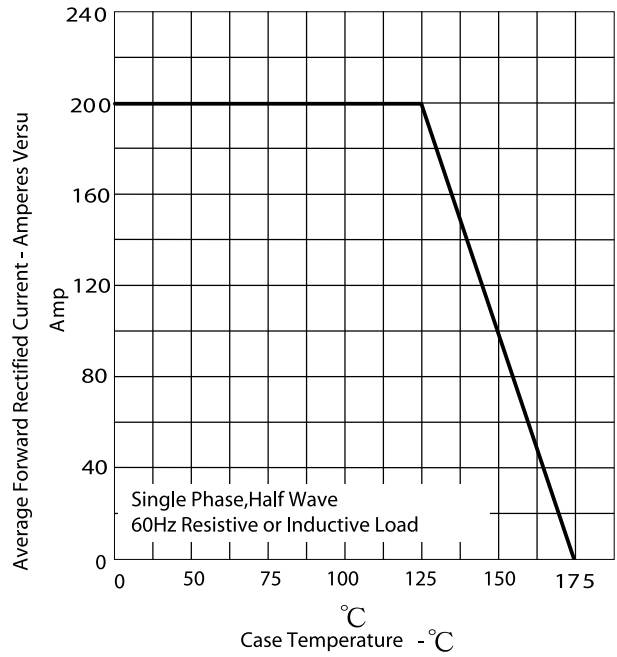


Figure.3- Peak Forward Surge Current

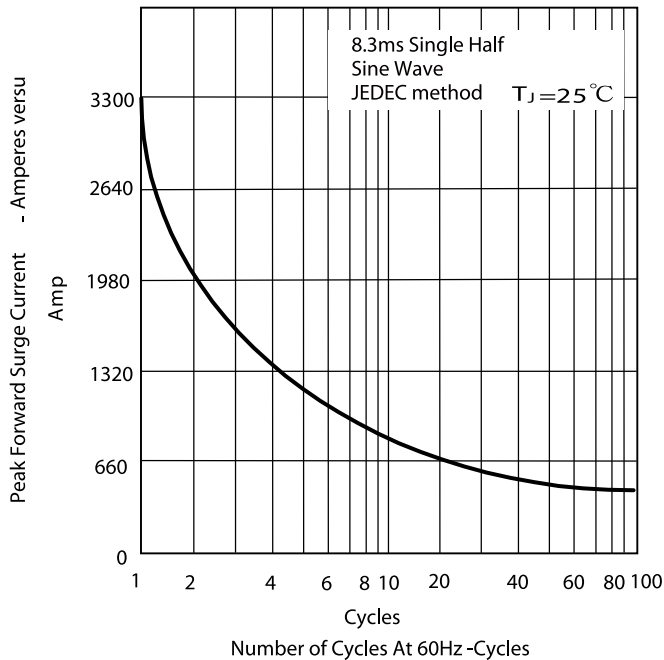


Figure .4- Typical Reverse Characteristics

