



SCHOTTKY DIODE MODULE TYPES 500A

Features

High Surge Capability
Types Up to 200V V_{RRM}

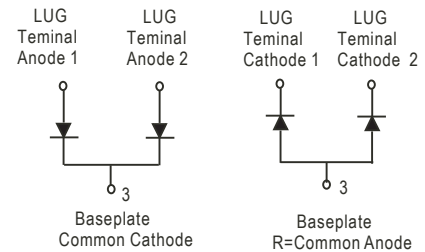
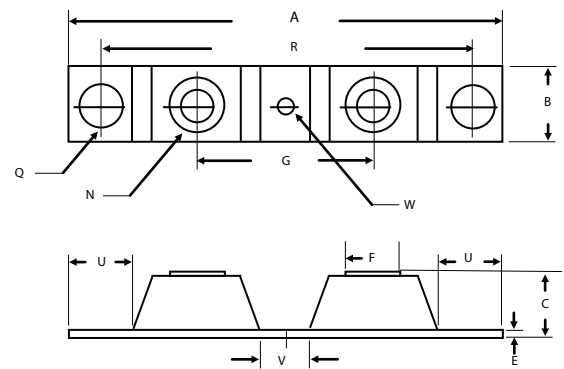
500Amp Rectifier
150-200 Volts

Maximum Ratings

Operating Temperature: -55°C to $+150^{\circ}\text{C}$
Storage Temperature: -55°C to $+150^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR500150CT(R)	150V	106V	150V
MBR500200CT(R)	200V	141V	200V

Twin Tower



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	500A	$TC=125^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	3500A	8.3ms, half sine
Maximum Instantaneous Forward Voltage (Per leg)	V_F	0.88V 0.92V	$I_{FM}=250\text{A}; T_J=25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg)	I_R	3mA 10mA 50mA	$T_J = 25^{\circ}\text{C}$ $T_J = 100^{\circ}\text{C}$ $T_J = 150^{\circ}\text{C}$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	$0.30^{\circ}\text{C}/\text{W}$	

NOTE :

(1) Pulse Test: Pulse Width 300 μ sec. Duty Cycle < 2%

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



Figure .1- Typical Forward Characteristics

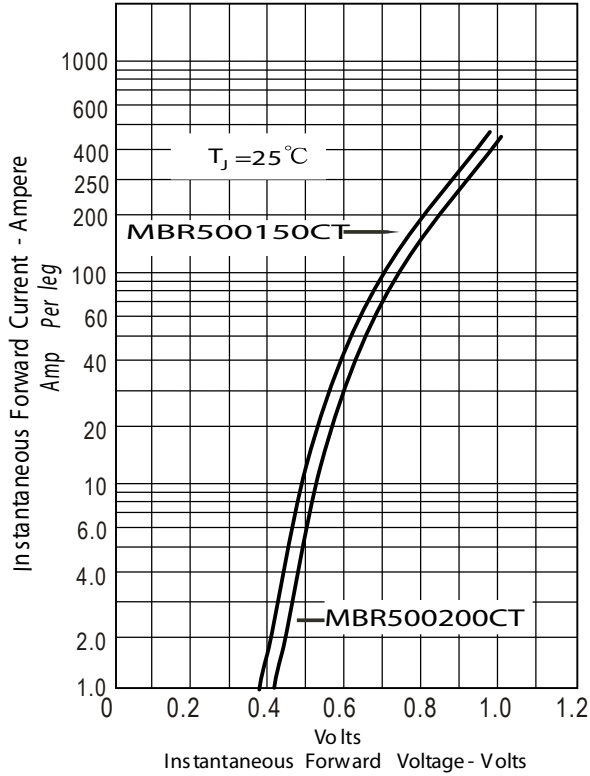


Figure .2- Forward Derating Curve

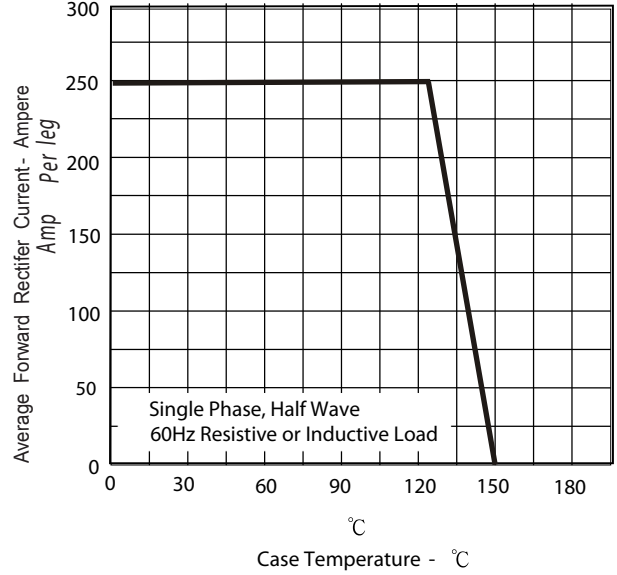


Figure .4- Typical Reverse Characteristics

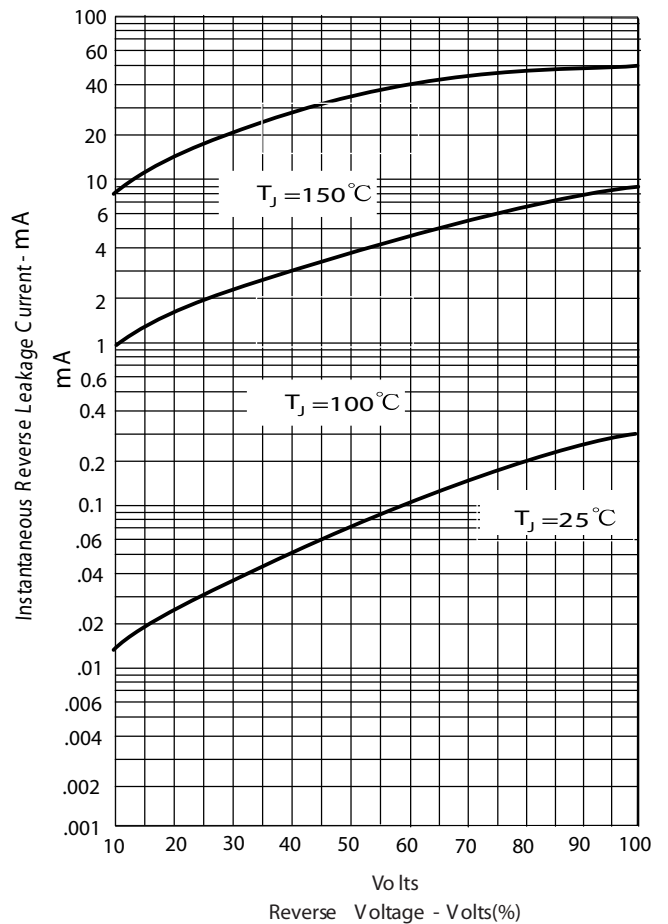


Figure .3- Peak Forward Surge Current

