

SCHOTTKY DIODES MODULE TYPE 120A

Features

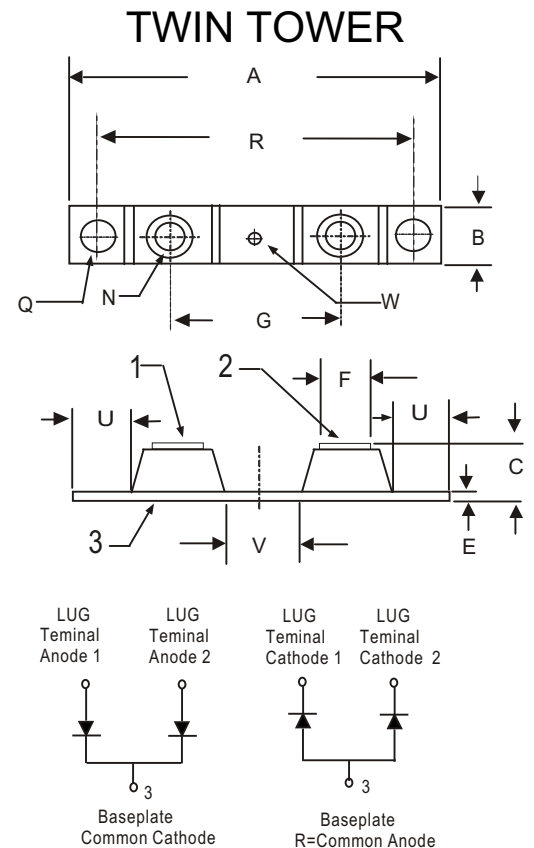
High Surge Capability
Types Up to 100V V_{RRM}

**120Amp Rectifier
20-100 Volts**

Maximum Ratings

Operating Temperature: -40°C to $+175^{\circ}\text{C}$
Storage Temperature: -40°C to $+175^{\circ}\text{C}$

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR12020CT(R)	20V	14V	20V
MBR12030CT(R)	30V	21V	30V
MBR12035CT(R)	35V	25V	35V
MBR12040CT(R)	40V	28V	40V
MBR12045CT(R)	45V	32V	45V
MBR12060CT(R)	60V	42V	60V
MBR12080CT(R)	80V	56V	80V
MBR120100CT(R)	100V	70V	100V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	120A	$T_C = 140^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	800A	8.3ms, half sine
Maximum Instantaneous Forward Voltage (Per leg) NOTE (1)	V_F	0.65V 0.75V 0.84V	(MBR12020CT-MBR12045CT) (MBR12060CT) (MBR12080CT-MBR120100CT) $I_{FM} = 60\text{ A}; T_j = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1)	I_R	3.0 mA 200 mA	$T_j = 25^{\circ}\text{C}$ $T_j = 125^{\circ}\text{C}$
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.8°C/W	

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	----	3.360	----	92.20	
B	0.700	0.800	17.78	20.32	
C	----	0.650	----	16.51	
E	0.120	0.130	3.05	3.30	
F	0.490	0.510	12.45	12.95	
G	1.379	BSC	35.02	BSC	
H	----	----	----	----	
N	1/4	- 20	UNC	FULL	
Q	0.275	0.290	6.99	7.37	2 PL
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	

NOTE :

(1) Pulse Test: Pulse Width 300 usec, Duty Cycle < 2%

MBR12020CT(R) THRU MBR120100CT(R)

Figure .1-Typical Forward Characteristics

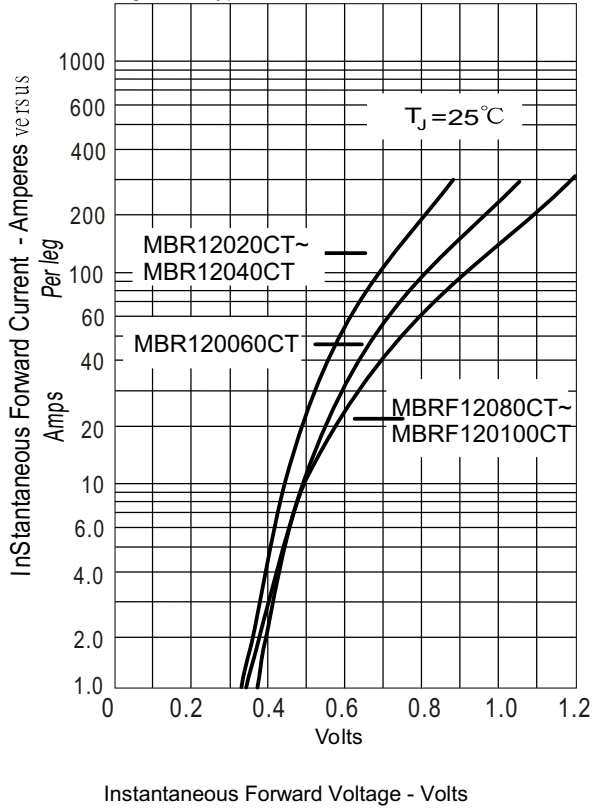


Figure .2-Forward Derating Curve

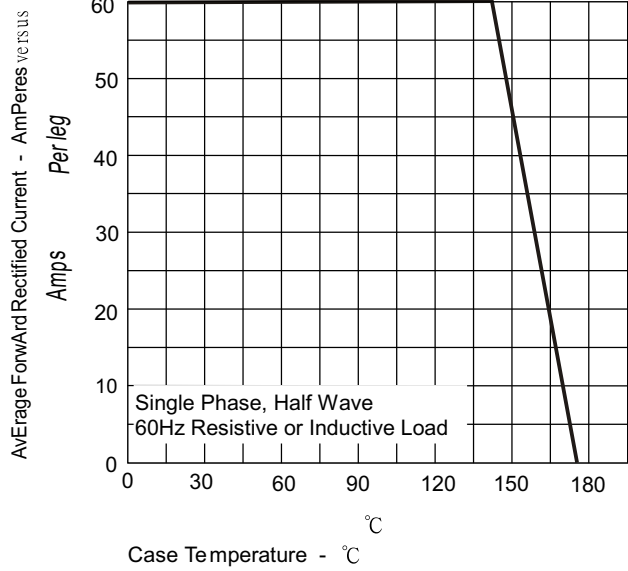


Figure .3- Peak Forward Surge Current

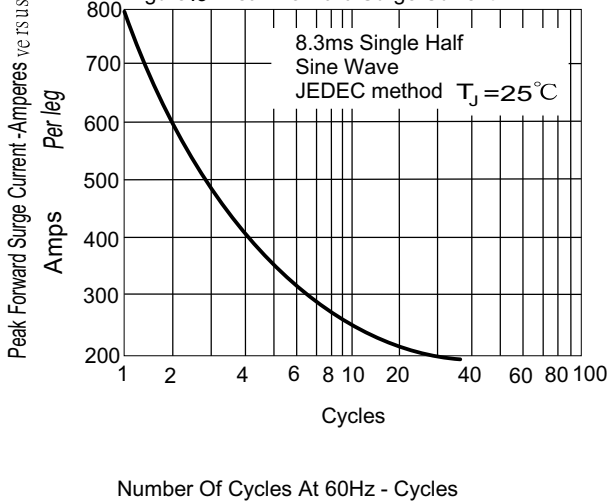


Figure .4-Typical Reverse Characteristics

