Transys Electronics LIMITED

MBR60020CT(R) THRU MBR60045CT(R)

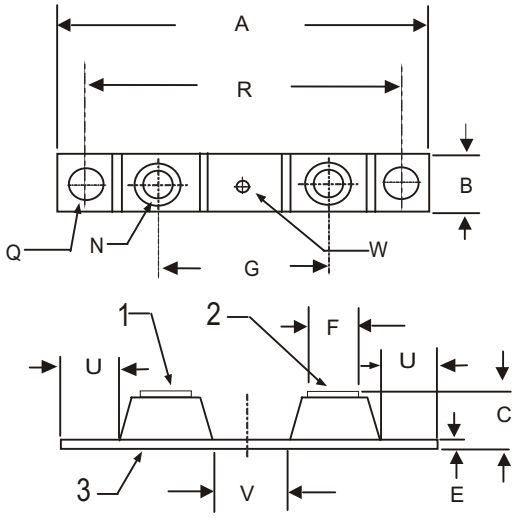
SCHOTTKY DIODES MODULE TYPE 600A

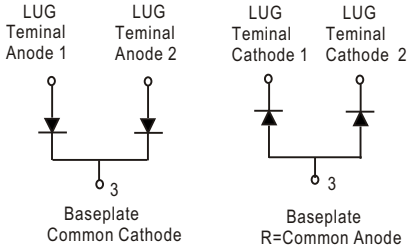
Features

High Surge Capability
Types Up to 45V V_{RRM}

600Amp Rectifier
20-45 Volts

TWIN TOWER





Maximum Ratings

Operating Temperature: -40 ℃ to +175 ℃
Storage Temperature: -40 ℃ to +175 ℃

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR60020CT(R)	20V	14V	20V
MBR60030CT(R)	30V	21V	30V
MBR60035CT(R)	35V	25V	35V
MBR60040CT(R)	40V	28V	40V
MBR60045CT(R)	45V	32V	45V

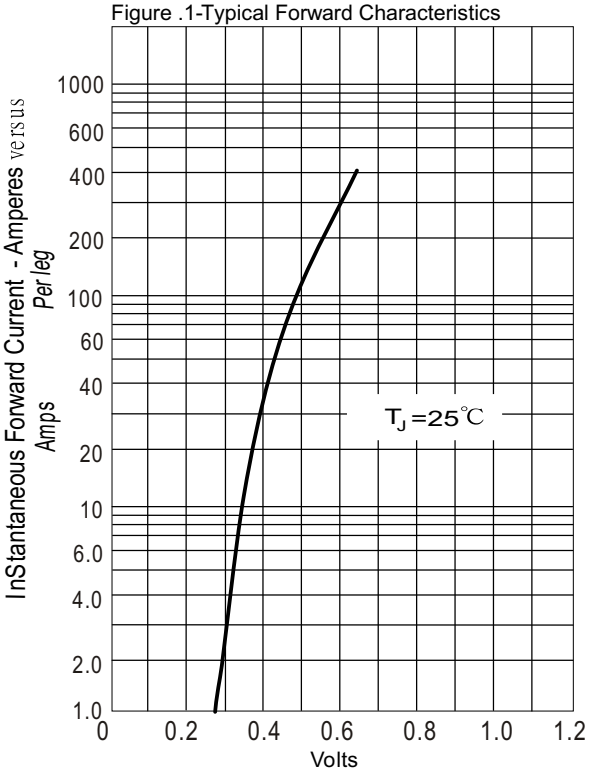
Electrical Characteristics @ 25 ℃ Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	600A	T_C =100℃
Peak Forward Surge Current (Per leg)	I_{FSM}	4000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage (Per leg) NOTE (1)	V_F	0.65V	I_{FM} =300 A; T_j = 25℃
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1)	I_R	10 mA 200 mA	T_J = 25 ℃ T_J =125 ℃
Maximum Thermal Resistance Junction To Case (Per leg)	$R_{\theta jc}$	0.8℃/W	

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

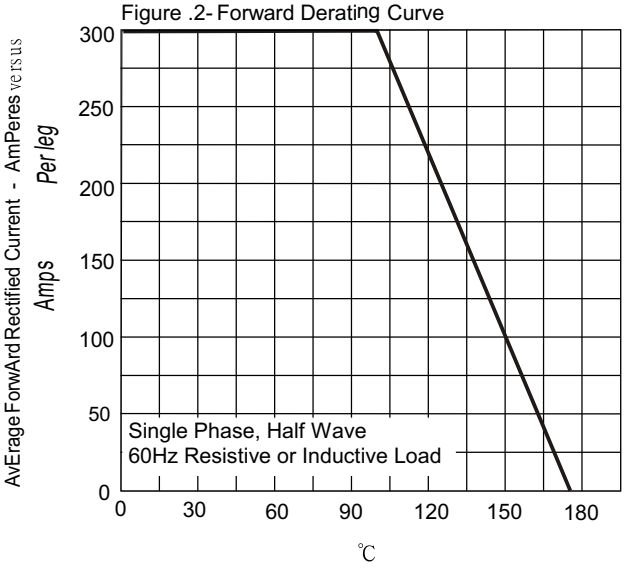
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	-----	3.360	-----	92.20	
B	0.700	0.800	17.78	20.32	
C	-----	0.650	-----	16.51	
E	0.120	0.130	3.05	3.30	
F	0.490	0.510	12.45	12.95	
G	1.379 BSC		35.02 BSC		
H	-----	-----	-----	-----	
N	1/4	- 20	UNC	FULL	
Q	0.275	0.290	6.99	7.37	2 PL
R	3.150 BSC		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	

Figure .1-Typical Forward Characteristics



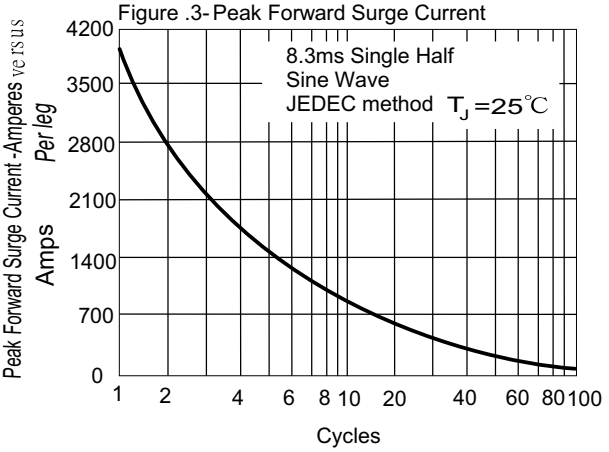
Instantaneous Forward Voltage - Volts

Figure .2- Forward Derating Curve



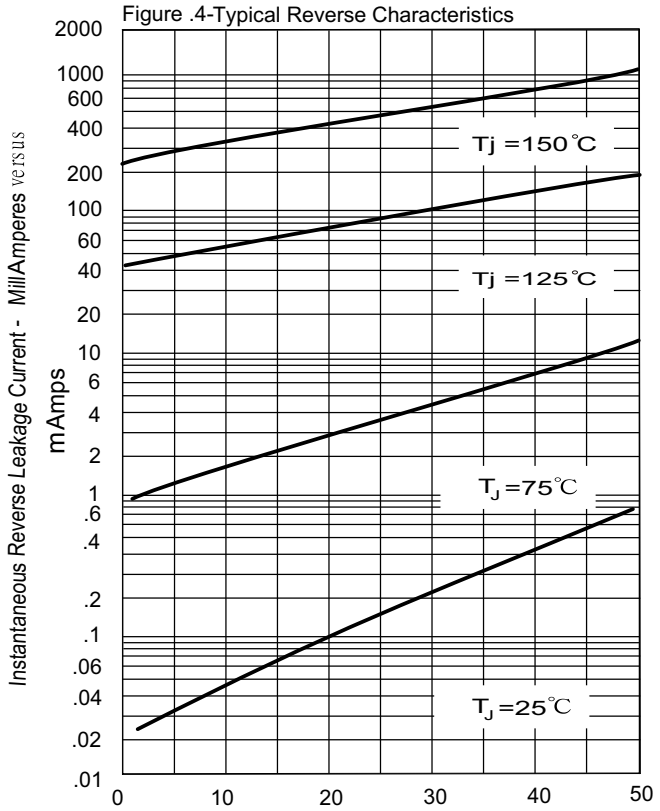
Case Temperature - ℃

Figure .3- Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles

Figure .4-Typical Reverse Characteristics



Reverse Voltage - Volts