Transys Electronics LIMITED

MBR8020(R) THRU MBR80100(R)

SCHOTTKY DIODES STUD TYPE 80 A

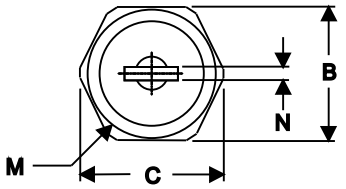
Features

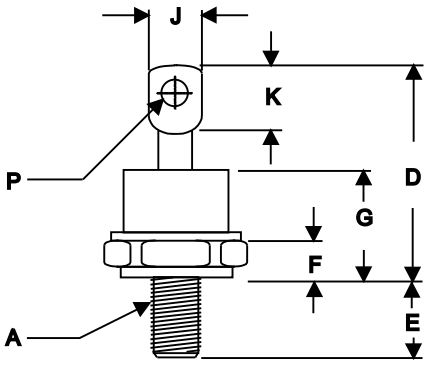
High Surge Capability

Types up to100V V_{RRM}

80Amp Rectifier
20-100 Volts

DO-5





Notes:
1.Standard Polarity:Stud is Cathode
2.Reverse Polarity:Stud is Anode

Maximum Ratings

Operating Temperature: -65 ℃ to +150 ℃

Storage Temperature: -65 ℃ to +175 ℃

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR8020(R)	20V	14V	20V
MBR8030(R)	30V	21V	30V
MBR8035(R)	35V	25V	35V
MBR8040(R)	40V	28V	40V
MBR8045(R)	45V	32V	45V
MBR8060(R)	60V	42V	60V
MBR8080(R)	80V	50V	80V
MBR80100(R)	100V	70V	100V

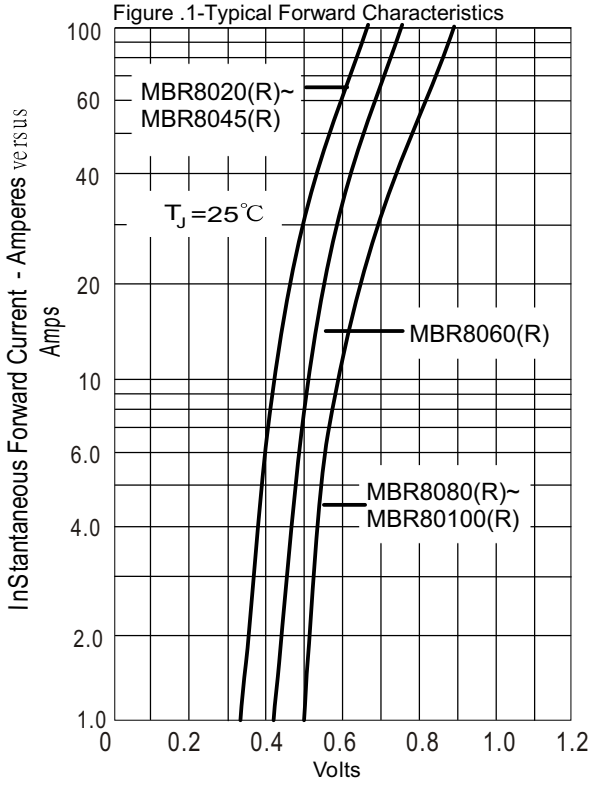
Electrical Characteristics @ 25 ℃ Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	80A	T_C =120 ℃
Peak Forward Surge Current	I_{FSM}	1000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage NOTE (1)	V_F	0.65V 0.75V 0.84V	(MBR8020~MBR8045) (MBR8060) (MBR8080~MBR80100) I_{FM} =80 A ; T_j = 25 ℃
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage NOTE (1)	I_R	5.0 mA 250 mA	T_J = 25 ℃ T_J = 125 ℃
Maximum Thermal Resistance,Junction To Case	$R_{\theta jc}$	1.0℃/W	
Mounting torque	Kgf-cm	23~34	Not lubricated threads

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

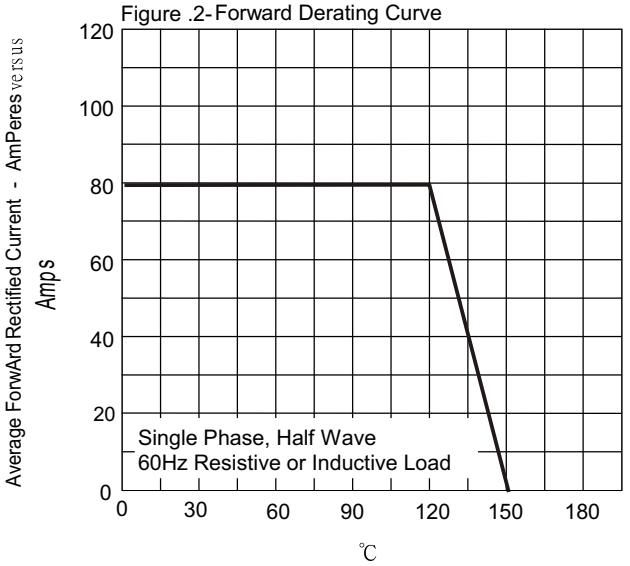
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	1/4 -28 Threads		Standard	Polarity	
B	.669	.687	17.19	17.44	
C	-----	.794	-----	20.16	
D	-----	1.020	-----	25.91	
E	.422	.453	10.72	11.50	
F	.115	.200	2.93	5.08	
G	-----	.460	-----	11.68	
H	-----	-----	-----	-----	
J	-----	.375	-----	9.52	
K	.156	-----	3.96	-----	
M	-----	.667	-----	16.94	
N	-----	.080	-----	2.03	
P	.140	.175	3.56	4.45	

Figure .1-Typical Forward Characteristics



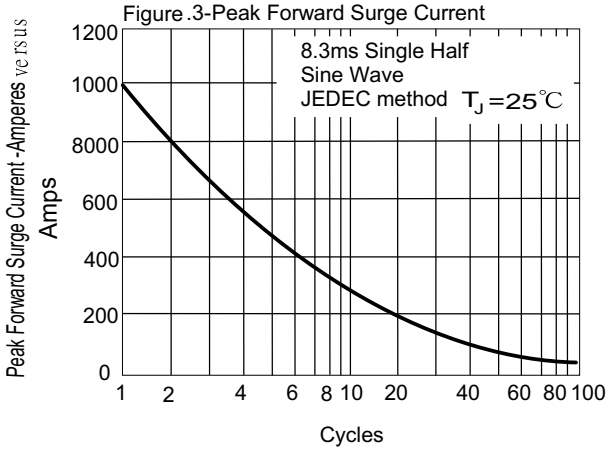
Instantaneous Forward Voltage - Volts

Figure .2-Forward Derating Curve



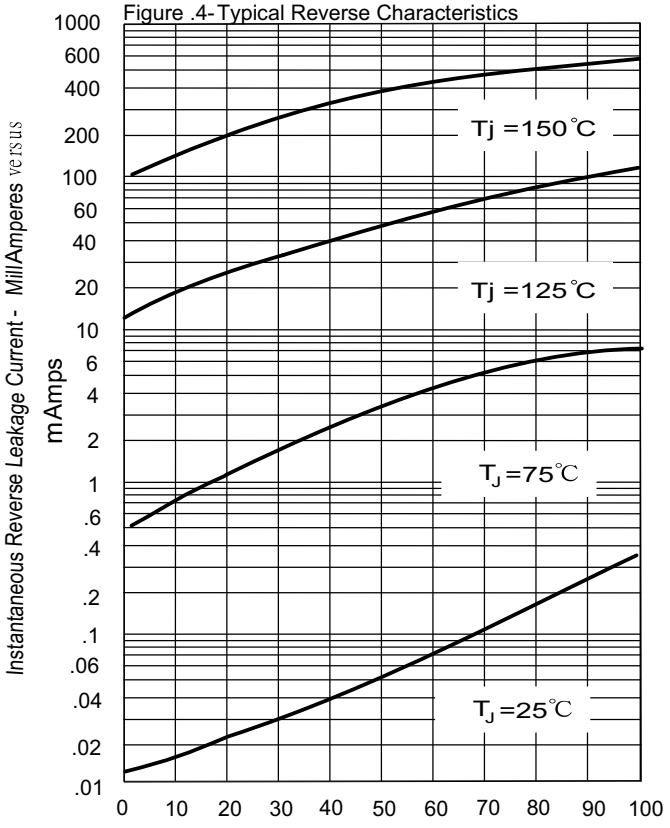
Case Temperature - ℃

Figure .3-Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles

Figure .4-Typical Reverse Characteristics



Reverse Voltage - Volts