

SCHOTTKY DIODES MODULE TYPE 200A

Features

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

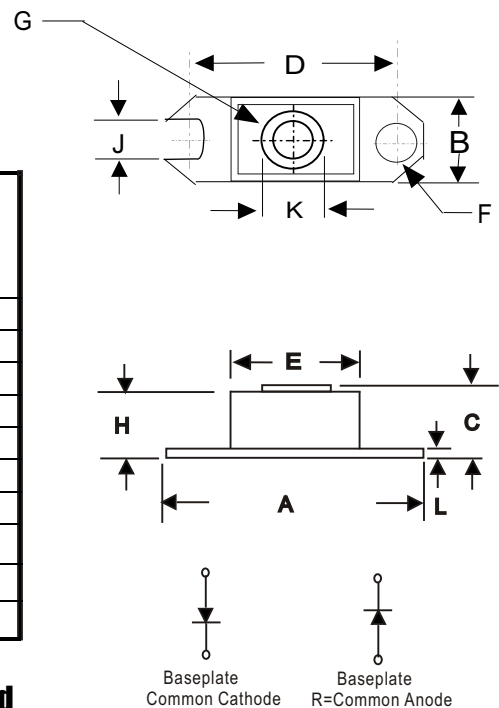
**200Amp Rectifier
20-100 Volts**

HALF PACKAGE

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
MBR20020(R)	20V	14V	20V
MBR20030(R)	30V	21V	30V
MBR20035(R)	35V	25V	35V
MBR20040(R)	40V	28V	40V
MBR20045(R)	45V	32V	45V
MBR20060(R)	60V	42V	60V
MBR20080(R)	80V	56V	80V
MBR200100(R)	100V	70V	100V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	200A	$T_C = 136^{\circ}\text{C}$
Peak Forward Surge Current	I_{FSM}	3000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage <small>NOTE (1)</small>	V_F	0.65V 0.75V 0.84V	(MBR20020~MBR20045) (MBR20060) (MBR20080~MBR200100) $I_{FM} = 200\text{ A}; T_J = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage <small>NOTE (1)</small>	I_R	5.0 mA 250 mA	$T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$
Maximum Thermal Resistance Junction To Case	$R_{\theta jc}$	0.8 °C/W	

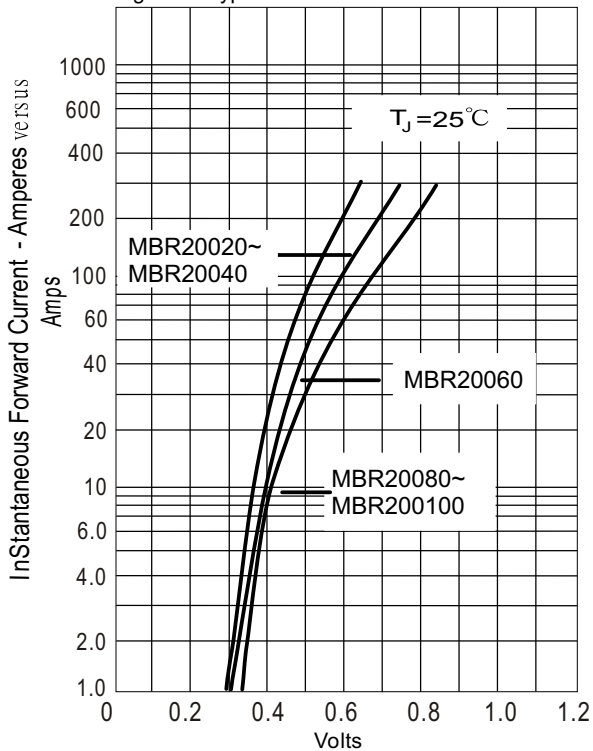
DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	1.515	1.560	38.48	39.62	
B	.725	.775	18.42	19.69	
C	.595	.625	15.11	15.88	
D	1.182	1.192	30.02	30.28	
E	.745	.755	18.92	19.18	
F	.152	.160	3.86	4.061	∅
G	1/4	- .20	UNC	- .2B	
H	.540	.580	13.72	14.73	
J	.156	.160	3.96	4.06	
K	.495	.505	12.57	12.83	∅
L	.120	.130	3.05	3.30	

NOTE :

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

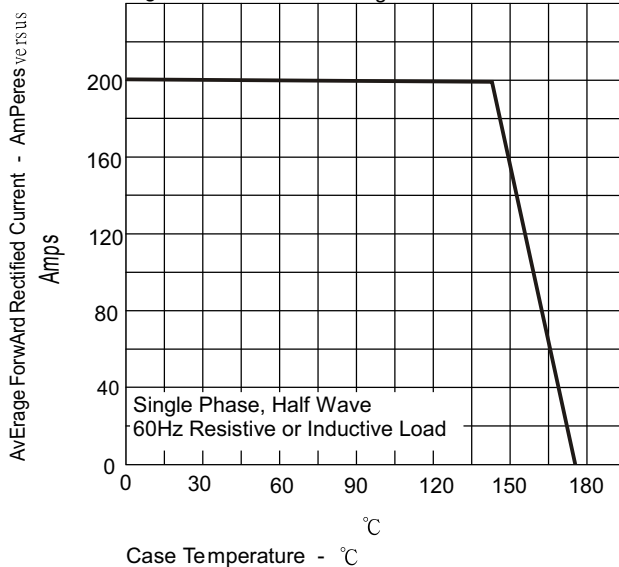
MBR20020(R) THRU MBR200100(R)

Figure .1-Typical Forward Characteristics



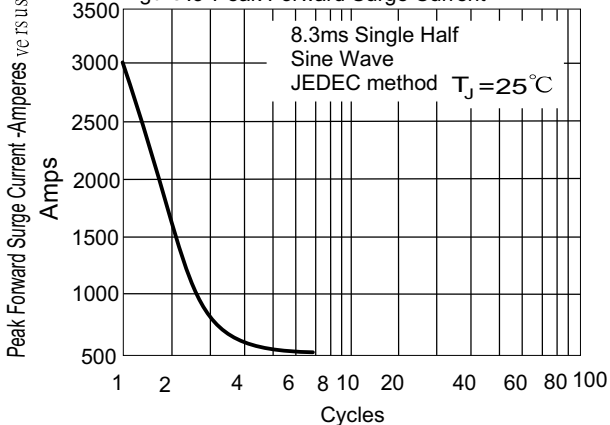
Instantaneous Forward Voltage - Volts

Figure .2- Forward Derating Curve



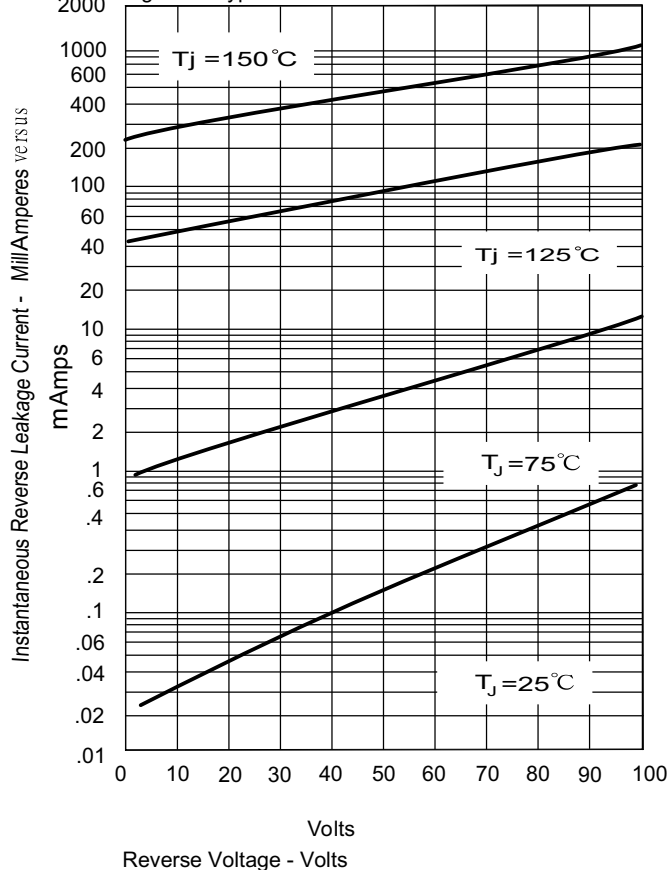
Case Temperature - $^\circ\text{C}$

Figure .3-Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles

Figure .4-Typical Reverse Characteristics



Volts

Reverse Voltage - Volts