

SCHOTTKY DIODES MODULE TYPE 200A

Features

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

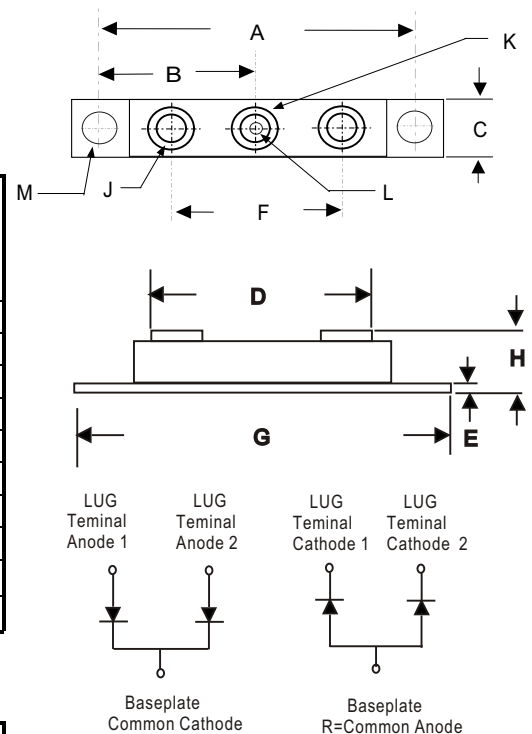
200Amp Rectifier
20-100 Volts

FULL 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
MBRF20020(R)	20V	14V	20V
MBRF20030(R)	30V	21V	30V
MBRF20035(R)	35V	25V	35V
MBRF20040(R)	40V	28V	40V
MBRF20045(R)	45V	32V	45V
MBRF20060(R)	60V	42V	60V
MBRF20080(R)	80V	56V	80V
MBRF200100(R)	100V	70V	100V



Electrical Characteristics @ 25 °C Unless Otherwise Specified

Average Forward Current (Per pkg)	$I_{F(AV)}$	200A	$T_C = 136^{\circ}\text{C}$
Peak Forward Surge Current (Per leg)	I_{FSM}	1500A	8.3ms, half sine
Maximum Instantaneous Forward Voltage (Per leg) NOTE (1)	V_F	0.65V 0.75V 0.84V	(MBRF20020~MBRF20045) (MBRF20060) (MBRF20080~MBRF200100) $I_{FM} = 100A; T_j = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage (Per leg) NOTE (1)	I_R	5.0 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	

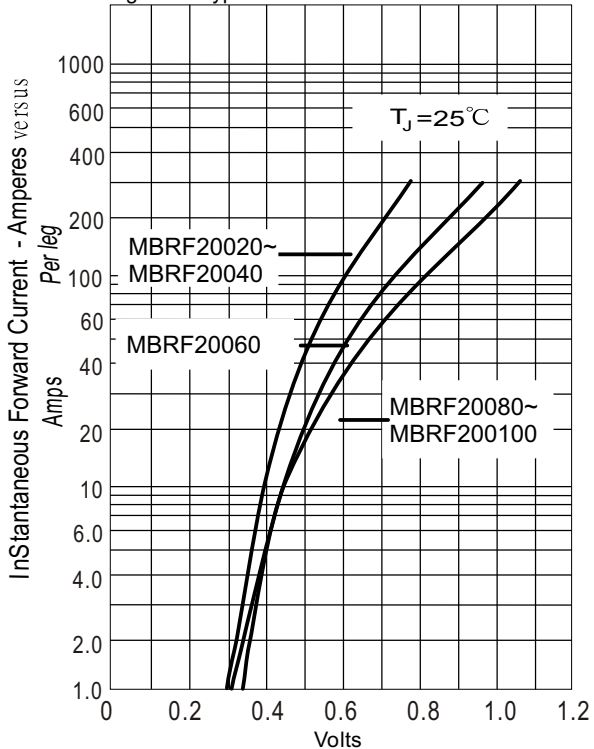
NOTE :

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

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	3.150	NOM	80.01	NOM	
B	1.565	1.585	39.75	40.26	
C	.700	.800	17.78	20.32	
E	.119	.132	3.02	3.35	
F	1.375	REF	34.92	REF	
G	3.55	3.65	90.17	92.71	
H	.604	.635	15.35	16.35	
J	1/4	- 20	UNC	FULL	
K	.380	.410	9.65	10.41	∅
L	.185	.195	4.70	4.95	∅
M	.275	.295	6.99	7.49	∅

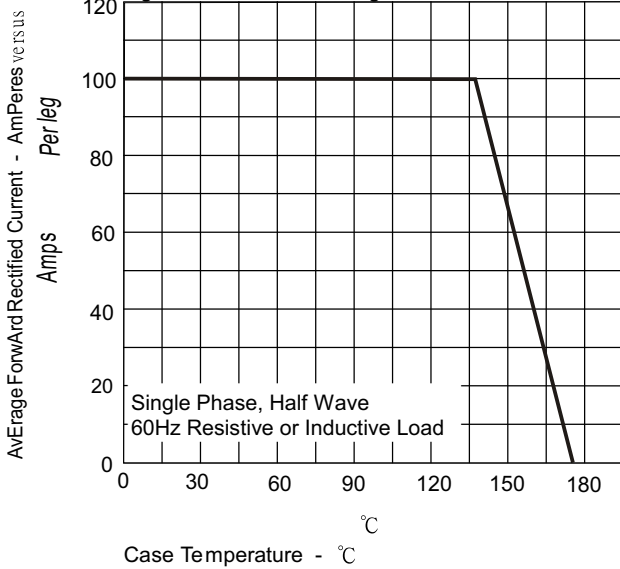
MBRF20020(R) THRU MBRF200100(R)

Figure .1-Typical Forward Characteristics



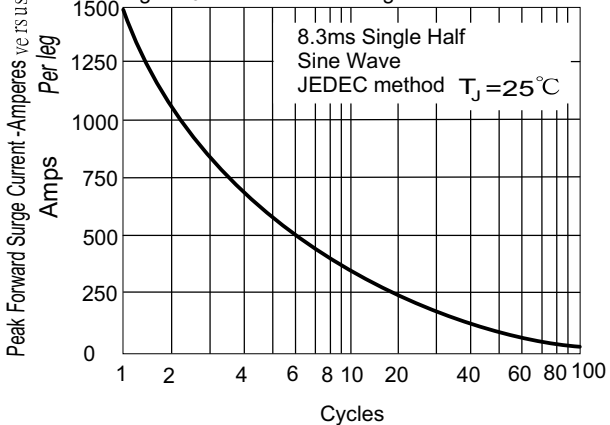
Instantaneous Forward Voltage - Volts

Figure .2-Forward Derating Curve



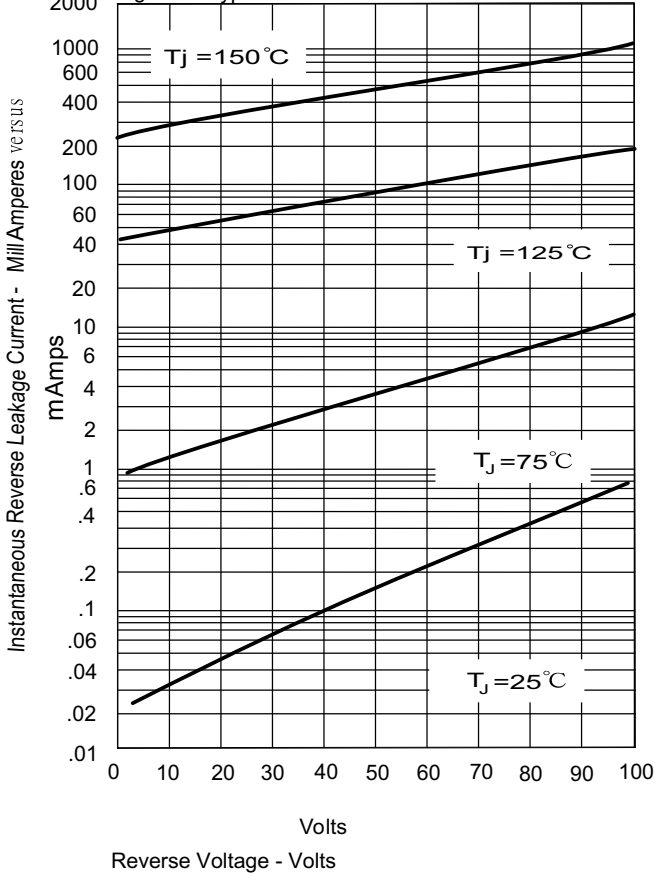
Case Temperature - °C

Figure.3-Peak Forward Surge Current



Number Of Cycles At 60Hz - Cycles

Figure .4-Typical Reverse Characteristics



Reverse Voltage - Volts