

**SCHOTTKY DIODES MODULE TYPE 120A**

**Features**

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

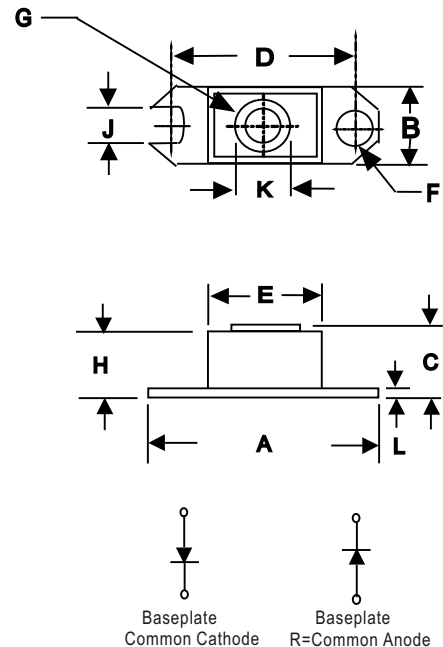
**120Amp Rectifier  
20-100 Volts**

**HALF PACKAGE**

**Maximum Ratings**

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

Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR12020( R )	20V	14V	20V
MBR12030( R )	30V	21V	30V
MBR12035( R )	35V	25V	35V
MBR12040( R )	40V	28V	40V
MBR12045( R )	45V	32V	45V
MBR12060( R )	60V	42V	60V
MBR12080( R )	80V	56V	80V
MBR120100( R )	100V	70V	100V



**Electrical Characteristics @ 25 °C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	120A	$T_C = 136^{\circ}\text{C}$
Peak Forward Surge Current	$I_{FSM}$	2000A	8.3ms , half sine
Maximum Instantaneous Forward Voltage <small>NOTE (1)</small>	$V_F$	0.65V 0.75V 0.84V	(MBR12020~MBR12045) (MBR12060) (MBR12080~MBR120100) $I_{FM} = 120\text{ A}; T_J = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage <small>NOTE (1)</small>	$I_R$	4.0 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%

# MBR12020(R) THRU MBR120100(R)

Figure .1-Typical Forward Characteristics

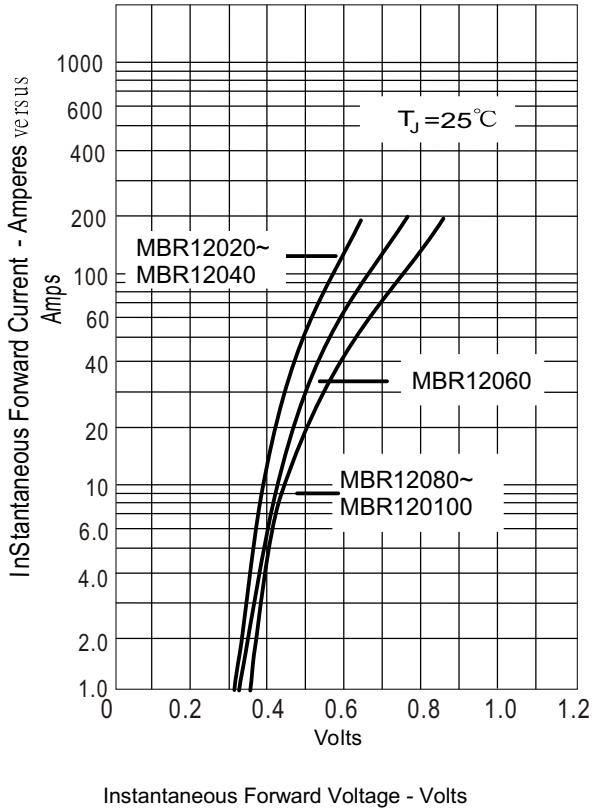


Figure .2-Forward Derating Curve

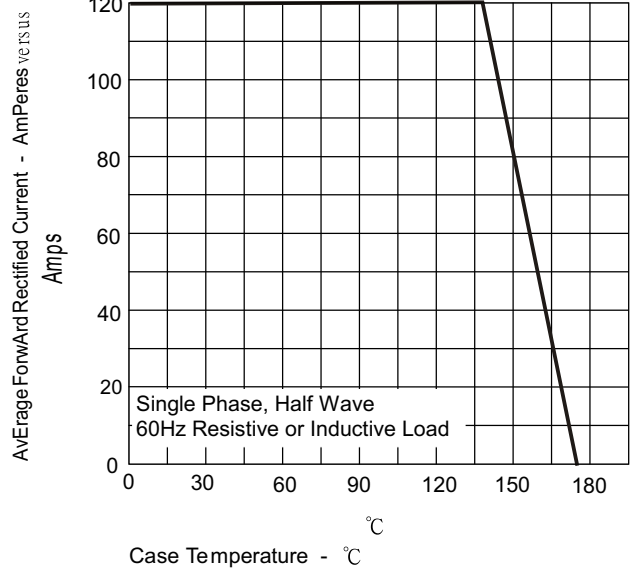


Figure .3-Peak Forward Surge Current

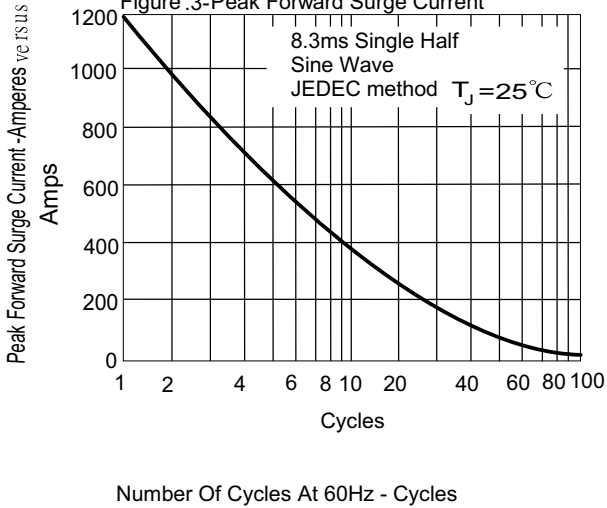


Figure .4-Typical Reverse Characteristics

