

SCHOTTKY DIODES MODULE TYPE 240A

Features

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

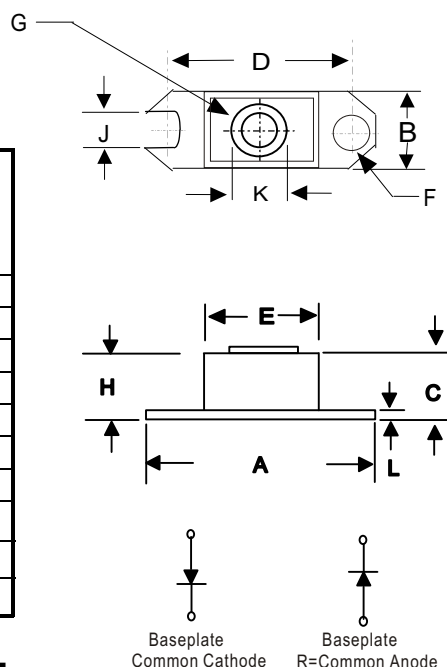
240Amp Rectifier
20-100 Volts

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
MBR24020(R)	20V	14V	20V
MBR24030(R)	30V	21V	30V
MBR24035(R)	35V	25V	35V
MBR24040(R)	40V	28V	40V
MBR24045(R)	45V	32V	45V
MBR24060(R)	60V	42V	60V
MBR24080(R)	80V	56V	80V
MBR240100(R)	100V	70V	100V



Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	240A	$T_C = 140^{\circ}\text{C}$
Peak Forward Surge Current	I_{FSM}	3300A	8.3ms, half sine
Maximum Instantaneous Forward Voltage NOTE (1)	V_F	0.65V 0.75V 0.84V	(MBR24020~MBR24045) (MBR24060) (MBR24080~MBR240100) $I_{FM} = 240\text{ A}; T_J = 25^{\circ}\text{C}$
Maximum Instantaneous Reverse Current At Rated DC Blocking Voltage NOTE (1)	I_R	8.0 mA 200 mA	$T_J = 25^{\circ}\text{C}$ $T_J = 125^{\circ}\text{C}$
Maximum Thermal Resistance Junction To Case	$R_{\theta jc}$	0.8 $^{\circ}\text{C/W}$	

DIMENSIONS					
DIM	INCHES		MM		NOTE
	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	Ø
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	Ø
L	.120	.130	3.05	3.30	

NOTE :

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

MBR24020(R) THRU MBR240100(R)

Figure .1-Typical Forward Characteristics

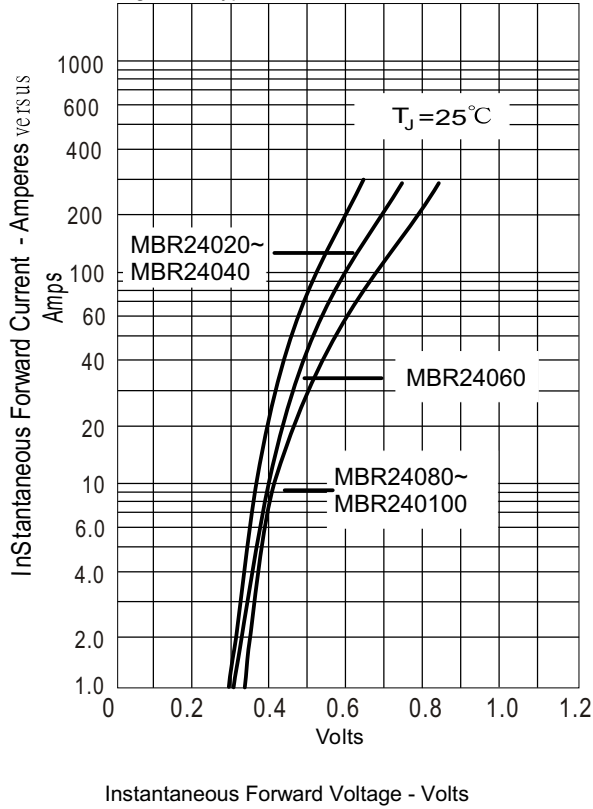


Figure .2- Forward Derating Curve

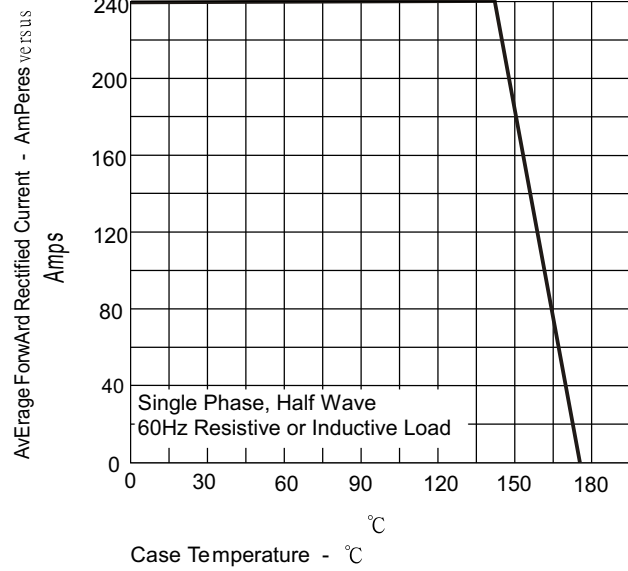


Figure.3-Peak Forward Surge Current

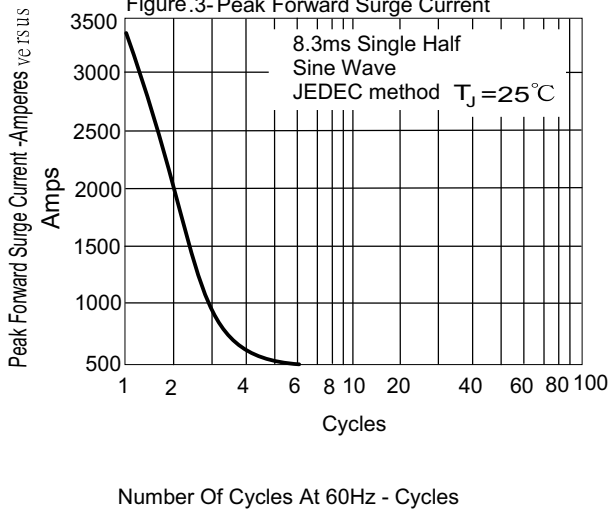


Figure .4-Typical Reverse Characteristics

