Micro Commercial Components
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MBR24020 THRU MBR240100

240 Amp Schottky Barrier Rectifier 20 to 100 Volts

Features

- Metal of siliconrectifier, majonty carrier conducton
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability

Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

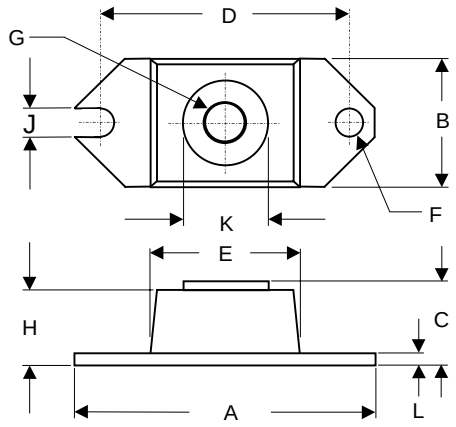
MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR24020	20V	14V	20V
MBR24030	30V	21V	30V
MBR24035	35V	24.5V	35V
MBR24040	40V	28V	40V
MBR24045	45V	31.5V	45V
MBR24060	60V	42V	60V
MBR24080	80V	56V	80V
MBR240100	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	240 A	T_L = 140°C
Peak Forward Surge Current	I_{FSM}	3300A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MBR24020-24045 MBR24060 MBR24080-240100	V_F	 .63 V .75 V .84 V	I_{FM} = 240.0A; T_A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	8 mA	T_A = 25°C
Typical Junction Capacitance	C_J	300pF	Measured at 1.0MHz, V_R=4.0V

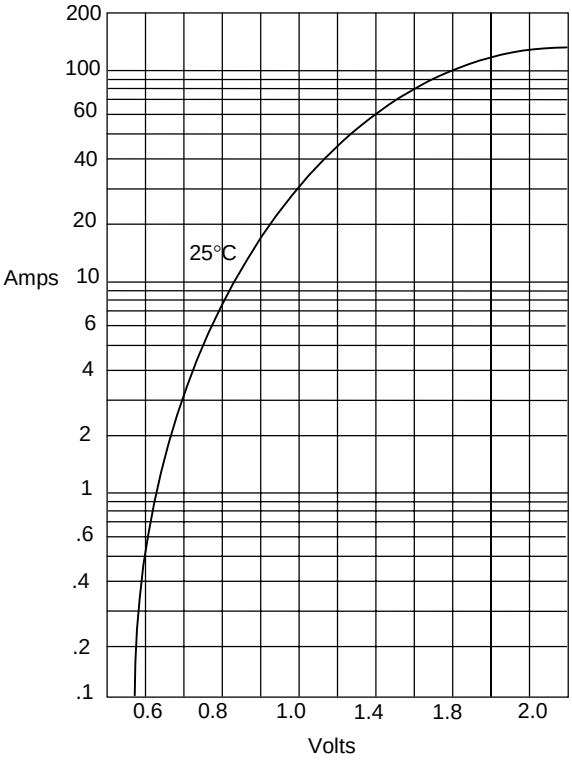
*Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

HALF PACK



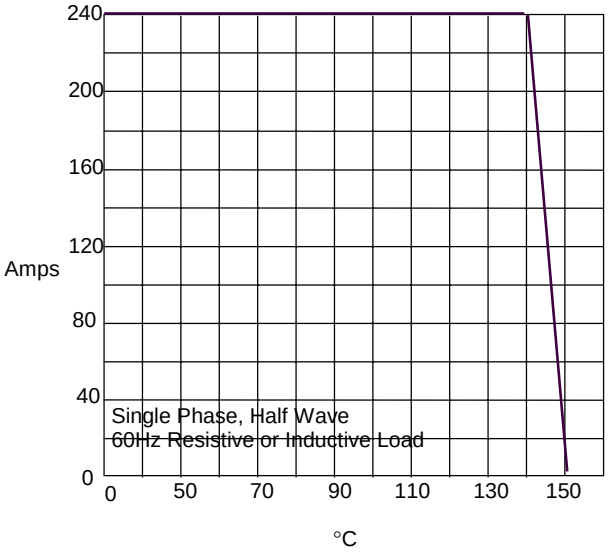
DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
A	1.520	1.560	38.86	39.62	
B	.725	.775	18.42	19.69	
C	.605	.625	15.37	15.88	
D	1.182	1.192	30.02	30.28	
E	.745	.755	18.92	18.18	
F	.152	.160	3.86	4.06	∅
G	1/4 - 20		UNC - 2B		
H	.570	.580	14.49	14.73	
J	.15	.160	3.96	4.06	
K	.495	.505	12.57	12.83	∅
L	.120	.130	3.05	3.30	

Figure 1
Typical Forward Characteristics



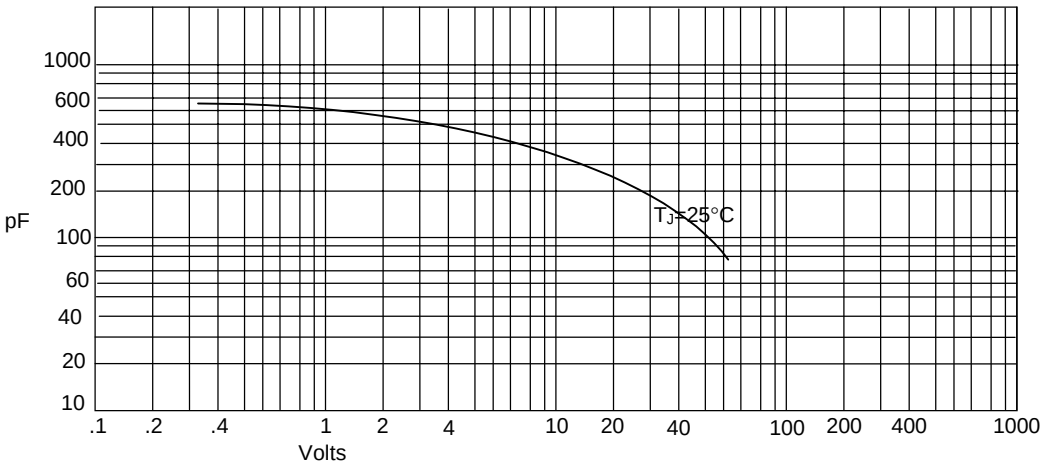
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



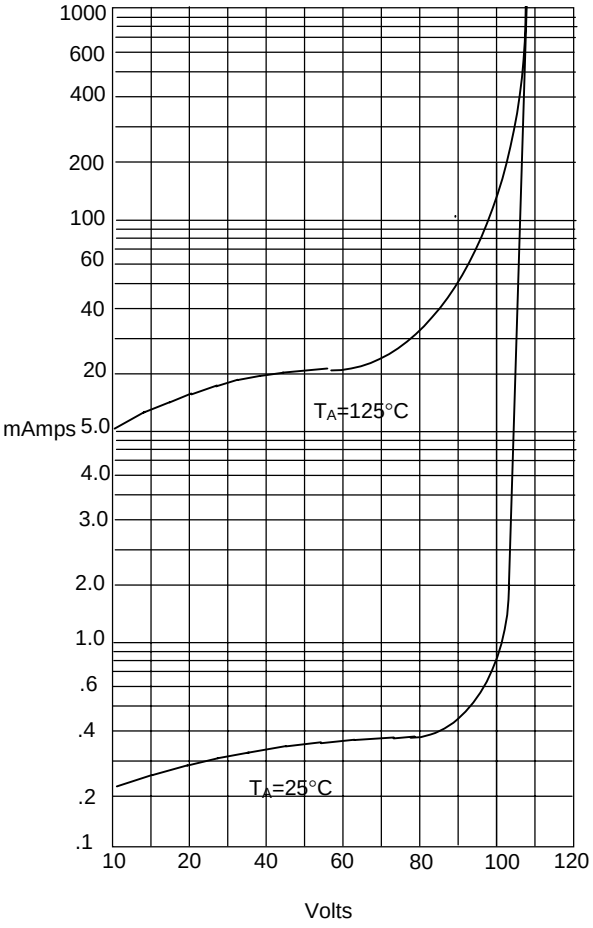
Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance



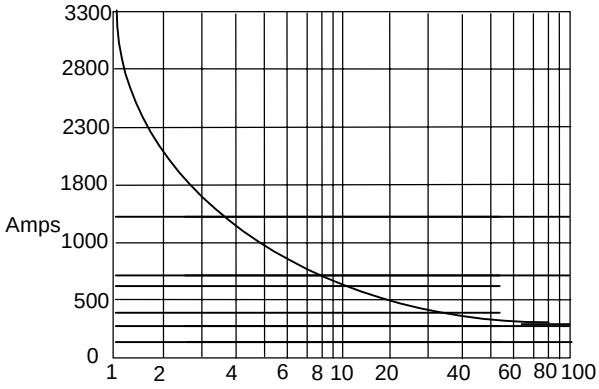
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

Figure 4
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*
Number Of Cycles At 60Hz - Cycles