



Micro Commercial Components  
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# MBRD520 THRU MBRD5100

## Features

- Meatl of Silicon Rectifier, Majority Conductor
- For surface mounted applications
- Low Forward Voltage Drop
- High Current Capability , High Efficiency
- Low Power Loss

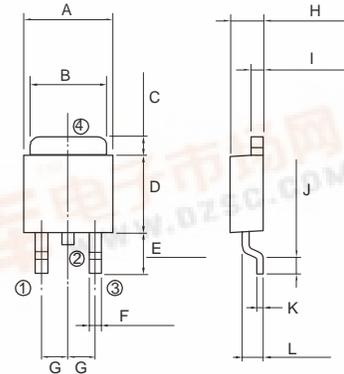
## 5.0 Amp Schottky Barrier Rectifier 20 to 100 Volts

## Maximum Ratings

- Operating Temperature: - 55°C to +125°C
- Storage Temperature: - 65°C to +150°C

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRD520	20V	14V	20V
MBRD530	30V	21V	30V
MBRD540	40V	28V	40V
MBRD550	50V	35V	50V
MBRD560	60V	42V	60V
MBRD580	80V	56V	80V
MBRD5100	100V	70V	100V

## DPAK



## Electrical Characteristics @ 25°C Unless Otherwise Specified

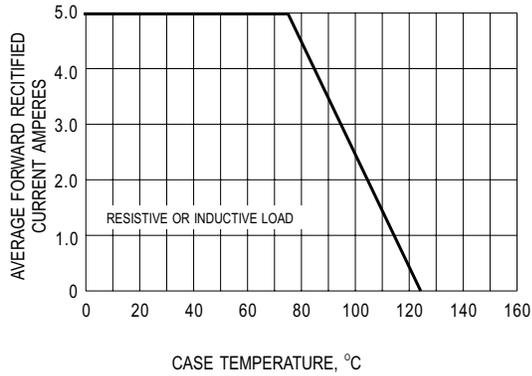
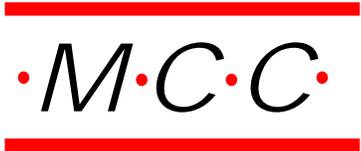
Average Forward Current	$I_{F(AV)}$	5A	$T_C = 75^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	100A	8.3ms, half sine
Maximum Instantaneous Forward Voltage MBRD520-40 MBRD550-60 MBRD580-100	$V_F$	.55V .75V .85V	$I_{FM} = 5A;$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.2mA 20mA	$T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.248	.364	6.3	6.7	
B	.200	.216	5.1	5.5	
C	.047	.063	1.2	1.6	
D	.209	.225	5.3	5.7	
E	.090	.106	2.3	2.7	
F	.012	.032	0.3	0.8	
G	.090		2.3		
H	.082	.098	2.1	2.5	
I	.016	.024	0.4	0.6	
J	.040	---	1.0	---	
K	.020		0.5		
L	.051	.071	1.3	1.8	

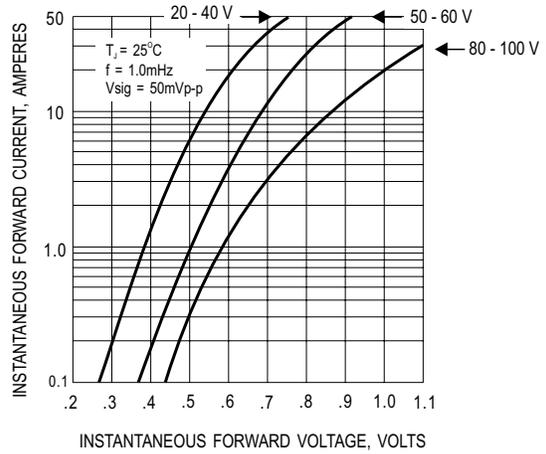
\*Pulse Test: Pulse Width 300µsec, Duty Cycle 2%



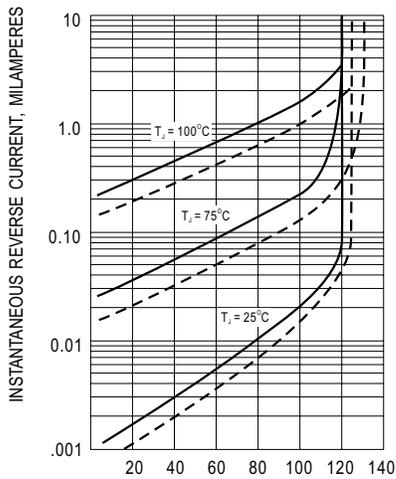
**RATING AND CHARACTERISTIC CURVES  
MBRD520 thru MBRD5100**



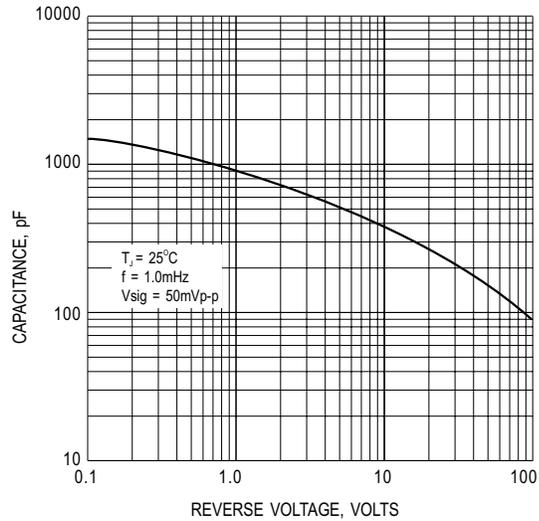
**Fig.1- FORWARD CURRENT DERATING CURVE**



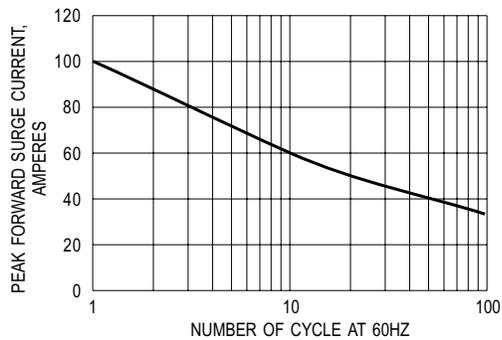
**Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**Fig.3- TYPICAL REVERSE CHARACTERISTIC**



**Fig.4- TYPICAL JUNCTION CAPACITANCE**



**Fig.5- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**