

MBR5100D ~ MBR5200D

Power Schottky Rectifier - 5Amp 100~200Volt

Features

- Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- High Junction Temperature Capability
- Low forward voltage, high current capability
- High surge capacity
- Low power loss, high efficiency

Mechanical data

- Switching-Mode Power Supply
- Solar-System Control Box

Maximum ratings and Electrical characteristics

Parameters	MBR5100D	MBR5150D	MBR5200D	UNIT
Maximum Recurrent Peak Reverse Voltage	100	150	200	V
Maximum RMS Voltage	70	105	140	V
Maximum DC Blocking Voltage	100	150	200	V
Maximum Average Forward Rectified Current	5			A
Peak Forward Surge Current	80			A
Maximum Instantaneous Forward Voltage Per Leg at IF = 2.5A	Tc = 25°C	0.82	0.88	V
	Tc = 125°C	0.66	0.69	
Maximum Average Reverse Current at Rated DC Blocking Voltage	Tc = 25°C	0.05		mA
	Tc = 125°C	10		
Typical Junction Capacitance	250			pF
Typical Thermal Resistance Rθ(j-c)	3.0			°C/W
Operating and Storage Temperature Range	-50 to +175			°C

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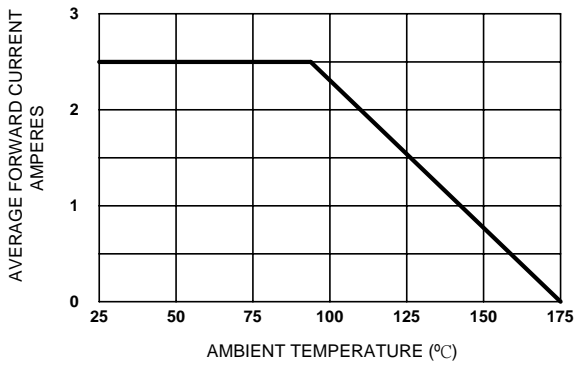


Figure 1. Forward Current Derating Curve

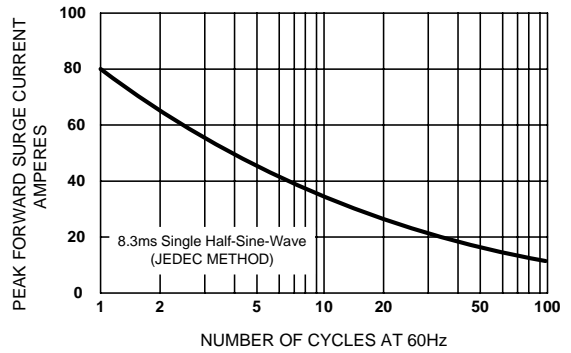


Figure 2. Maximum Non-repetitive Surge Current

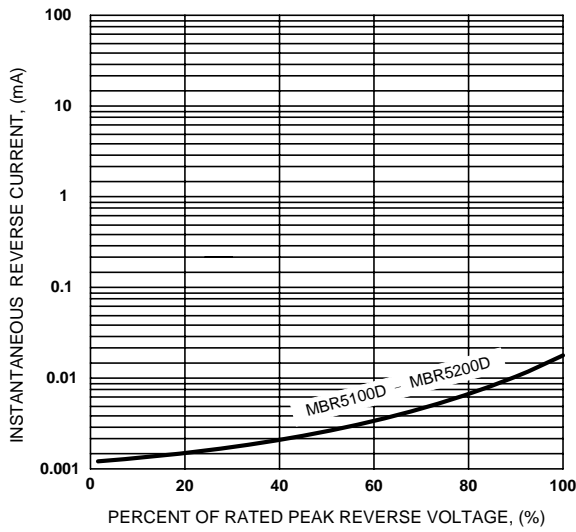


Figure 3. Typical Reverse Characteristics

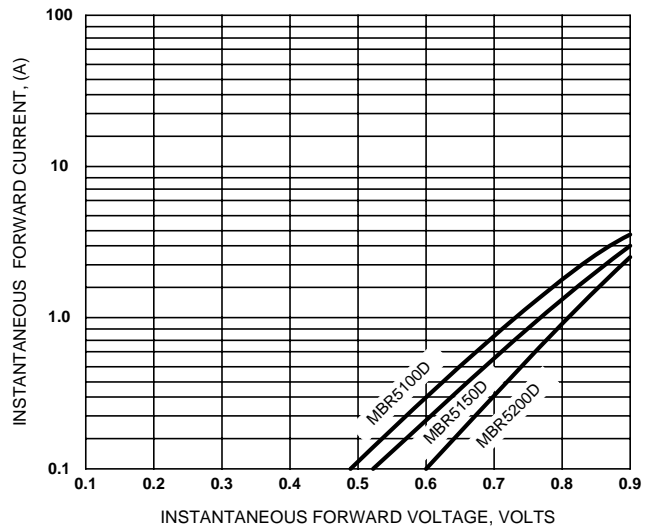


Figure 4. Typical Forward Characteristics

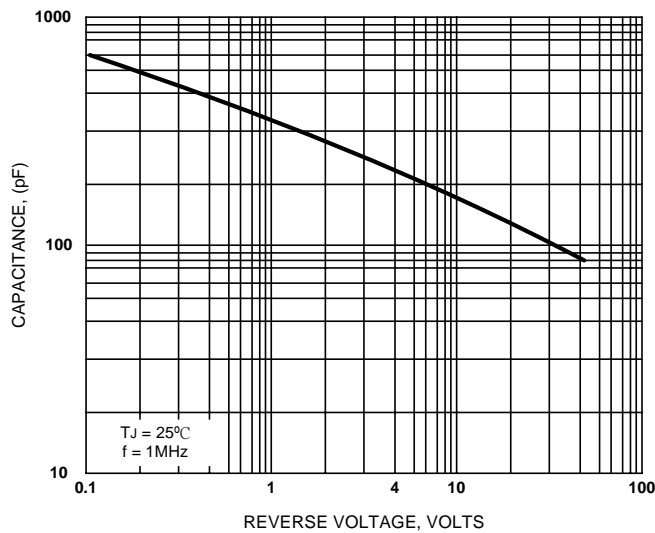


Figure 5. Typical Junction Capacitance

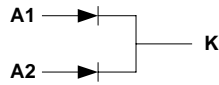
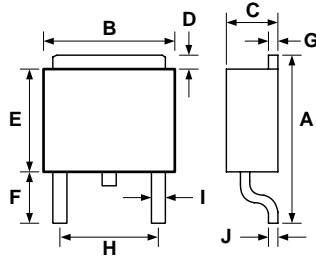


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T0-252 / D-Pak



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.354	.394	9.00	10.00	
B	.248	.263	6.30	6.70	
C	.083	.098	2.10	2.50	
D	.031	.051	0.80	1.30	
E	.224	.244	5.70	6.20	
F	.094	.114	2.40	2.90	
G	.016	.023	0.40	0.60	
H	.169	.185	4.30	4.70	
I	.026	.039	0.65	1.00	
J	.016	.023	0.40	0.60	