

## MBR0520-MBR05100

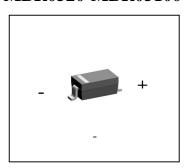
## **Features**

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering: 250°C for 10 Seconds At Terminals
- Low Forward Voltage

## Maximum Ratings

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

Maximum Thermal Resistance: 5°C/W Junction to Lead



**SOD123** 

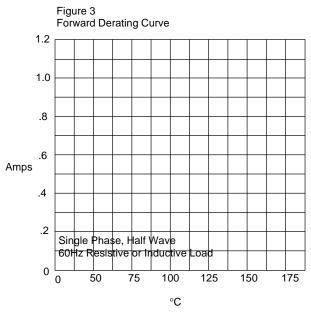
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR0520	20V	14V	20V
MBR0530	30V	21V	30V
MBR0540	40V	28V	40V
MBR0560	60V	42V	60V
MBR0580	80V	56V	80V
MBR05100	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

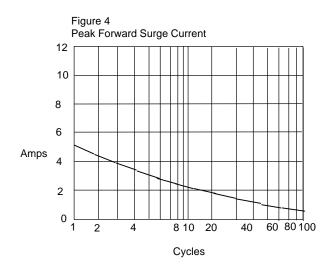
Average Forward  Current	I <sub>F(AV)</sub>	0.5A	T <sub>J</sub> =115°C
Peak Forward Surge Current	I <sub>FSM</sub>	5A	8.3ms half sine
Maximum Instantaneous Forward Voltage MBR0520 MBR0530 MBR0540 MBR0560 MBR0580-05100	V <sub>F</sub>	0.45V 0.55V 0.55V 0.70V 0.80V	I <sub>FM</sub> =0.5A T <sub>A</sub> =25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	0.2mA	T <sub>J</sub> =25°C
Typical Junction Capacitance	СJ	30pF	Measured at 1.0MHz, V <sub>R</sub> =4.0 V



## MBR0520-MBR05100 Typical Characteristics



Average Forward Rectified Current - Amperesversus Ambient Temperature -°C



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