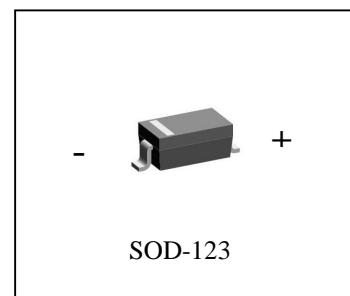


## Schottky Barrier Diode

**MBR0520-MBR0580**
**FEATURES**

- Lead Free Finish/RoHS Compliant
- Extremely Low Thermal Resistance
- For Surface Mount Application and High Current Capability


**Maximum Ratings @T<sub>a</sub>=25°C**

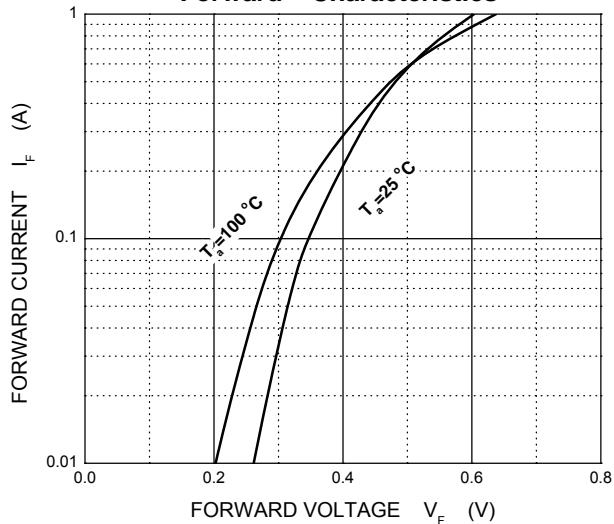
Parameter	Symbol	MBR 0520	MBR 0530	MBR 0540	MBR 0560	MBR 0580	Unit
<b>Maximum recurrent peak reverse voltage</b>	V <sub>RRM</sub>	20	30	40	60	80	
<b>Maximum RMS voltage</b>	V <sub>RMS</sub>	14	21	28	42	56	V
<b>Mean rectifying current</b>	I <sub>O</sub>			0.5			A
<b>Non-repetitive Peak forward surge current @t=8.3ms</b>	I <sub>FSM</sub>			5.5			A
<b>Power Dissipation</b>	P <sub>D</sub>			410			mW
<b>Thermal Resistance Junction to Ambient</b>	R <sub>θJA</sub>			244			°C/W
<b>Junction temperature</b>	T <sub>j</sub>			125			°C
<b>Storage temperature</b>	T <sub>stg</sub>			-55~+150			°C

 T<sub>a</sub>=25 °C unless otherwise specified

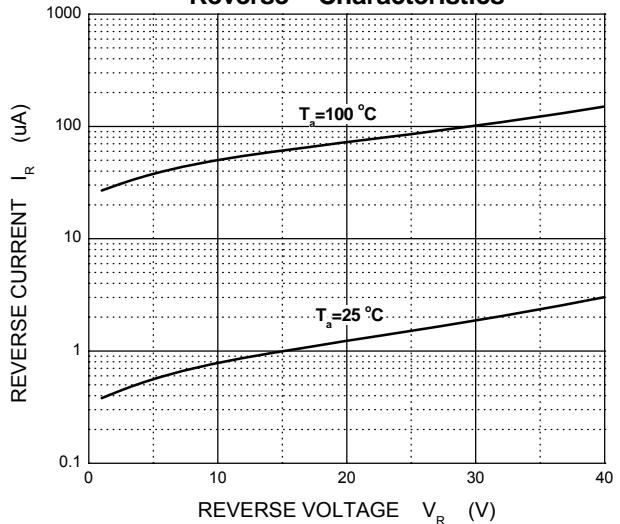
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
<b>Forward voltage</b> <b>MBR0520</b>	V <sub>F</sub>			0.45	V	I <sub>F</sub> =500mA
<b>MBR0530</b>				0.55		
<b>MBR0540</b>				0.55		
<b>MBR0560</b>				0.70		
<b>MBR0580</b>				0.80		
<b>Reverse current</b> <b>MBR0520</b>	I <sub>R</sub>			80	μA	V <sub>R</sub> =20V V <sub>R</sub> =30V V <sub>R</sub> =40V V <sub>R</sub> =60V V <sub>R</sub> =80V
<b>MBR0530</b>						
<b>MBR0540</b>						
<b>MBR0560</b>						
<b>MBR0580</b>						
<b>Capacitance between terminals</b>	C <sub>T</sub>		30		pF	V <sub>R</sub> =4V, f=1MHz

## MBR0520-MBR0580

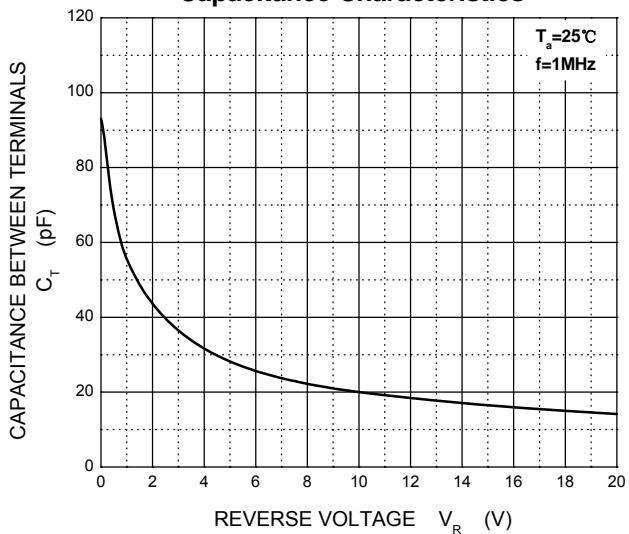
### Forward Characteristics



### Reverse Characteristics



### Capacitance Characteristics



### Power Derating Curve

