

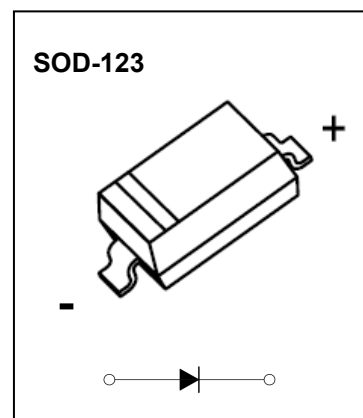


# THE DATASHEET OF MBR0560



**SOD-123 Plastic-Encapsulate Diodes**
**FEATURES**

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

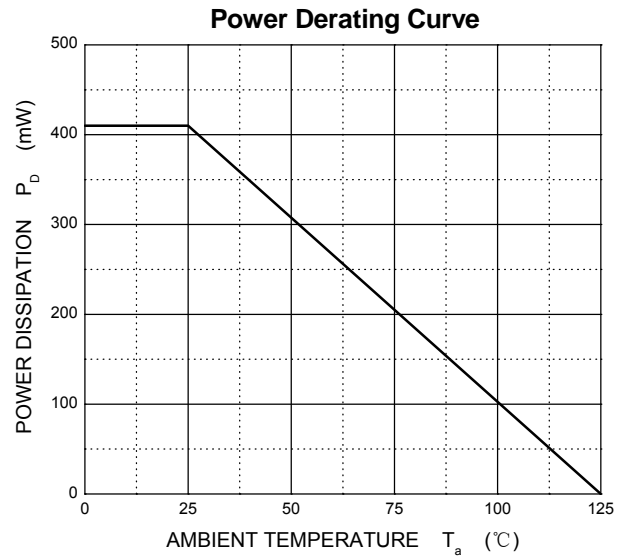
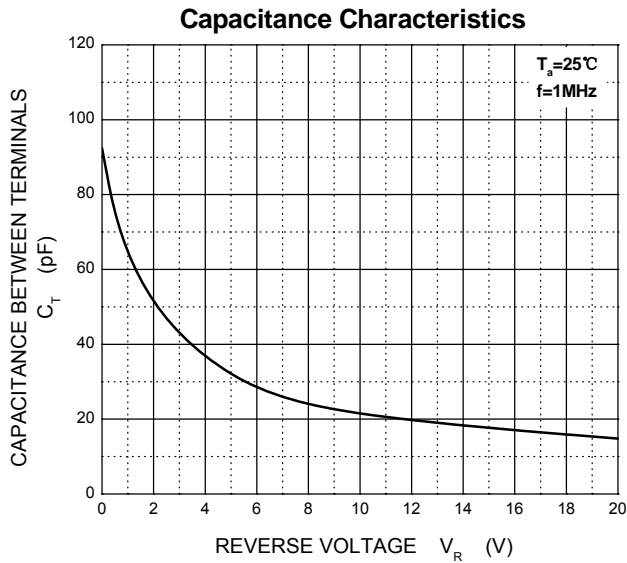
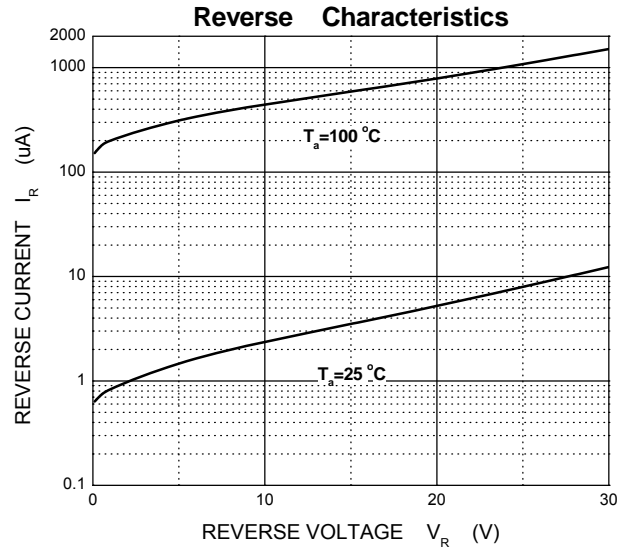
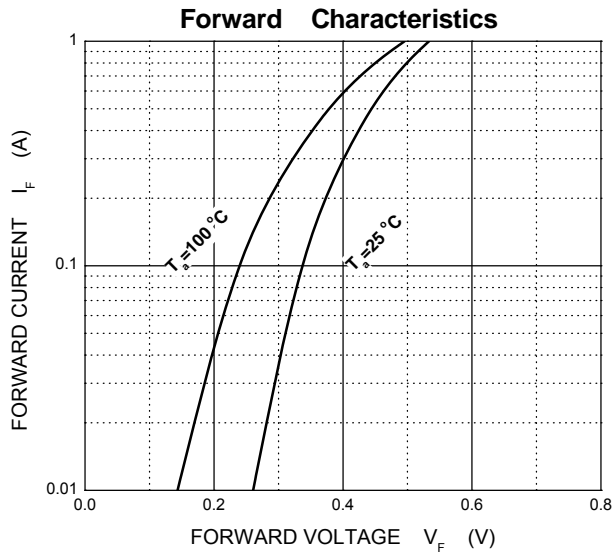

**Maximum Ratings @T<sub>a</sub>=25°C**

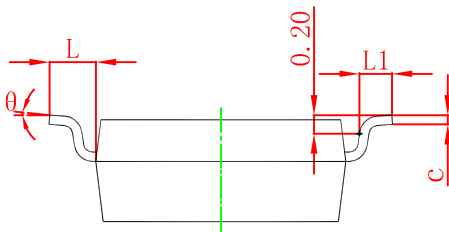
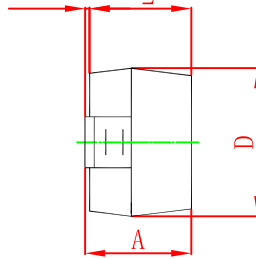
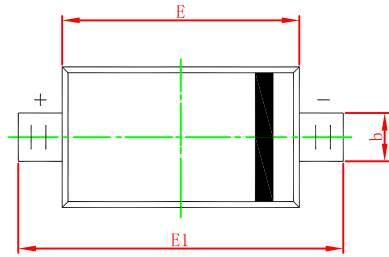
Parameter	Symbol	MBR	MBR	MBR	MBR	MBR	Unit
		0520	0530	0540	0560	0580	
<b>Maximum recurrent peak reverse voltage</b>	$V_{RRM}$	20	30	40	60	80	V
<b>Maximum RMS voltage</b>	$V_{RMS}$	14	21	28	42	56	
<b>Mean rectifying current</b>	$I_O$	0.5					A
<b>Non-repetitive Peak forward surge current @t=8.3ms</b>	$I_{FSM}$	5.5					A
<b>Power Dissipation</b>	$P_D$	410					mW
<b>Thermal Resistance Junction to Ambient</b>	$R_{\theta JA}$	244					°C/W
<b>Junction temperature</b>	$T_j$	125					°C
<b>Storage temperature</b>	$T_{stg}$	-55~+150					°C

**ELECTRICAL CHARACTERISTICS**
 **$T_a=25\text{ }^\circ\text{C}$  unless otherwise specified**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
<b>Forward voltage</b>						
<b>MBR0520</b>	$V_F$			0.45	V	$I_F=500\text{mA}$
<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>	$I_R$			80	$\mu\text{A}$	$V_R=20\text{V}$
<b>MBR0530</b>						$V_R=30\text{V}$
<b>MBR0540</b>						$V_R=40\text{V}$
<b>MBR0560</b>						$V_R=60\text{V}$
<b>MBR0580</b>						$V_R=80\text{V}$
<b>Capacitance between terminals</b>	$C_T$		30		pF	$V_R=4\text{V}, f=1\text{MHZ}$

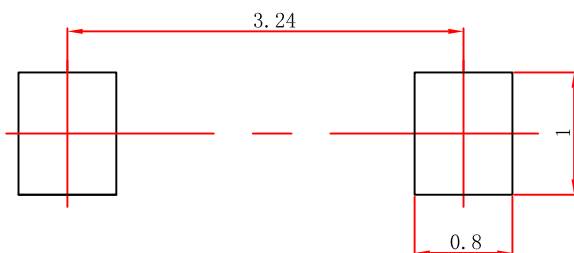
## Typical Characteristics





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.050	1.250	0.041	0.049
A1	0.000	0.100	0.000	0.004
A2	1.050	1.150	0.041	0.045
b	0.450	0.650	0.018	0.026
c	0.080	0.150	0.003	0.006
D	1.500	1.700	0.059	0.067
E	2.600	2.800	0.102	0.110
E1	3.550	3.850	0.140	0.152
L	0.500 REF		0.020 REF	
L1	0.250	0.450	0.010	0.018
θ	0°	8°	0°	8°

### SOD-123 Suggested Pad Layout





**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

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-  [ShenZhen SikorMicro Semicon Co. Ltd Information](#)

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-  Cost Control Management
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