

**FEATURES**

- | Small surface mounting type
- | Low forward voltage
- | High reliability

**SOD-123**

**MARKING: 74**
**Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$** 

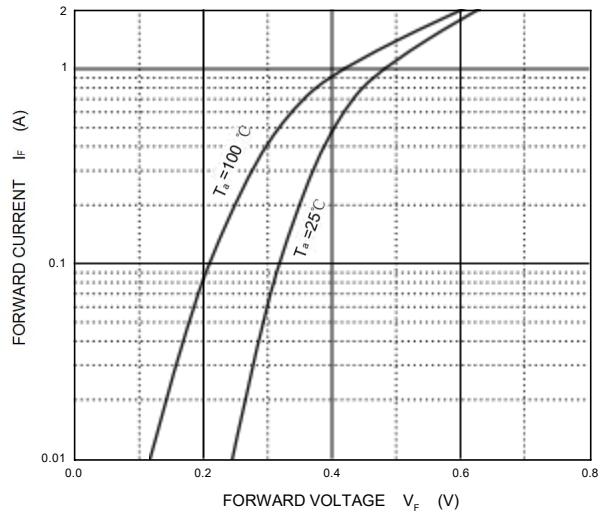
Parameter	Symbol	Limits	Unit
DC reverse voltage	$V_R$	40	V
Mean rectifying current	$I_o$	1	A
Non-repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	$I_{FSM}$	15	A
Power Dissipation	$P_D$	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	200	$^\circ\text{C/W}$
Operating Junction Temperature Range	$T_j$	-40 ~ +125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	-55 ~ +150	$^\circ\text{C}$

**Electrical Ratings @ $T_A=25^\circ\text{C}$** 

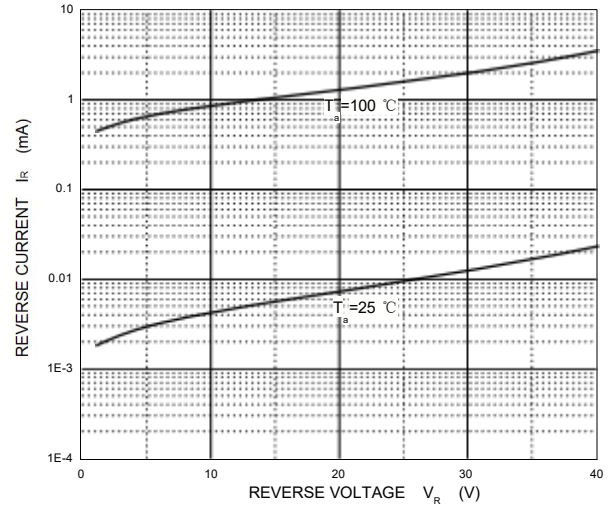
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$			0.51	V	$I_F=1\text{A}$
Reverse current	$I_R$			30	$\mu\text{A}$	$V_R=40\text{V}$

**Typical Characteristics**

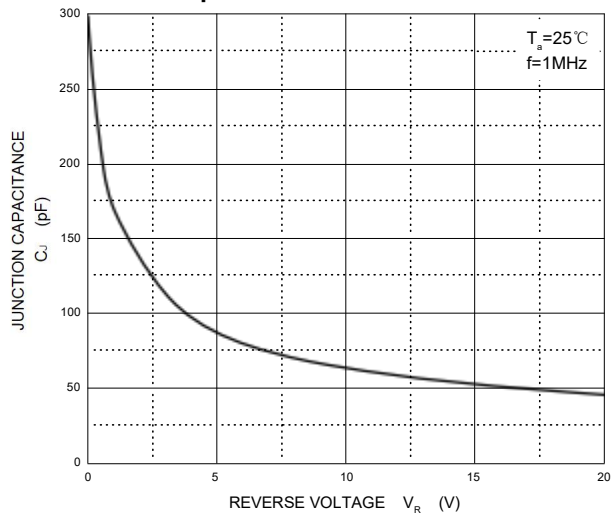
**Forward Characteristics**



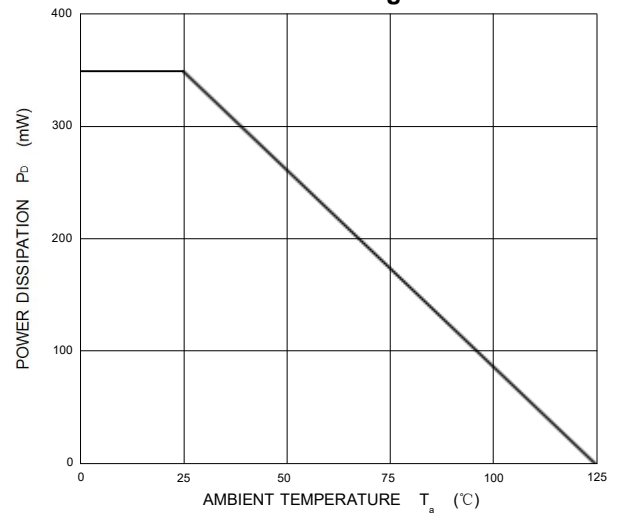
**Reverse Characteristics**



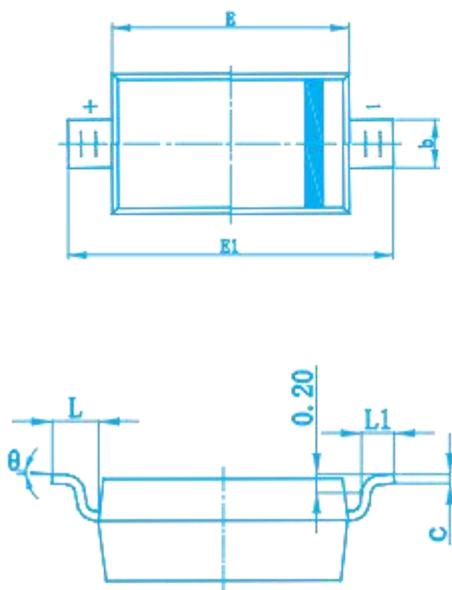
**Capacitance Characteristics**



**Power Derating Curve**

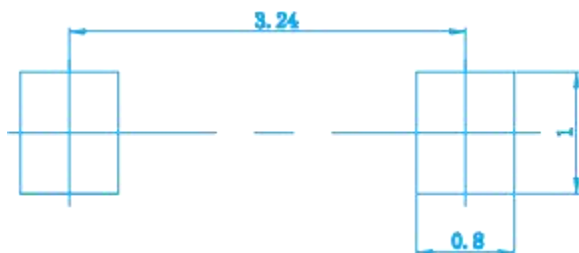


**SOD-123 Package Outline Dimensions**



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
E1	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
$\theta$	0°	8°	0°	8°

**SOD-123 Suggested Pad Layout**



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