

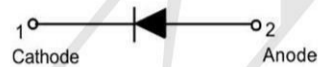
### Features

- General rectification
- Low  $V_F$ ; Low  $I_R$
- High reliability



SOD123

PIN	DESCRIPTION
1	Cathode
2	Anode



### Applications

- surface mount schottky barrier rectifier

### Ordering Information

- Shipping Qty:3000/7inch Tape& Reel

### Absolute Maximum Ratings ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	40	V
RMS Reverse Voltage	$V_{RMS}$	28	V
Maximum Average Forward Output Current	$I_{F(AV)}$	0.5	A
Peak Forward Surge Current (8.3ms single half sine-wave)	$I_{FSM}$	5.5	A

### Thermal Characteristics

Parameter	Symbol	Value	Unit
Power Dissipation	$P_D$	500	mW
Operating junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 ~ +150	$^\circ\text{C}$

### Electrical Characteristics ( $T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F = 0.1\text{A}$	-	-	0.51	V
		$I_F = 0.5\text{A}$	-	-	0.62	
Maximum Peak Reverse Current	$I_R$	$V_R = 20\text{V}$	-	-	20	$\mu\text{A}$

### Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

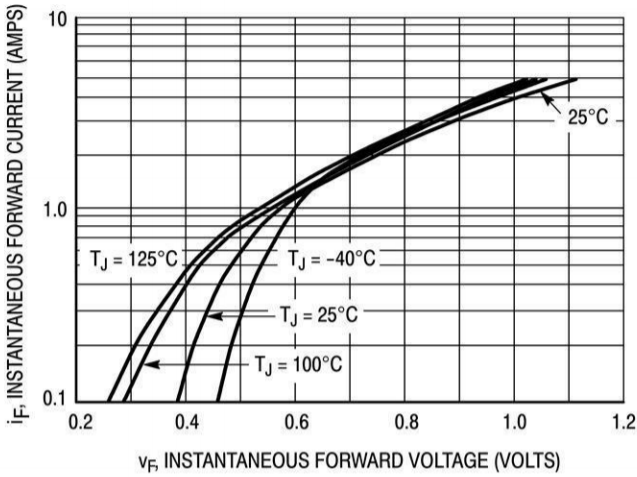


Figure 1. Typical Forward Voltage

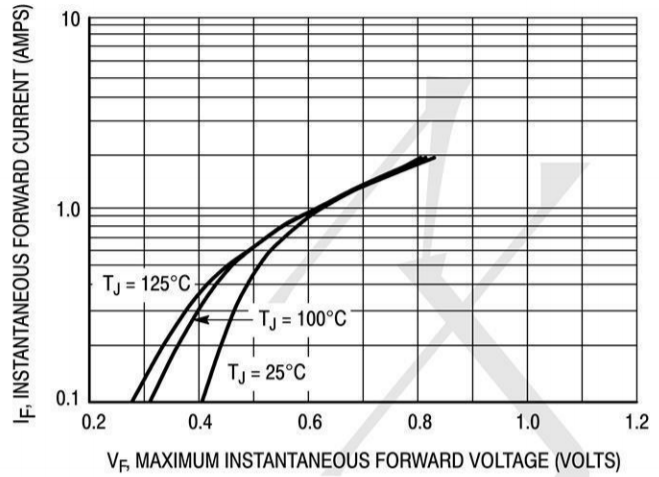


Figure 2. Maximum Forward Voltage

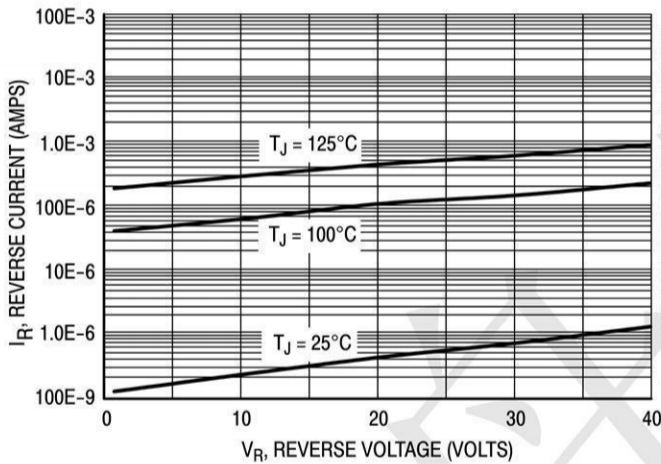


Figure 3. Typical Reverse Current

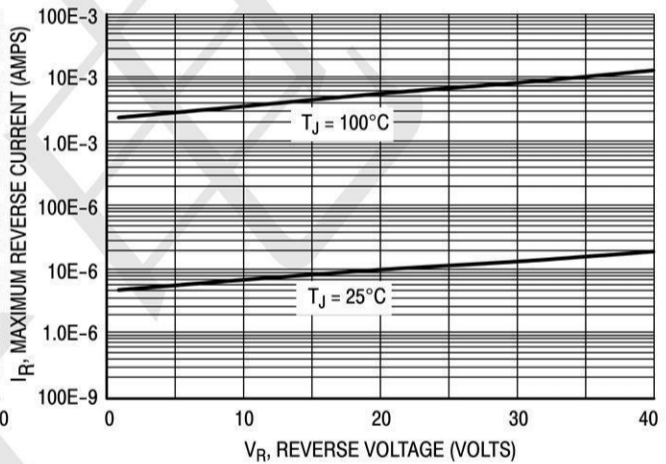


Figure 4. Maximum Reverse Current

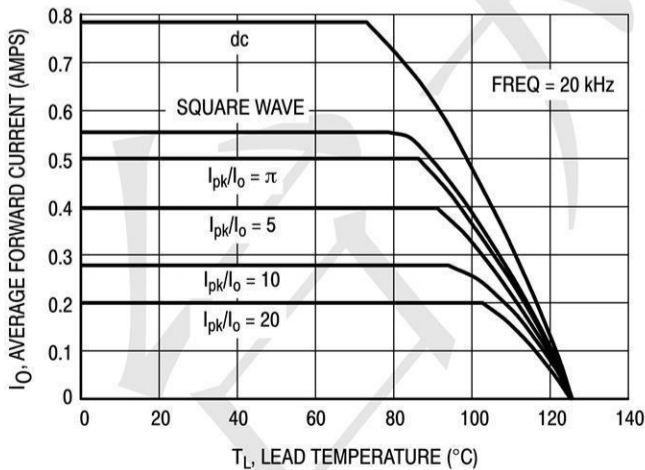


Figure 5. Current Derating

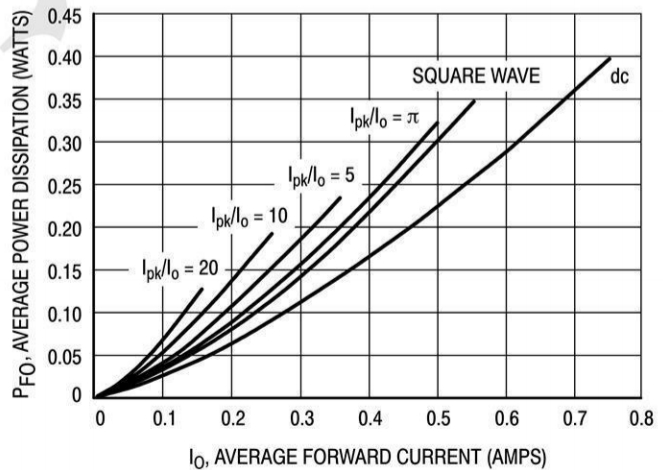


Figure 6. Forward Power Dissipation

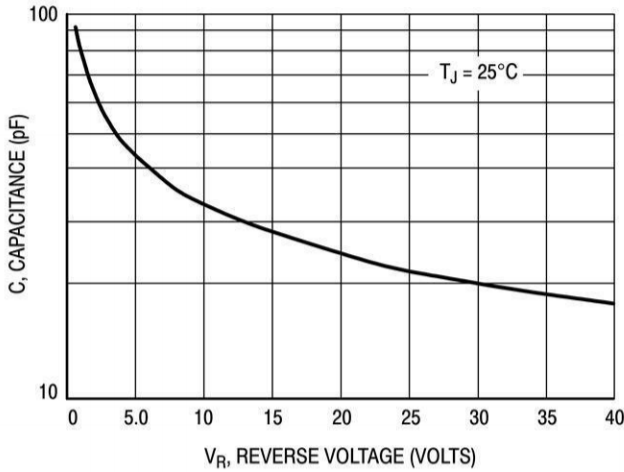


Figure 7. Capacitance

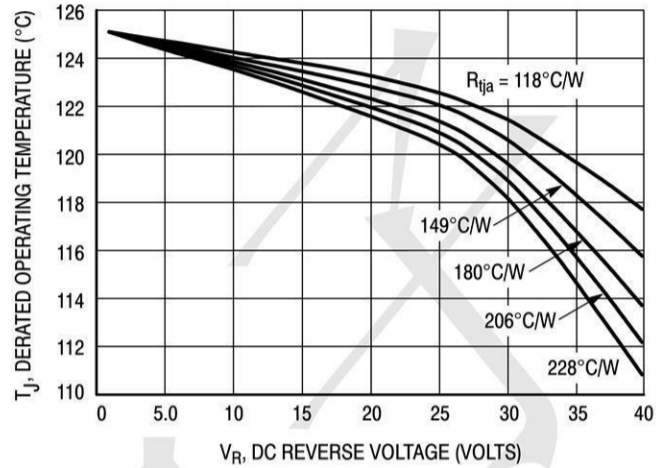


Figure 8. Typical Operating Temperature Derating\*

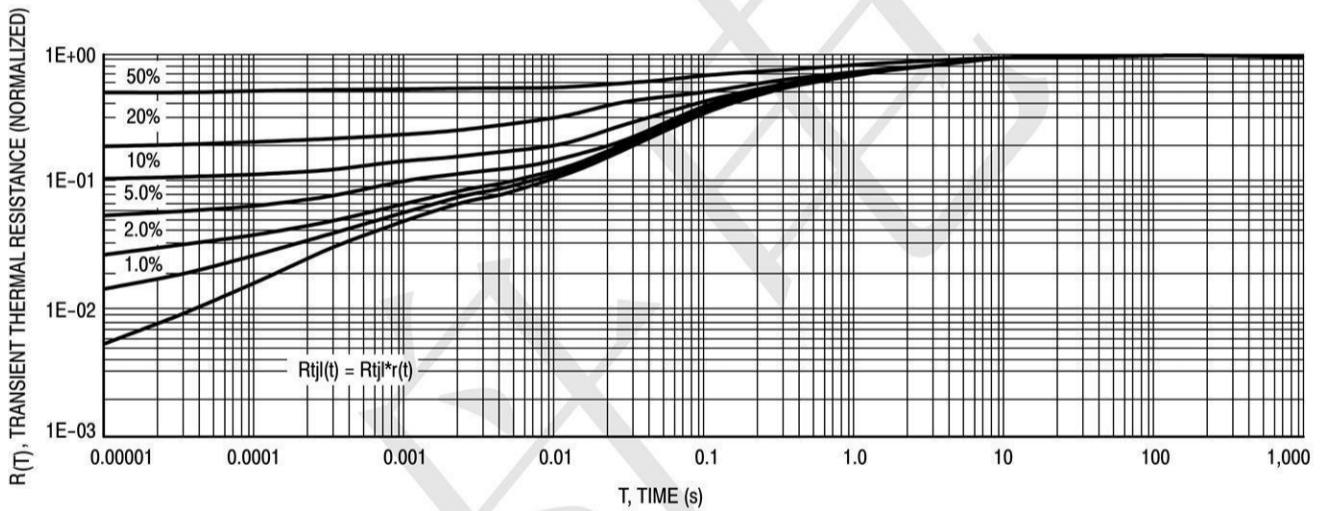


Figure 9. Thermal Response Junction to Lead

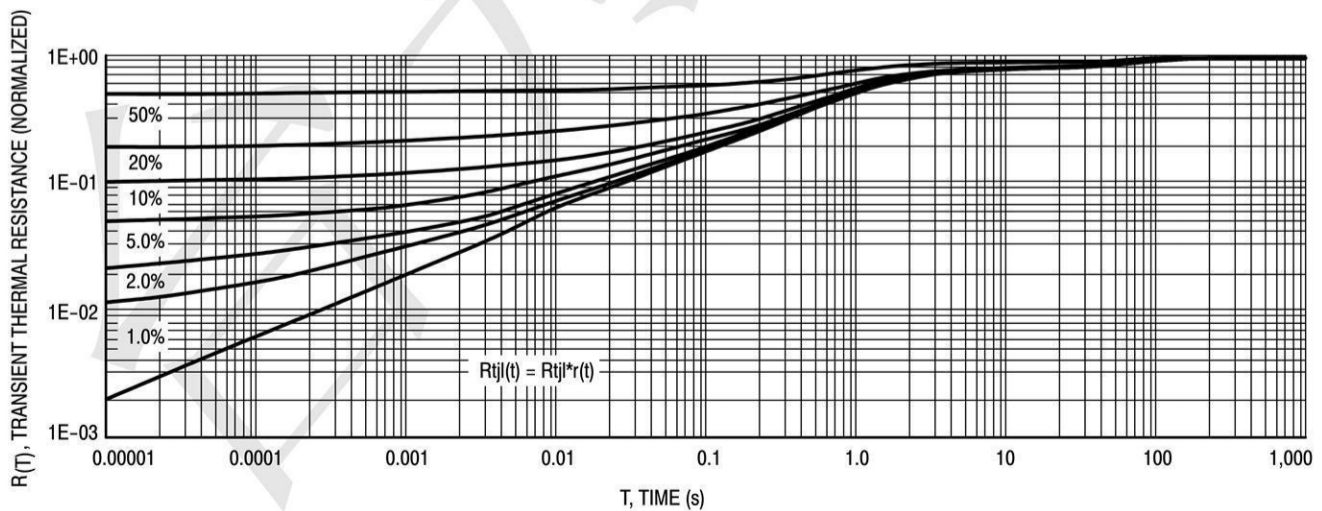
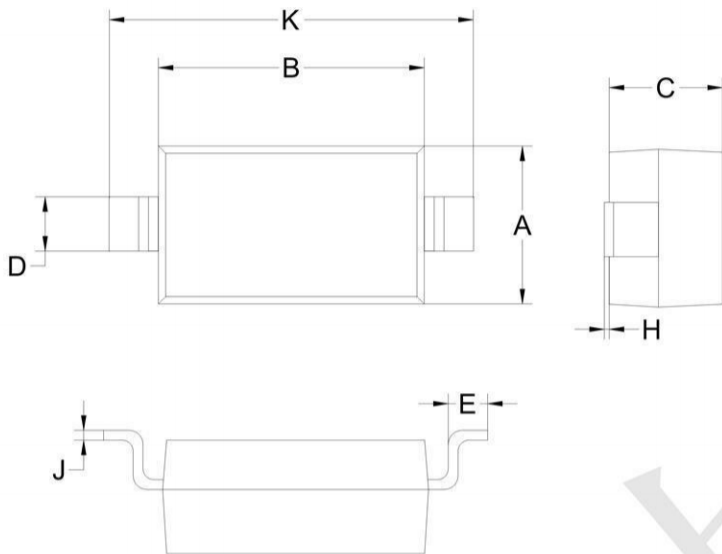


Figure 10. Thermal Response Junction to Ambient

### Outline Drawing - SOD123 (unit: mm)



SOD-123		
Dim	Min	Max
A	1.45	1.75
B	2.55	2.85
C	1.00	1.30
D	0.50	0.60
E	0.25	0.45
H	0.02	0.10
J	0.05	0.15
K	3.55	3.85

### Mounting Pad Layout-SOD123 (unit: mm)

