

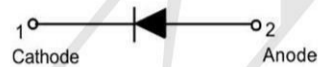
Features

- 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	μA

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

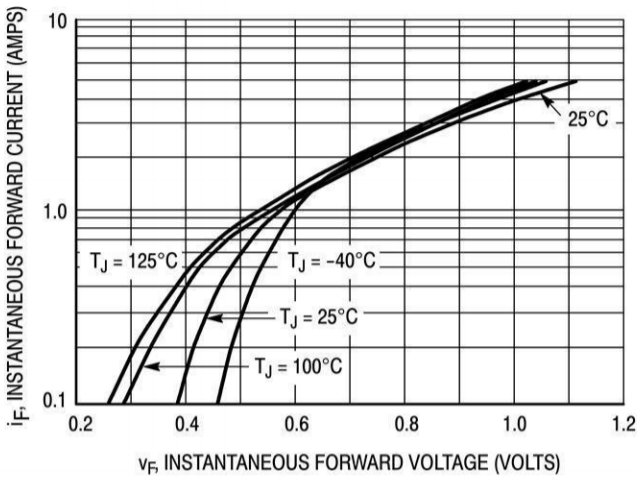


Figure 1. Typical Forward Voltage

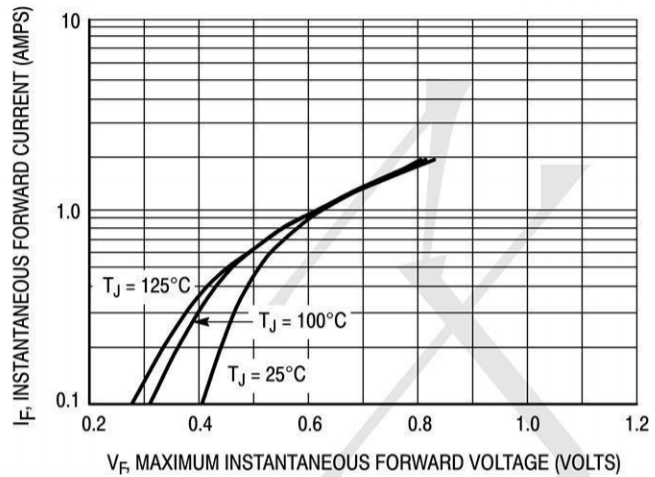


Figure 2. Maximum Forward Voltage

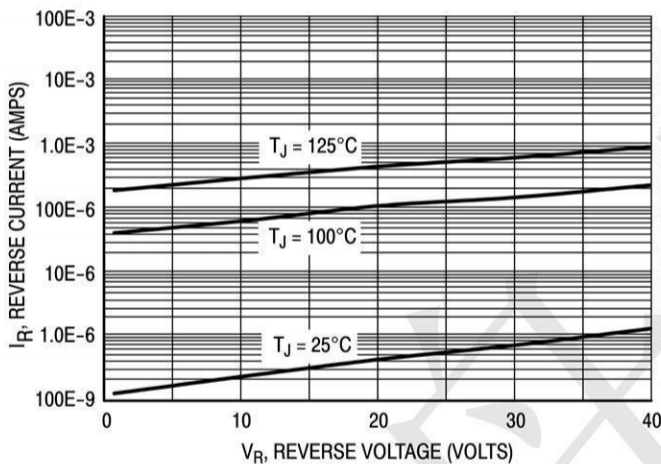


Figure 3. Typical Reverse Current

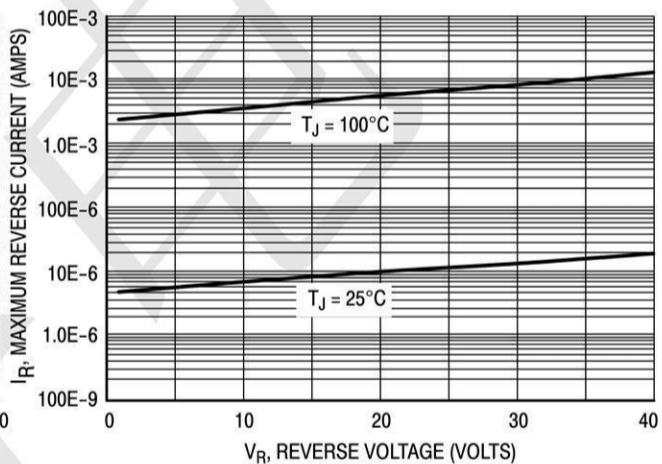


Figure 4. Maximum Reverse Current

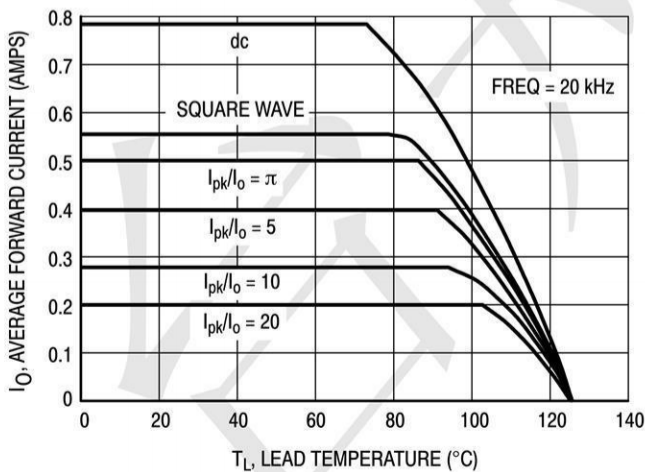


Figure 5. Current Derating

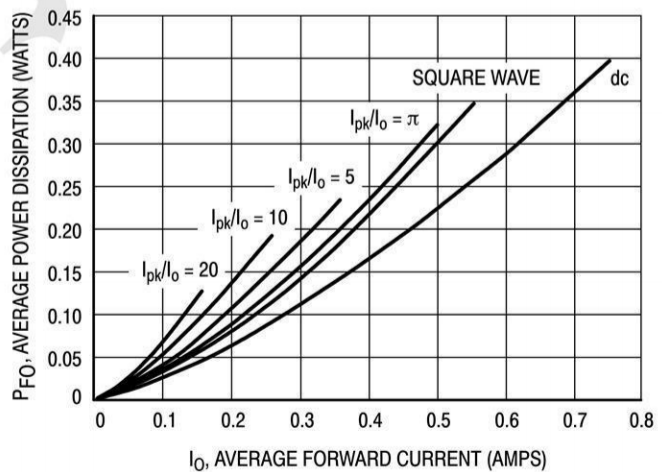


Figure 6. Forward Power Dissipation

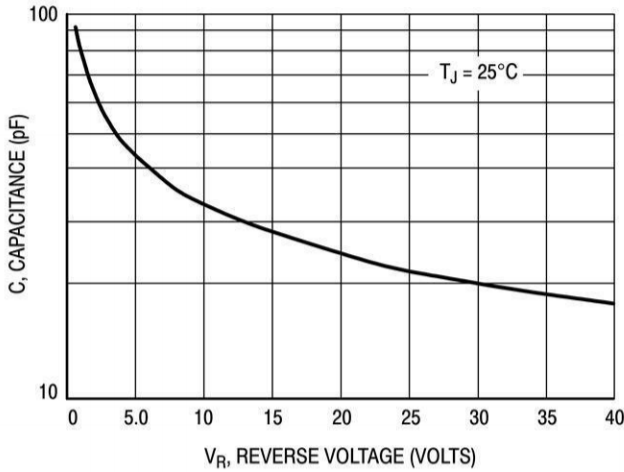


Figure 7. Capacitance

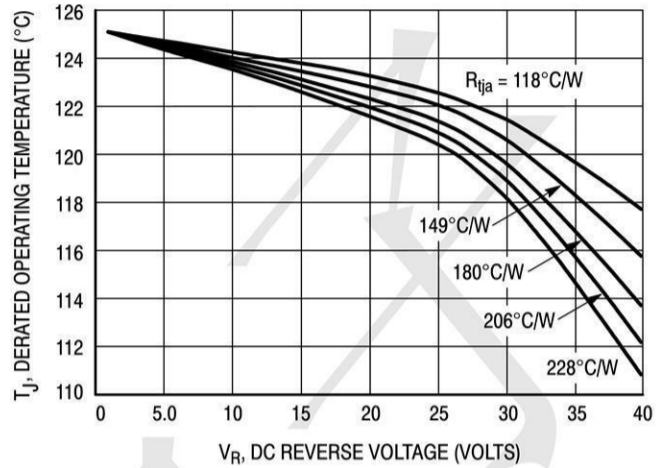


Figure 8. Typical Operating Temperature Derating*

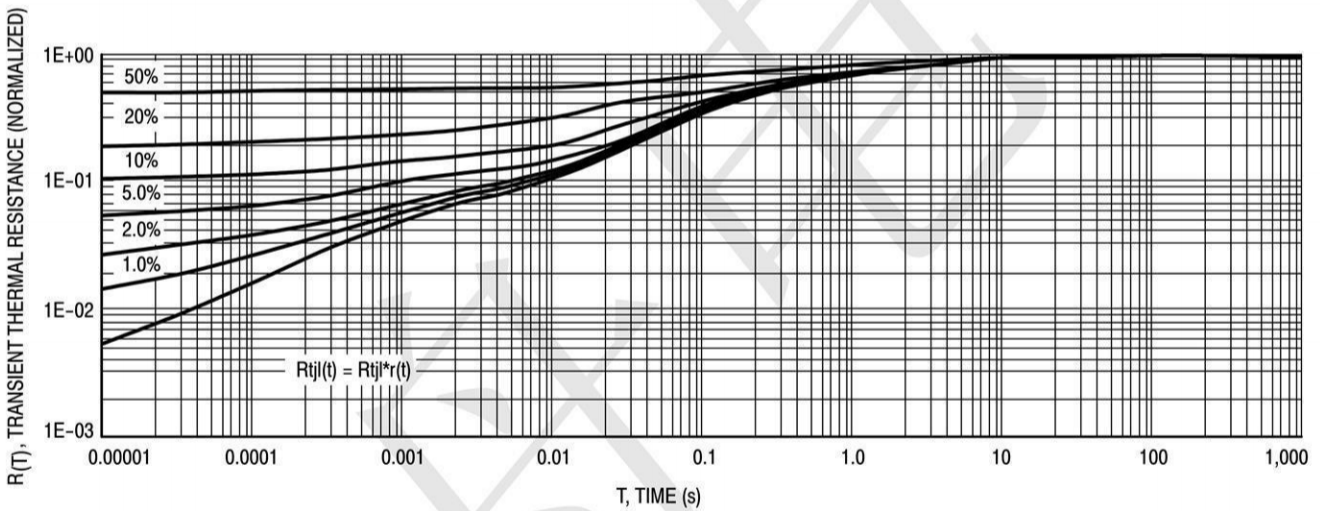


Figure 9. Thermal Response Junction to Lead

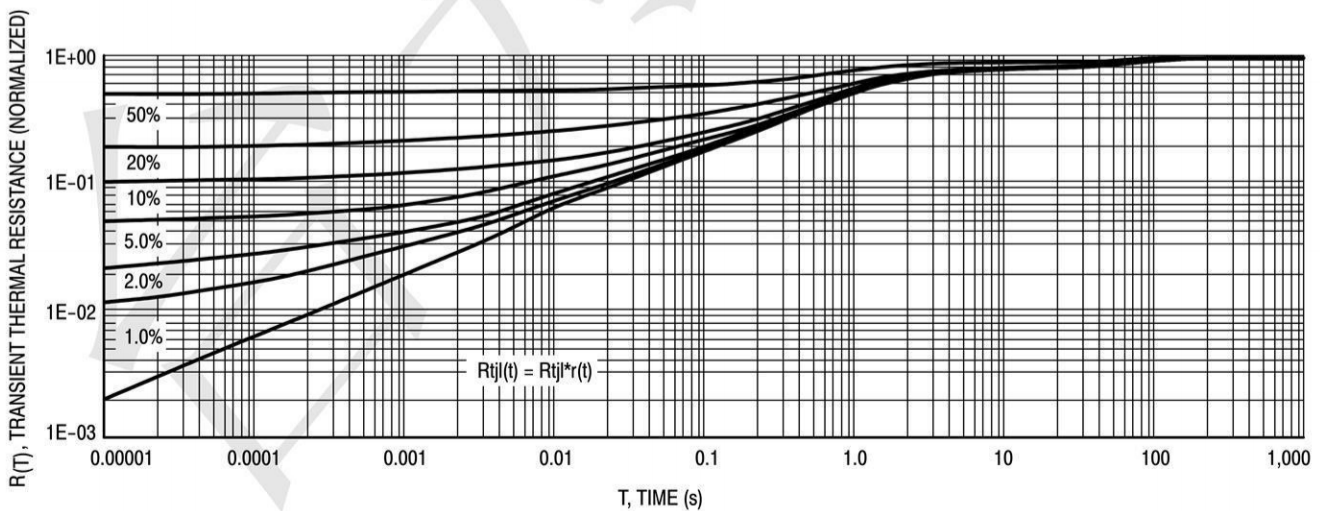
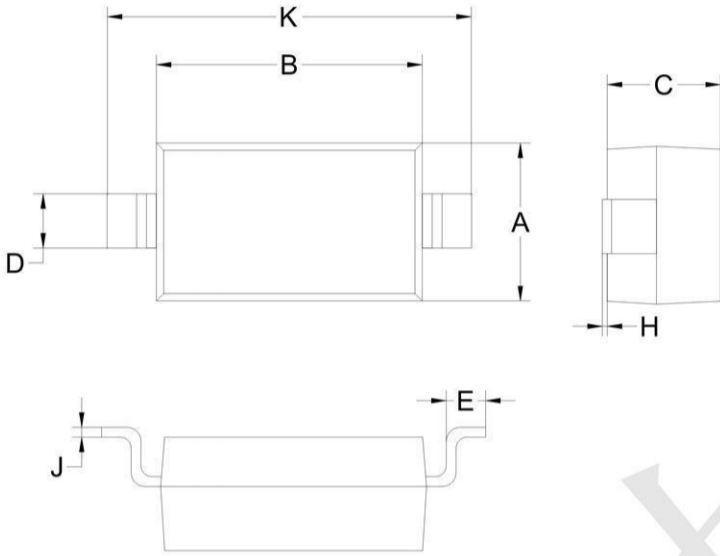


Figure 10. Thermal Response Junction to Ambient

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)

