

Features

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



SOD-123



Equivalent Circuit

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

Symbol	Parameter	Value	Unit
V_R	DC Blocking Voltage	40	V
I_O	Average Rectified Output Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	15	
P_D	Power Dissipation	350	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	200	$^{\circ}\text{C}/\text{W}$
T_J	Operating Junction Temperature Range	$-40 \sim +125$	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	$-55 \sim +150$	$^{\circ}\text{C}$

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

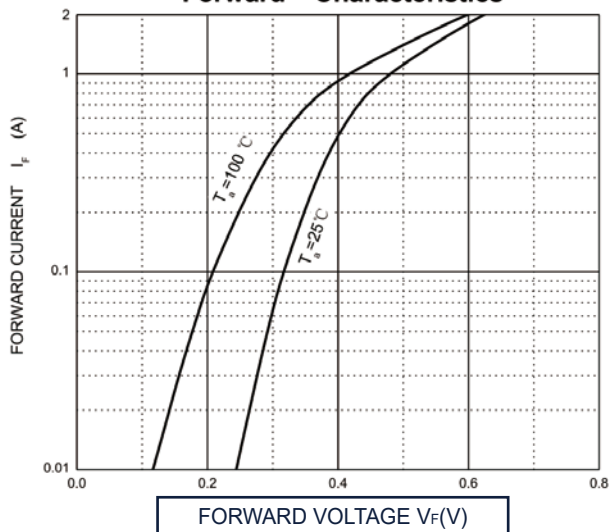
Symbol	Parameter	Test conditions	Min	Typ	Max	Unit
V_F	Forward voltage	$I_F=1\text{A}$			0.51	V
I_R	Reverse current	$V_R=40\text{V}$			30	μA

Ordering information

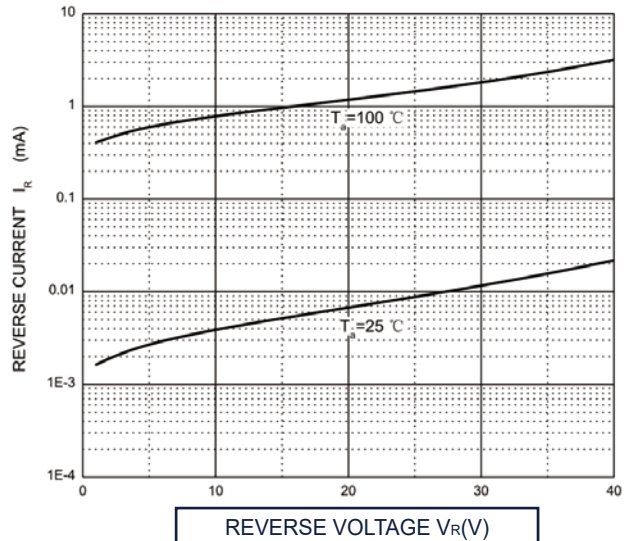
Product ID	Pack	Naming rule	Marking	Qty(PCS)
RB160M-40	SOD-123	RB160M-40 产品名称 product name	74	3000

Typical Characteristics

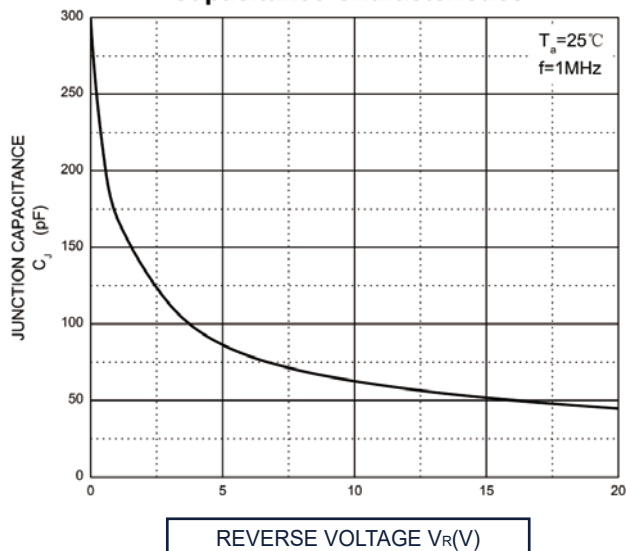
Forward Characteristics



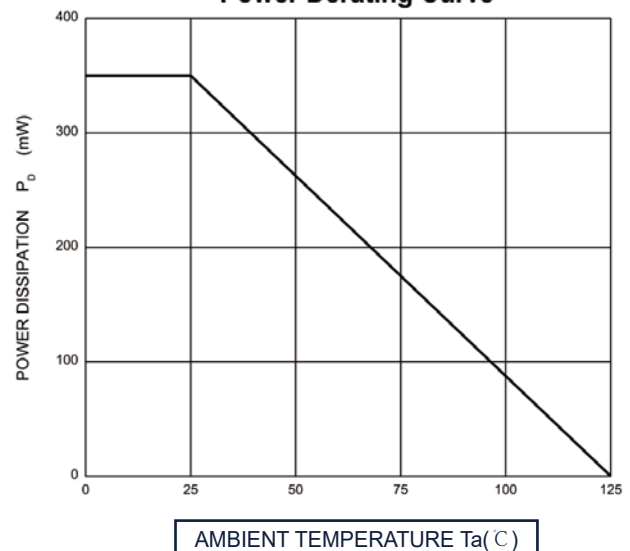
Reverse Characteristics



Capacitance Characteristics

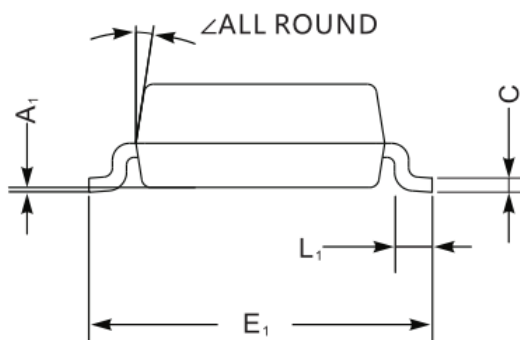
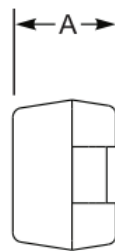
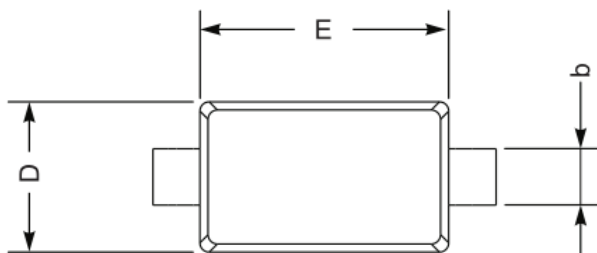


Power Derating Curve





SOD-123 Package Outline Dimensions



Symbol	mm		mil	
	min	max	min	max
A	0.9	1.3	35	51
C	0.09	0.22	3.5	8.7
D	1.5	1.8	59	71
E	2.5	2.8	98	110
E ₁	3.6	3.9	142	154
L ₁	0.25	0.45	10	18
b	0.5	0.7	20	28
A ₁		0.2		8
∠	9°			