

Features

- Small Current Rectification
- Low Voltage



SOD-123



Equivalent Circuit

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

Symbol	Parameter	Value	Unit
V_R	DC Blocking Voltage	30	V
I_O	Average Rectified Output Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	15	
P_D	Power Dissipation	450	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	222	$^{\circ}\text{C}/\text{W}$
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
I_R	Reverse current	$V_R=15\text{V}$			20	μA
		$V_R=30\text{V}$			50	
$V_{F(1)}$	Reverse current	$I_F=500\text{mA}$			0.46	V
$V_{F(2)}$		$I_F=1000\text{mA}$			0.48	

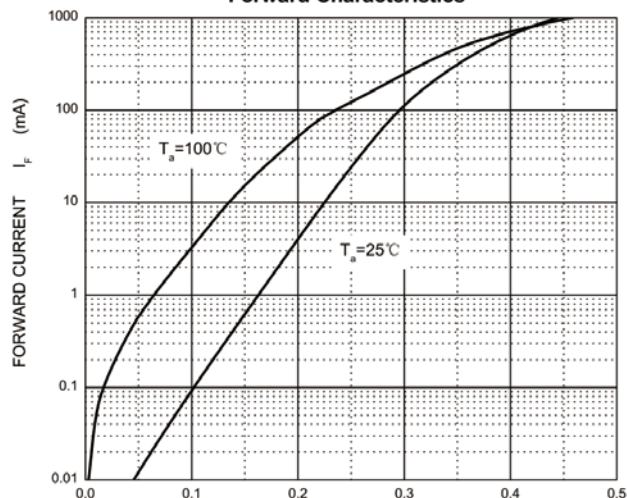
Ordering information

Product ID	Pack	Naming rule	Marking	Qty(PCS)
RB160M-30	SOD-123	RB160M-30 产品名称 product name	73	3000

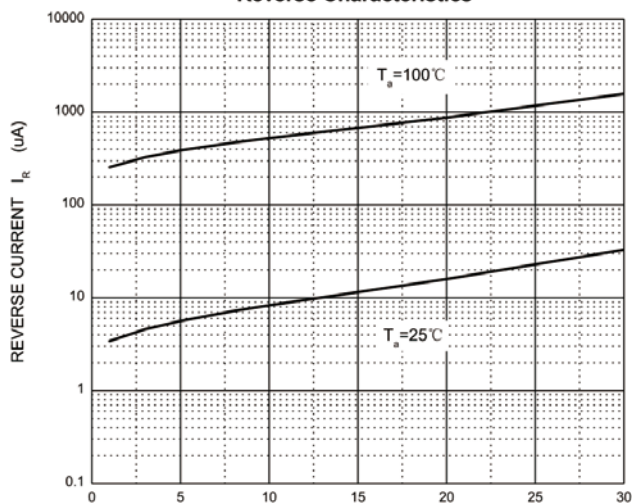


Typical Characteristics

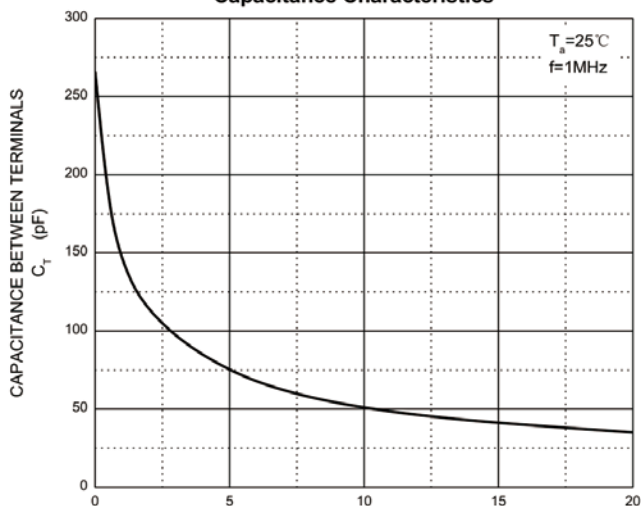
Forward Characteristics

FORWARD VOLTAGE V_F (V)

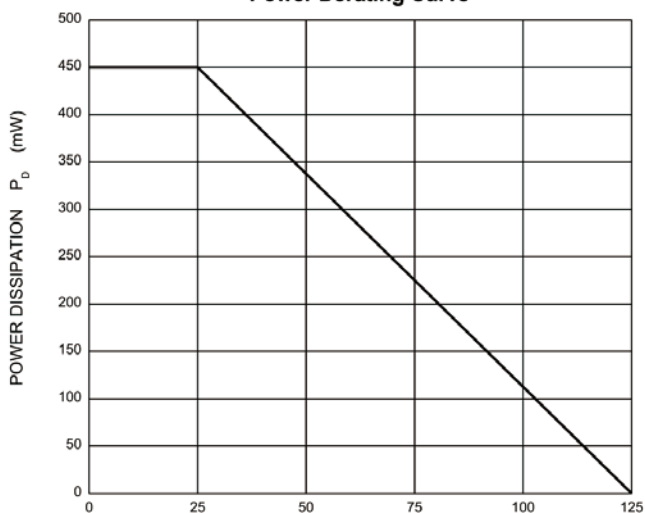
Reverse Characteristics

REVERSE VOLTAGE V_R (V)

Capacitance Characteristics

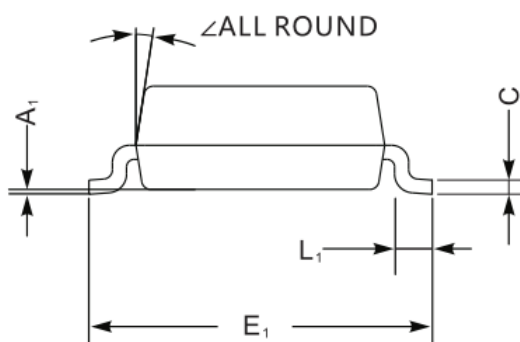
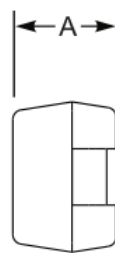
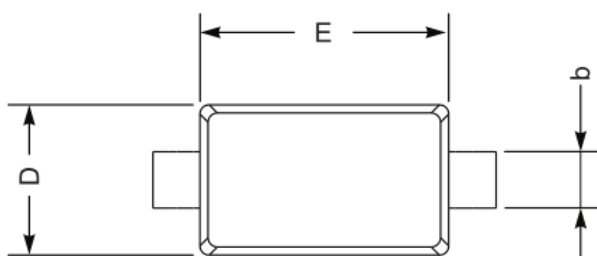
REVERSE VOLTAGE V_R (V)

Power Derating Curve

AMBIENT TEMPERATURE T_a ($^\circ\text{C}$)



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°			