

Features

- Low Forward Voltage Schottky Rectifier.
- High Frequency Inverters.



SOD-123



Equivalent Circuit

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

Symbol	Parameter	Value	Unit
V_{RM}	Non-repetitive Peak Reverse Voltage Peak Repetitive Peak Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	40	V
V_{RRM}			
V_{RWM}			
V_R			
$V_{R(RMS)}$	RMS Reverse Voltage	28	V
I_O	Average Rectified Output Current	1	A
I_{FSM}	Non-repetitive Peak Forward Surge Current@8.3mS	9	A
I_{FRM}	Repetitive Peak Forward Current	1.5	A
P_d	Power Dissipation	250	mW
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	400	$^{\circ}\text{C}/\text{W}$
T_J	Operation 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
$V_{(BR)}$	Reverse breakdown voltage	$I_R=1\text{mA}$	40			V
I_R	Reverse voltage leakage current	$V_R=40\text{V}$			1	mA
$V_{F(1)}$	Forward voltage(1)	$I_F=1\text{A}$			0.5	V
$V_{F(2)}$	Forward voltage(2)	$I_F=3\text{A}$			0.9	V
C_D	Diode capacitance	$V_R=4\text{V}, f=1.0\text{MHz}$			120	pF

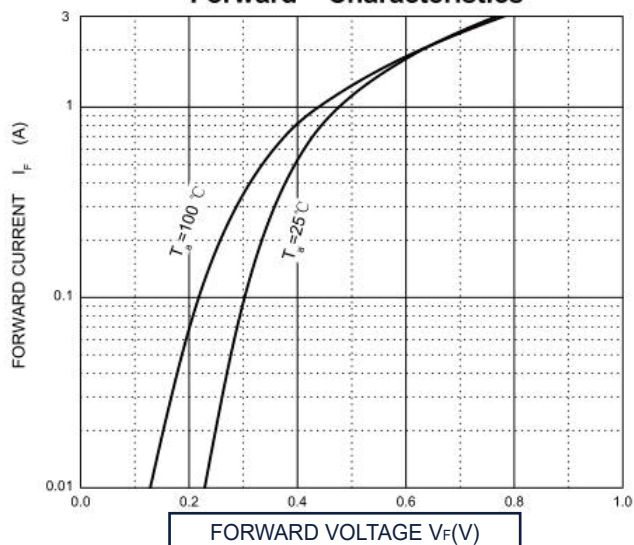
Ordering information

Product ID	Pack	Naming rule	Marking	Qty(PCS)
B5819W	SOD-123	B5819W 产品名称 product name	SL	3000

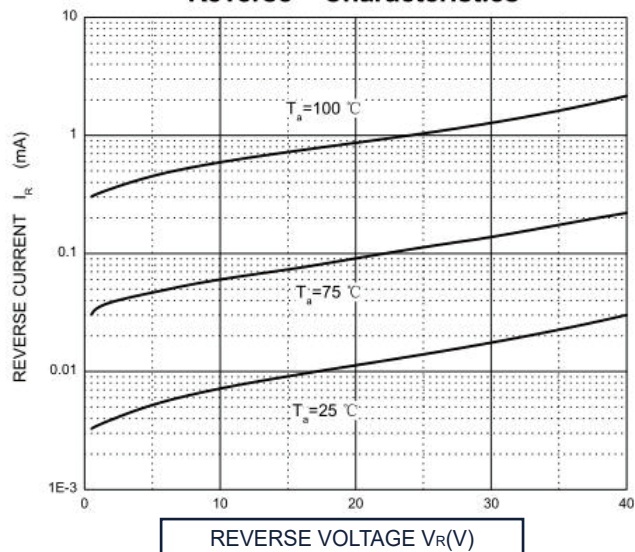


Typical Characteristics

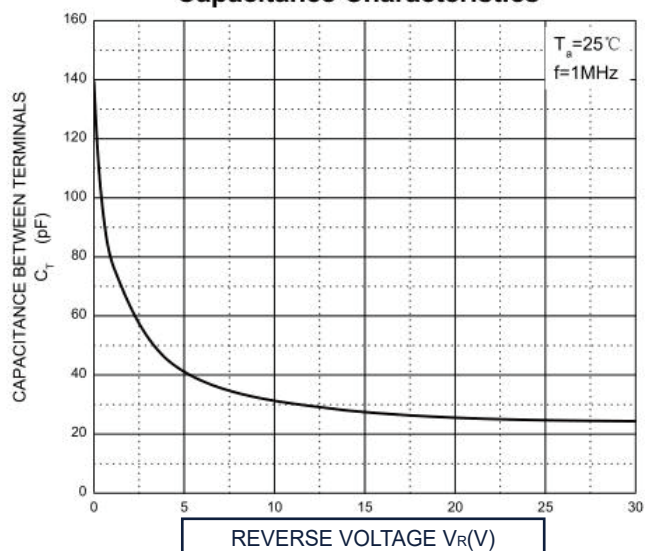
Forward Characteristics



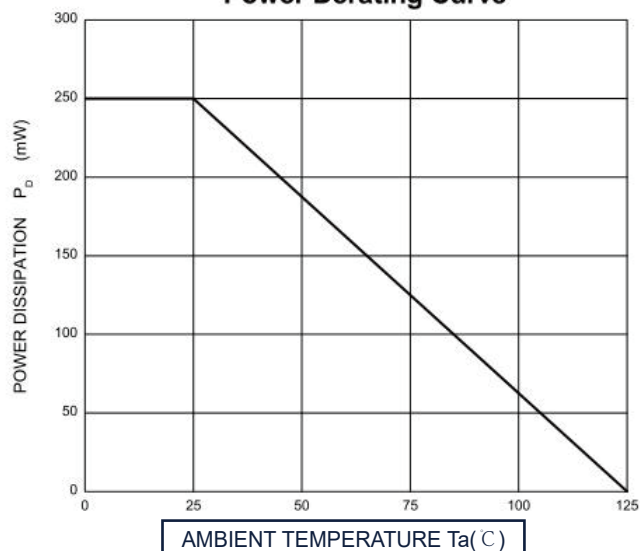
Reverse Characteristics



Capacitance Characteristics

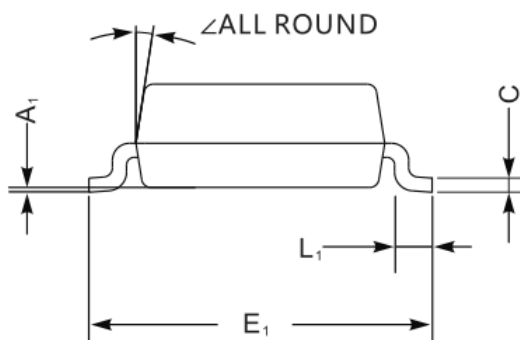
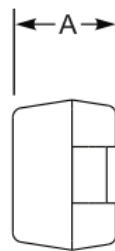
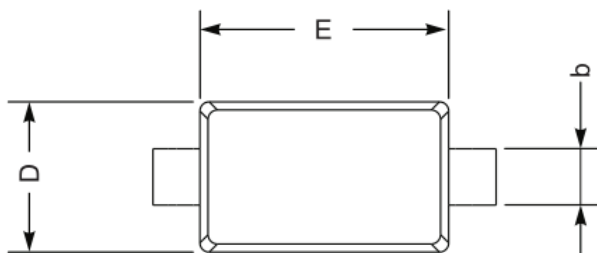


Power Derating Curve





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°			