

Specification Features:

- ◆ Low Forward Voltage Drop
- ◆ Flat Lead SOD-523 Small Outline Plastic Package
- ◆ Extremely Small SOD-523 Package
- ◆ Surface Device Type Mounting
- ◆ RoHS Compliant
- ◆ Green EMC
- ◆ Matte Tin(Sn) Lead Finish
- ◆ Band Indicates Cathode

DEVICE MARKING CODES:



SOD-523



ELECTRICAL SYMBOL



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

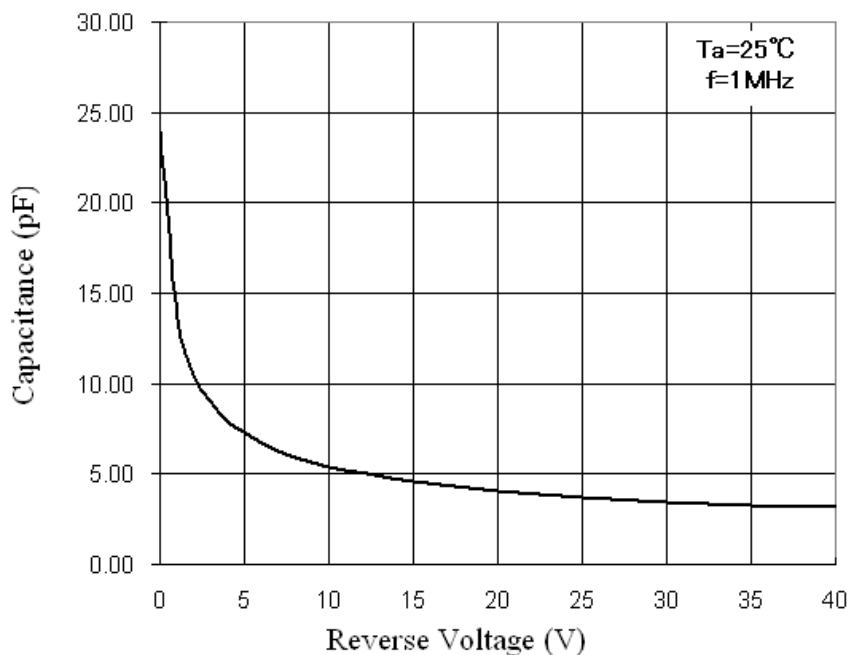
Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-55 to +125	$^\circ\text{C}$
T_J	Operating Junction Temperature	+125	$^\circ\text{C}$
V_R	Reverse Voltage	30	V
$I_{F(AV)}$	Average Forward Current	200	mA
I_{FSM}	Peak Forward Surge Current (At 8.3ms single halfsine-wave)	1	A

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

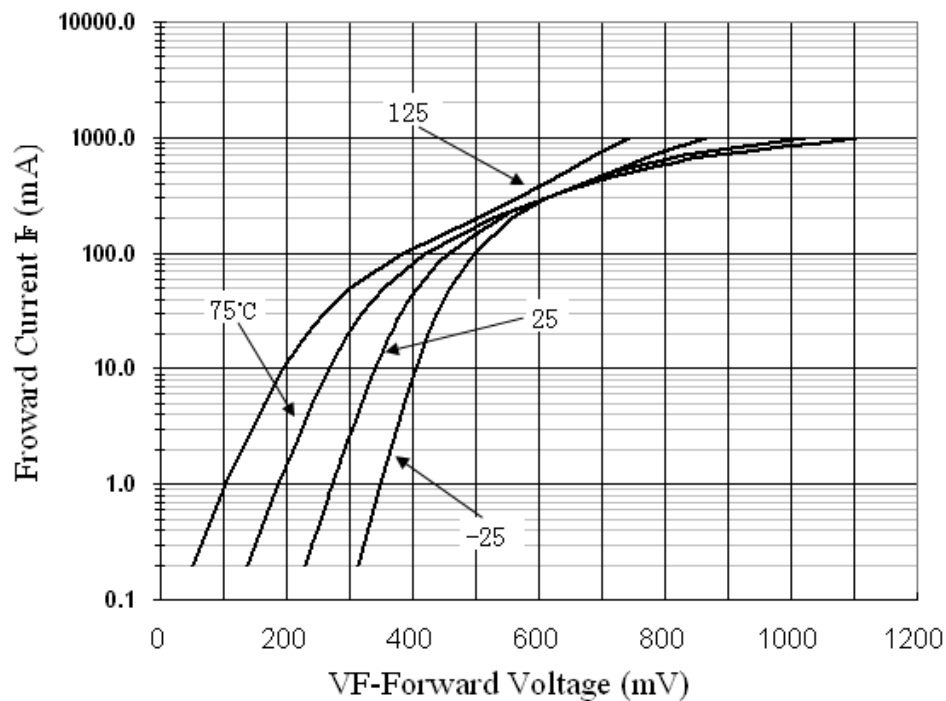
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	$I_R=500\mu\text{A}$	30		Volts
I_R	Reverse Leakage Current	$V_R=10\text{V}$		1	μA
V_F	Forward Voltage	$I_F=200\text{mA}$		0.6	Volts

Typical Performance Characteristics

Total Capacitance

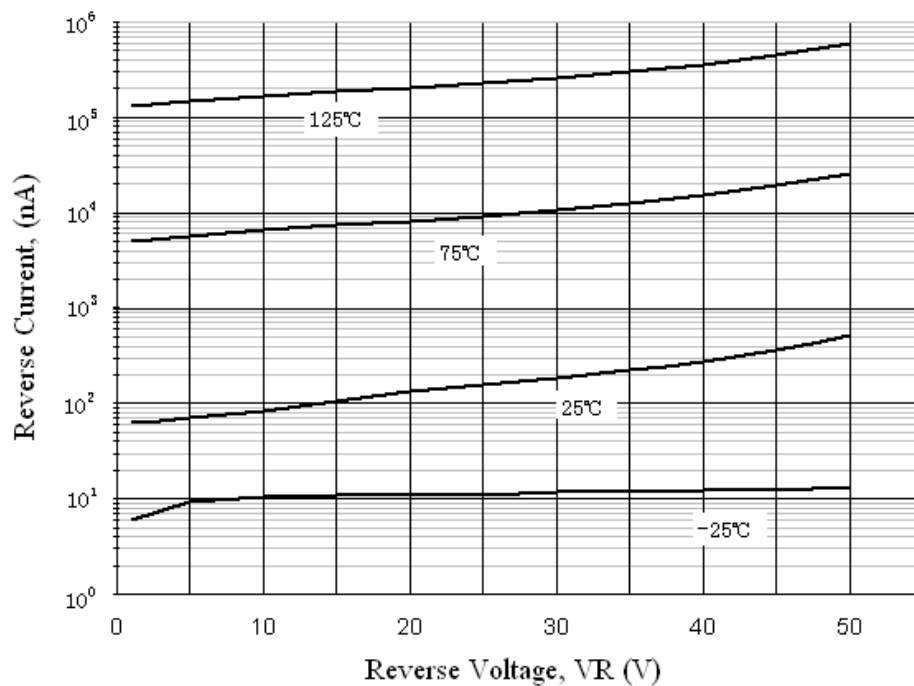


Forward Voltage vs Ambient Temperature



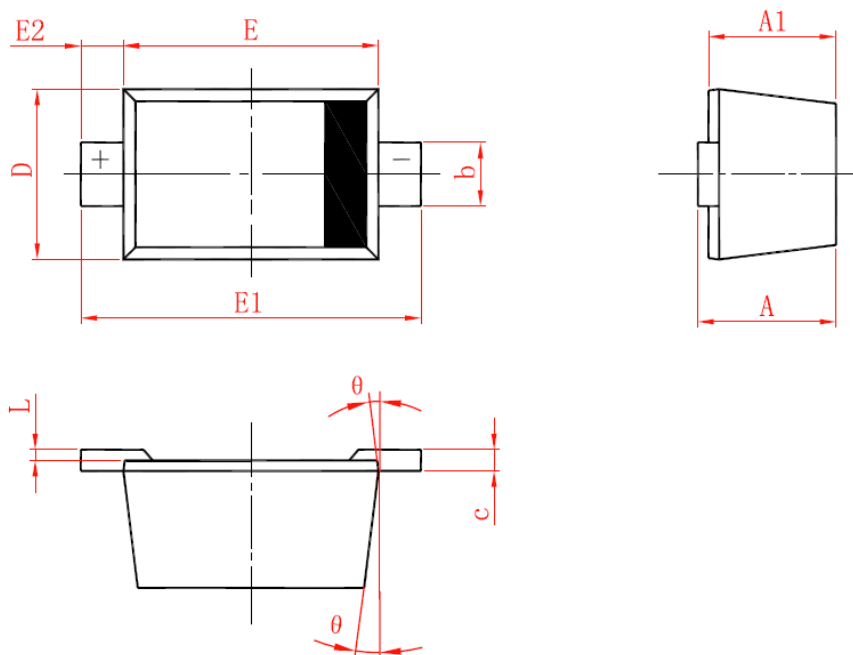
Typical Performance Characteristics

Reverse Current vs Reverse Voltage



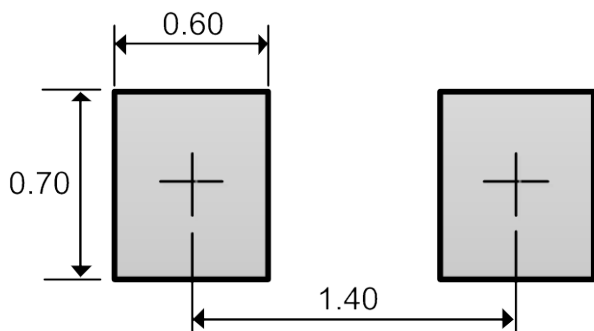
Package outline dimensions

SOD-523



Symbol	Dimensions in millimeter		
	Min.	Typ.	Max.
A	0.510	0.640	0.770
A1	0.500	0.600	0.700
b	0.250	0.300	0.350
c	0.080	0.115	0.150
D	0.750	0.800	0.850
E	1.100	1.200	1.300
E1	1.500	1.600	1.700
E2	0.200 Ref		
L	0.010	0.040	0.070
θ	7° Ref		

Recommend land pattern (Unit: mm)



Note: This land pattern is for your reference only. Actual pad layouts may vary depending on application.