

**200mW SOD-523 Surface Mount**

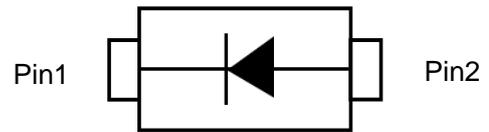
**Features**

- Low Forward Voltage Drop
- Flat Lead SOD-523 Small Outline Plastic Package
- Extremely Small SOD-523 Package
- Moisture Sensitivity: Level 1 per J-STD-020
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Lead Finish
- Band Indicates Cathode

**SOD-523 Surface Mount**



SOD-523



**Circuit Diagram**

**Absolute Maximum Ratings (T<sub>A</sub> = 25°C unless otherwise noted)**

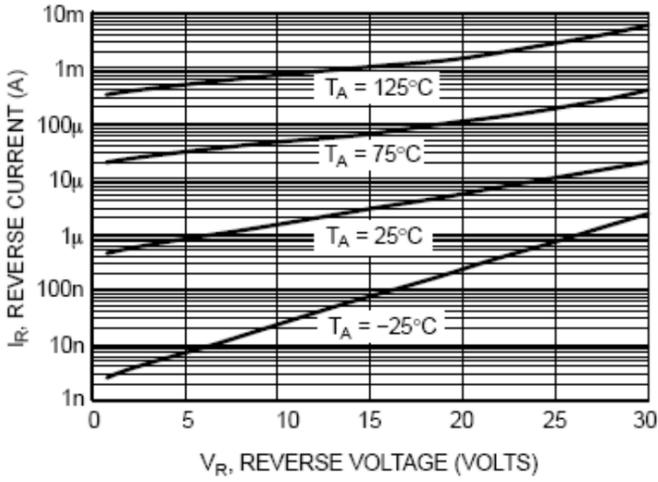
Symbol	Parameter	Value	Units
P <sub>D</sub>	Power Dissipation	200	mW
T <sub>STG</sub>	Storage Temperature Range	-55 to +125	°C
T <sub>J</sub>	Operating Junction Temperature	+125	°C
V <sub>R</sub>	Reverse Voltage	30	V
I <sub>F(AV)</sub>	Average Forward Current	200	mA
I <sub>FSM</sub>	Peak Forward Surge Current ( At 8.3ms single half sine-wave )	1	A

\*These ratings are limiting values above which the serviceability of the diode may be impaired

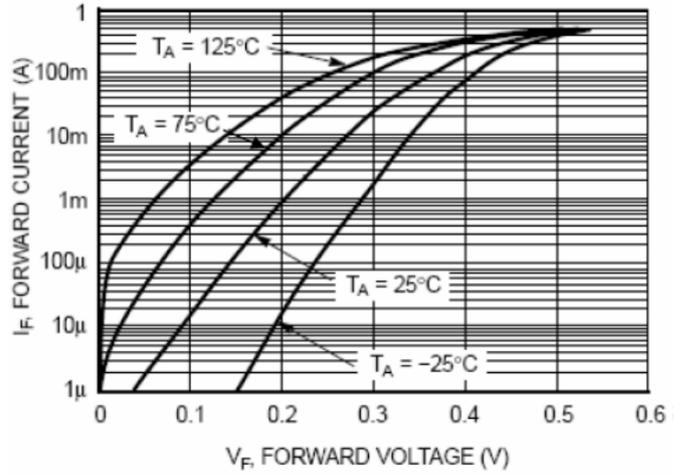
**Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)**

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B <sub>V</sub>	Breakdown Voltage	I <sub>R</sub> =500μA	30		V
I <sub>R</sub>	Reverse Leakage Current	V <sub>R</sub> =10V		30	μA
V <sub>F</sub>	Forward Voltage	I <sub>F</sub> =200mA		0.5	V
T <sub>rr</sub>	Reverse Recovery Time	I <sub>F</sub> = I <sub>R</sub> = 10mA , I <sub>R(REC)</sub> = 1.0mA		5.0	nS

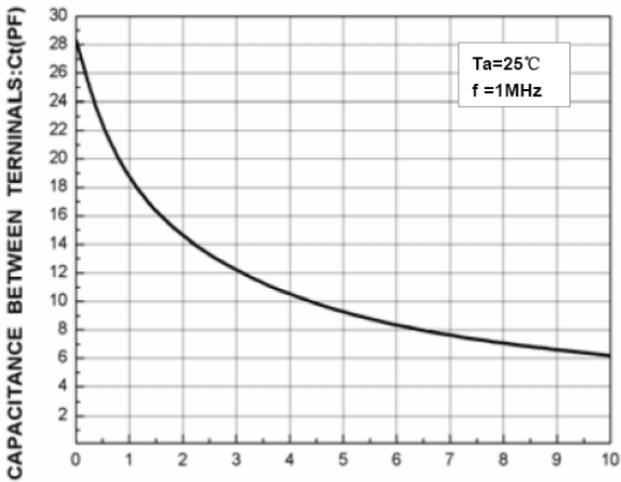
**Typical Performance Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise Specified)**



**Figure 2. Reverse Characteristics**

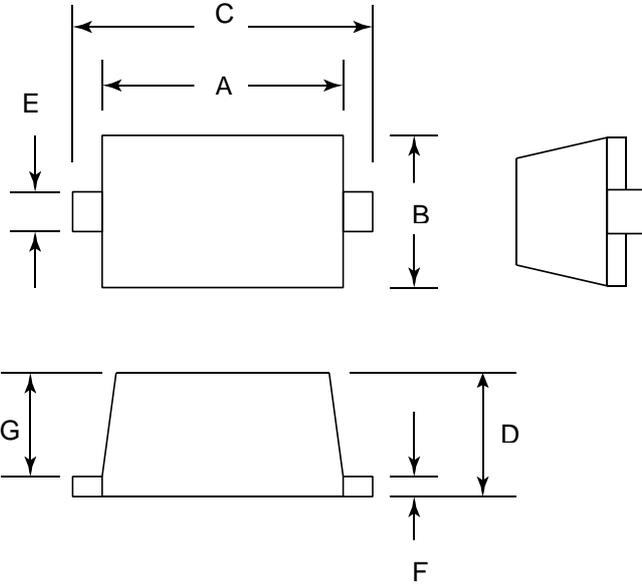


**Figure 1. Forward Characteristics**



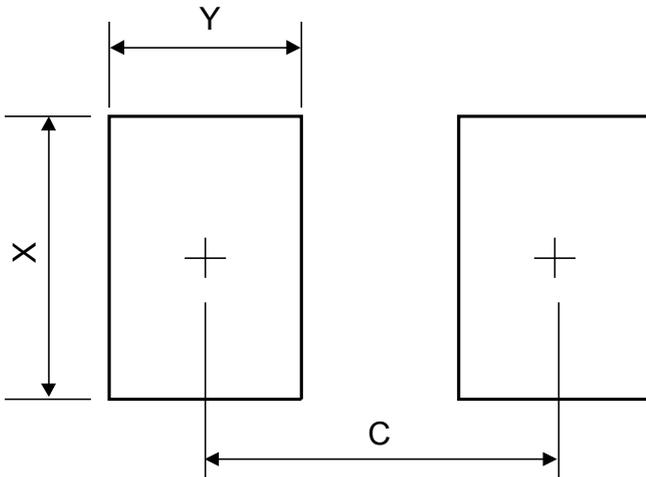
REVERSE VOLTAGE :  $V_R$ (V)  
**Figure3.Total Capacitance**

**SOD-523 Package Outline Drawing**



SYM	DIMENSIONS			
	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.10	1.30	0.043	0.051
B	0.70	0.90	0.028	0.035
C	1.50	1.70	0.059	0.067
D	0.50	0.70	0.020	0.028
E	0.25	0.35	0.010	0.014
F	0.10	0.20	0.004	0.008
G	0.50	0.70	0.020	0.028

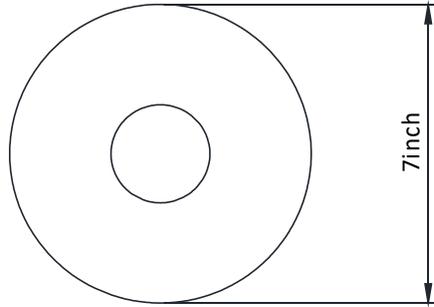
**Suggested Land Pattern**



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
C	1.42	0.056
X	0.70	0.028
Y	0.60	0.024

**TAPE AND REEL INFORMATION**

Reel Dimensions



Tape Dimensions

