

## 40V 200mA Schottky Barrier Diode

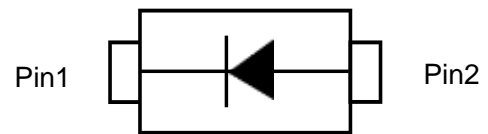
### Features

- 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

### SOD-523 Surface Mount



SOD-523



Circuit Diagram

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

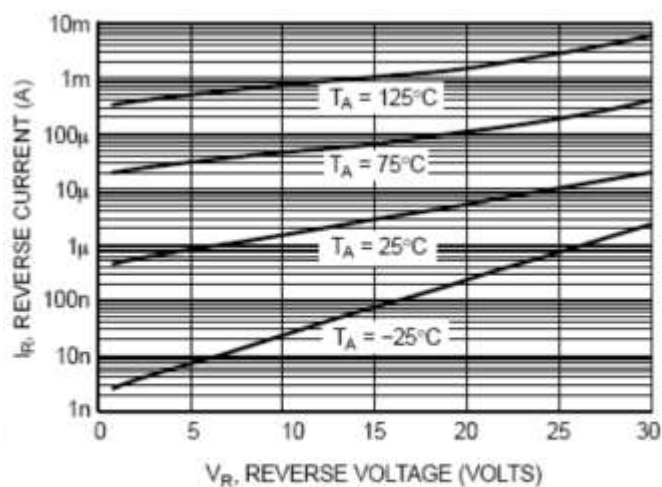
Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	200	mW
$T_{STG}$	Storage Temperature Range	-55 to +125	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	+125	$^\circ\text{C}$
$V_R$	Reverse Voltage	40	V
$I_{F(AV)}$	Average Forward Current	200	mA
$I_{FSM}$	Peak Forward Surge Current ( At 8.3ms single half sine-wave )	1	A

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

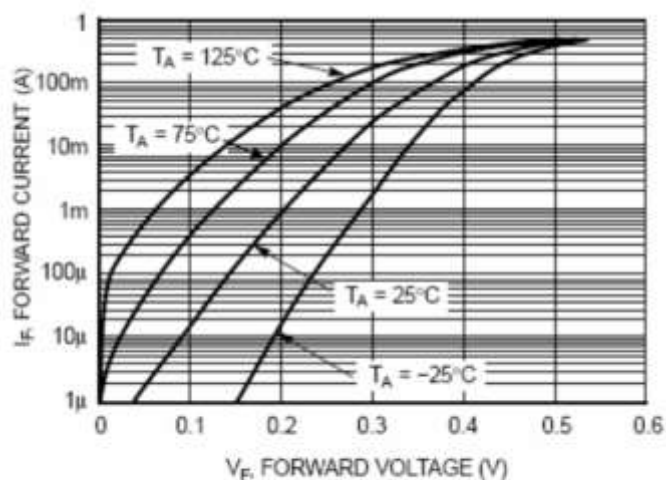
### Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
$B_V$	Breakdown Voltage	$I_R = 500\mu\text{A}$	40		V
$I_R$	Reverse Leakage Current	$V_R = 10\text{V}$		30	$\mu\text{A}$
$V_F$	Forward Voltage	$I_F = 200\text{mA}$		0.6	V
$T_{rr}$	Reverse Recovery Time	$I_F = I_R = 10\text{mA}$ , $I_{R(REC)} = 1.0\text{mA}$		5.0	nS

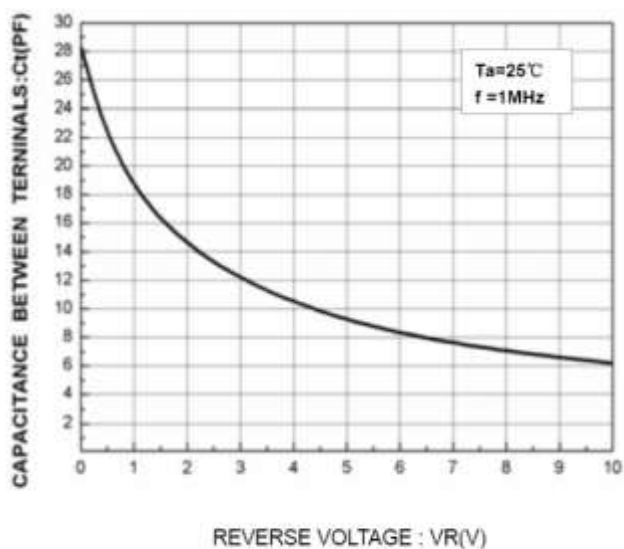
**Typical Performance Characteristics ( $T_A=25^\circ\text{C}$  unless otherwise Specified)**



**Figure 2. Reverse Characteristics**

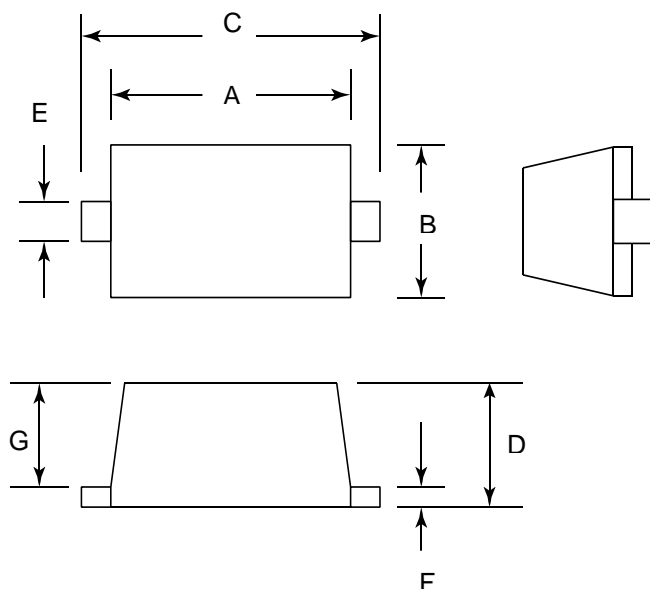


**Figure 1. Forward Characteristics**



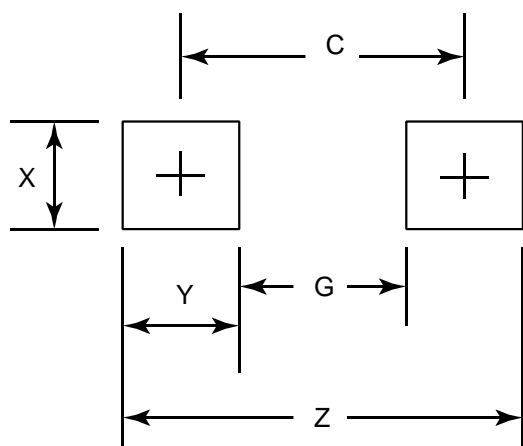
**Figure 3. Total Capacitance**

## 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	1.70	0.067
G	1.10	0.043
X	0.80	0.031
Y	0.60	0.024
Z	2.30	0.091