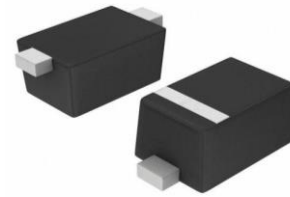


SOD-523 Plastic-Encapsulate Diodes

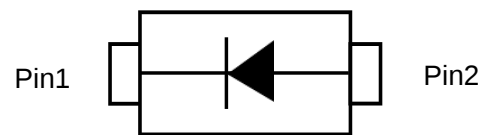
Features

- 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

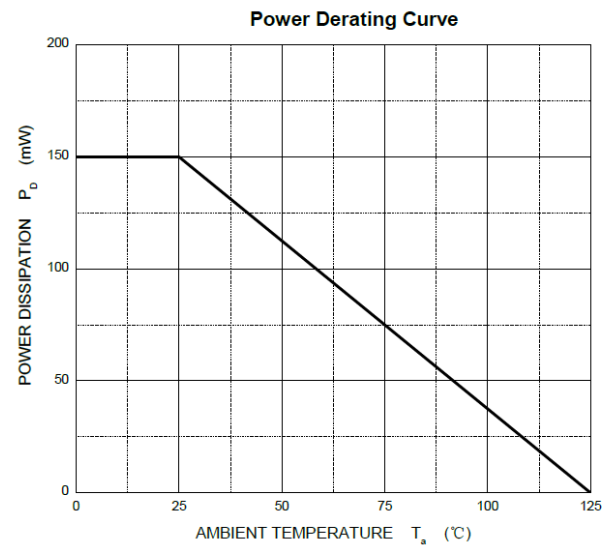
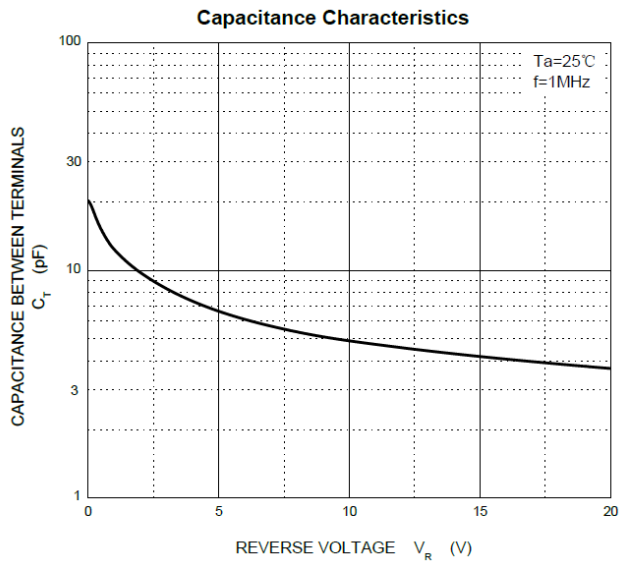
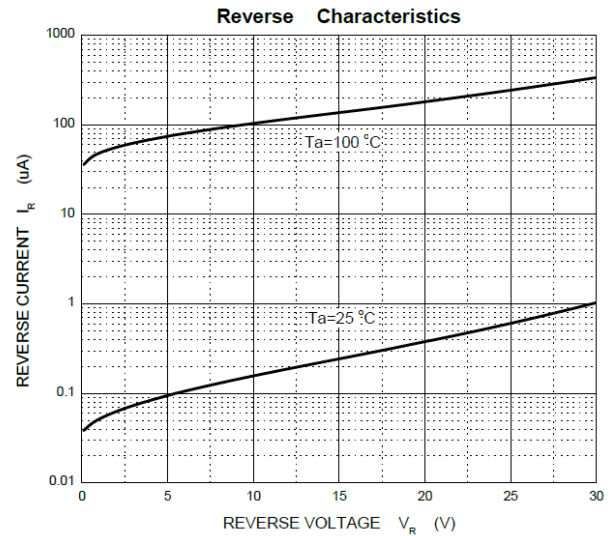
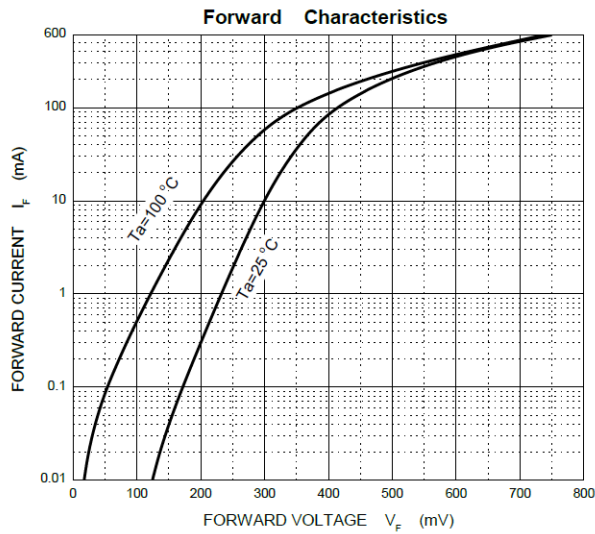
Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

Symbol	Parameter	Value	Units
P_D	Power Dissipation	150	mW
V_R	DC Reverse Voltage	30	V
I_O	Mean rectifying current	200	mA
I_{FSM}	Peak Forward Surge Current (At 8.3ms single half sine-wave)	1	A
T_{STG}	Storage Temperature Range	-55 to +125	°C
T_J	Operating Junction Temperature	125	°C
$R_{\theta JA}$	Thermal resistance junction to ambient	667	°C/W

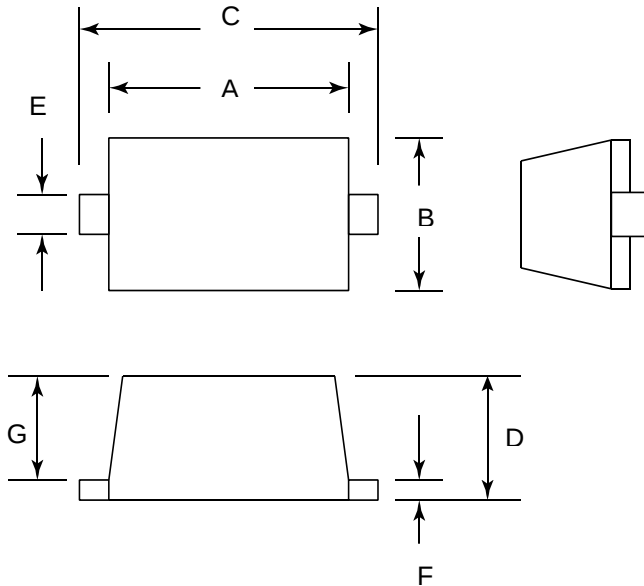
Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
I_R	Reverse Leakage Current	$V_R = 10\text{V}$		1	μA
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)

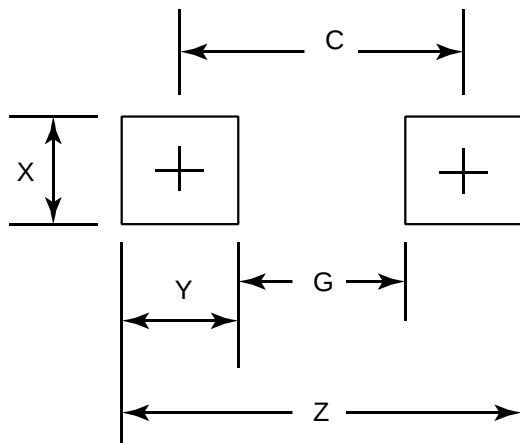


SOD-523 Package Outline Drawing



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