

SOD-523



Marking: B

Features

- High Current Capability
- Low Forward Voltage Drop
- Halogen free and RoHS compliant

Mechanical Data

- SOD-523 Small Outline Plastic Package
- Polarity: Color band denotes cathode end
- Epoxy UL: 94V-0
- Mounting Position: Any

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Symbol	Parameter	Value	Units
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-55 to +125	°C
T_J	Operating Junction Temperature	+125	°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 half sine-wave)	1	A

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

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

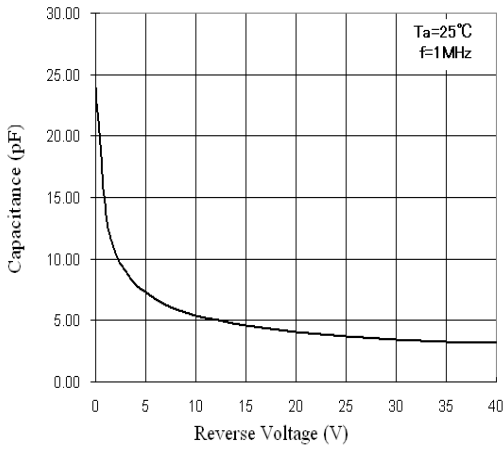
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	$I_R=500\mu A$	30		Volts
I_R	Reverse Leakage Current	$V_R=10V$		1	μA
V_F	Forward Voltage	$I_F=200mA$		0.6	Volts

Summary of Packing Options

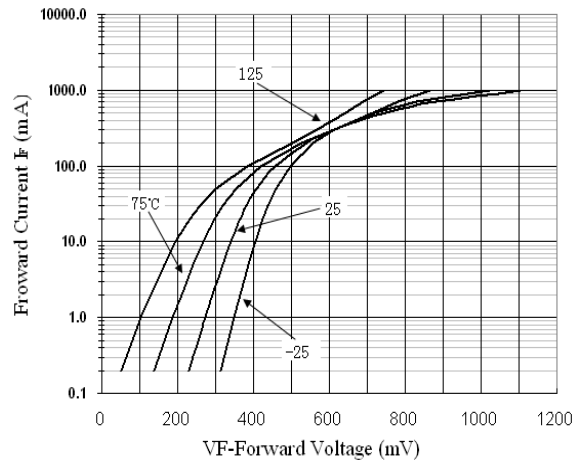
Package	Packing Description	Packing Quantity	Industry Standard
SOD-523	Tape/Reel, 7" reel	3000	EIA-481-1

Ratings and Characteristic Curves

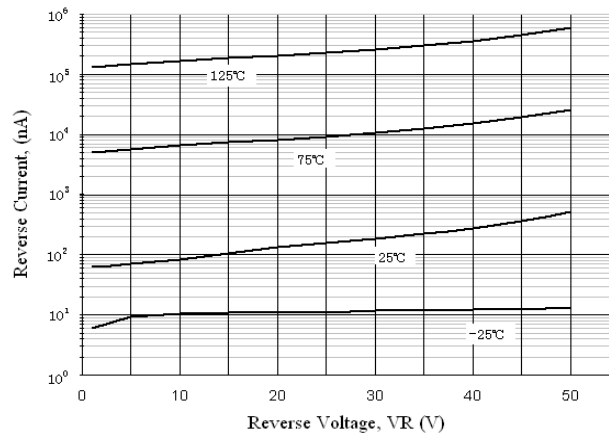
Total Capacitance



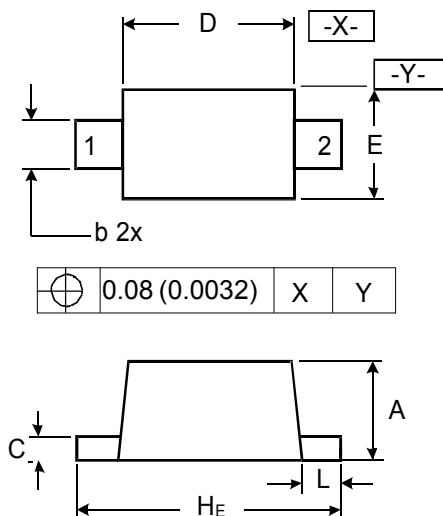
Forward Voltage vs Ambient Temperature



Reverse Current vs Reverse Voltage



Package Outline Dimensions: SOD-523



DIMENSIONS

SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.50	0.70	0.020	0.028
b	0.25	0.35	0.010	0.014
C	0.07	0.20	0.0028	0.0079
D	1.10	1.30	0.043	0.051
E	0.70	0.90	0.028	0.035
HE	1.50	1.70	0.059	0.067
L	0.15	0.25	0.006	0.010