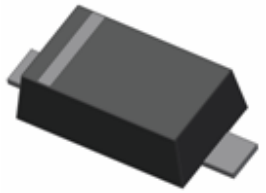
TAK CHEONG®

SEMICONDUCTOR

SOD-323 SURFACE MOUNT
Very Small Outline Flat Lead Plastic Package
Schottky Barrier Diode

Green Product



SOD-323 Flat Lead

ELECTRICAL SYMBOL

Absolute Maximum Ratings T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
T_{STG}	Storage Temperature Range	-40 to +125	°C
T_J	Operating Junction Temperature	+125	°C
V_{RRM}	Repetitive Peak Reverse Voltage	45	V
V_R	Reverser Voltage (DC)	40	V
$I_{F(AV)}$	Average Forward Rectified Current	100	mA
I_{FSM}	Peak Forward Surge Current (60Hz/1cyc)	1	A

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

Specification Features:

- Low Forward Voltage Drop
- Flat Lead SOD-323 Small Outline Plastic Package
- Surface Device Type Mounting
- RoHS Compliant
- Green EMC
- Matte Tin(Sn) Terminal Finish
- Band Indicates Cathode

DEVICE MARKING CODES:

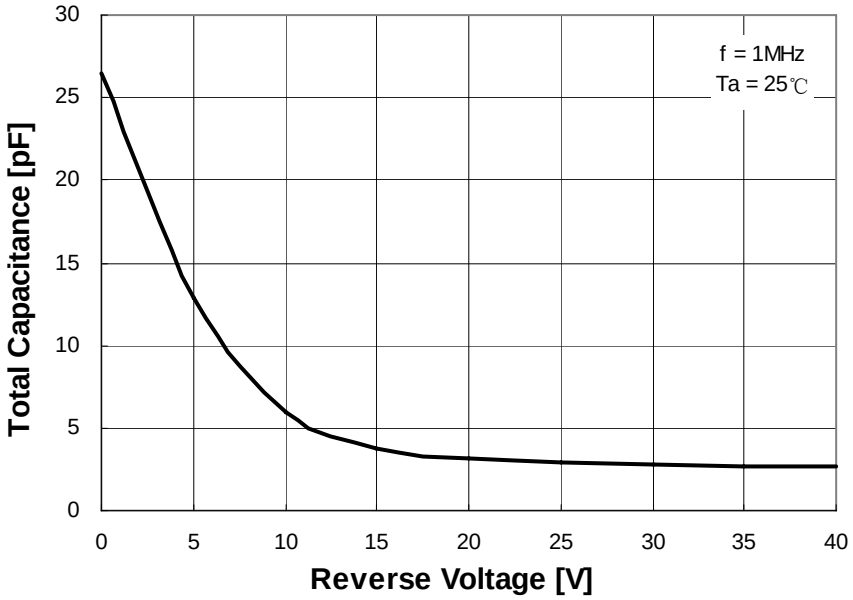
Device Type	Device Marking
RB500V-40	5

Electrical Characteristics T_A = 25°C unless otherwise noted

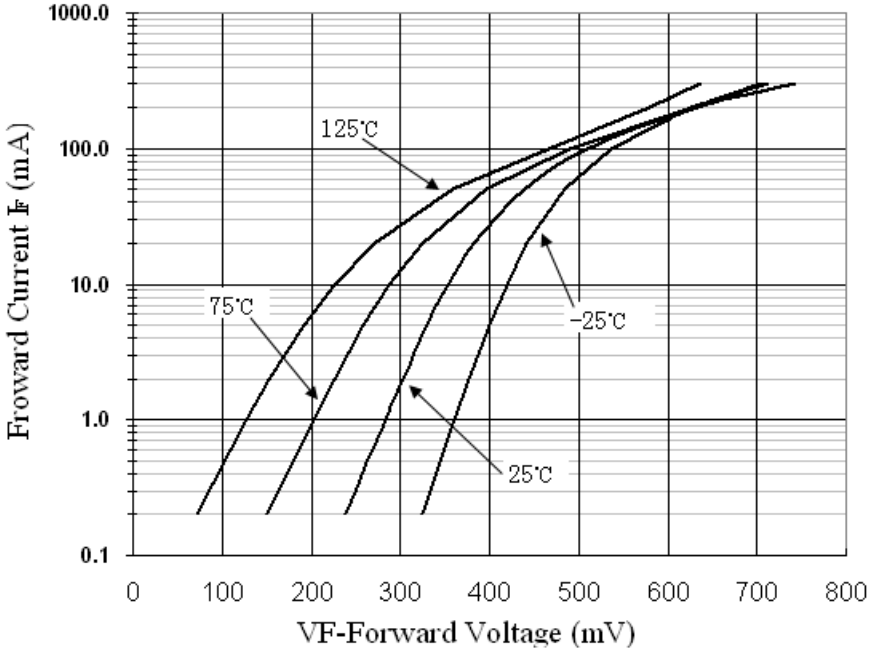
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
I_R	Reverse Leakage Current	V_R=10V	-	1	uA
V_F	Forward Voltage	I_F=10mA	-	0.45	Volts
Ct	Capacitance	V_R=10V, f=1M_{HZ}	**Typ.** 6.0		pF

Typical Performance Characteristics

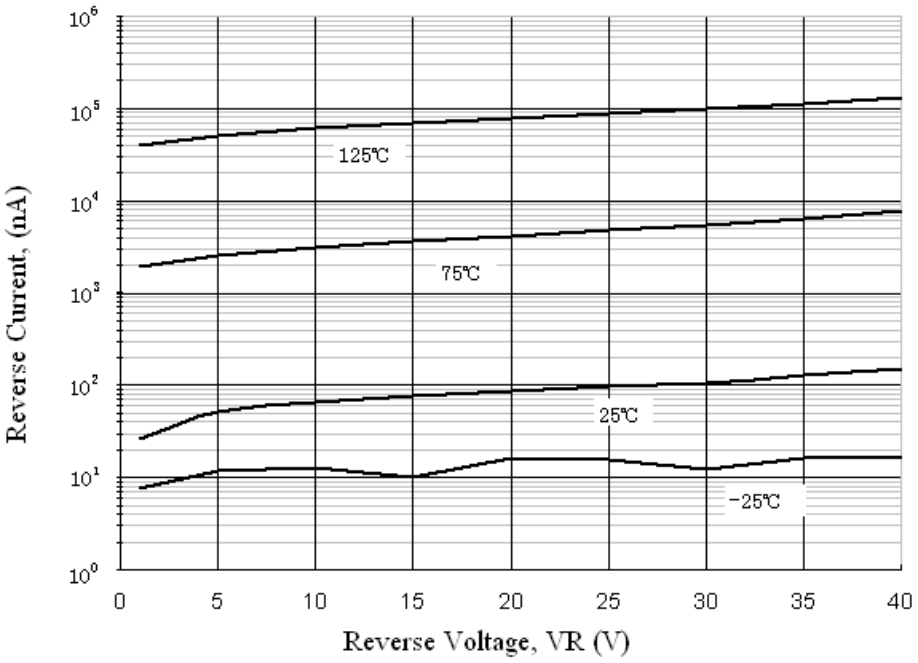
Total Capacitance



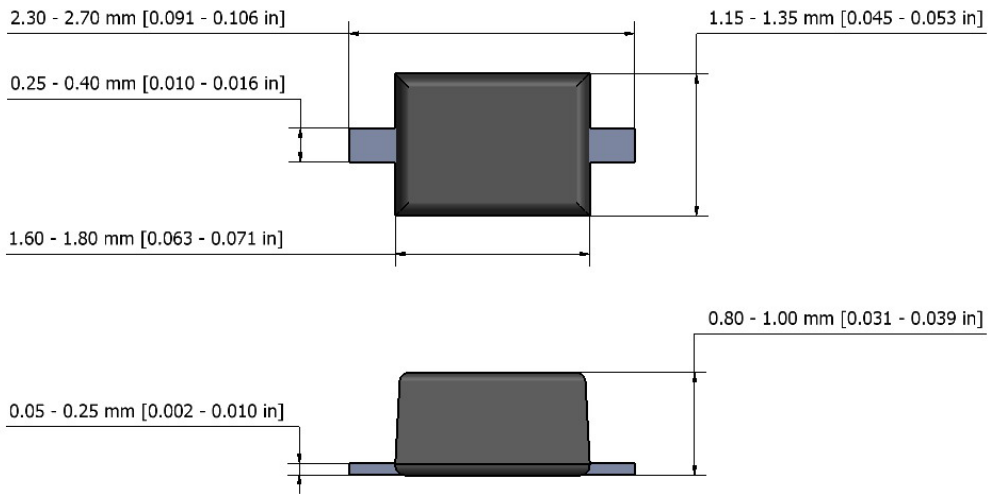
Forward Voltage vs Ambient Temperature



Reverse Current vs Reverse VoltageReverse



SOD-323 Package Outline



NOTES:
1. The above package outline is similar to JEITA SC-90.
2. Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

NOTICE

The information presented in this document is for reference only. Tak Cheong reserves the right to make changes without notice for the specification of the products displayed herein.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Tak Cheong Semiconductor Co., Ltd., or anyone on its behalf, assumes no responsibility or liability for any damagers resulting from such improper use of sale.

This publication supersedes & replaces all information reviously supplied. For additional information, please visit our website http://www.takcheong.com, or consult your nearest Tak Cheong's sales office for further assistance.