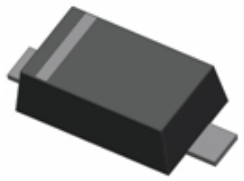
TAK CHEONG®

SEMICONDUCTOR

200mW SOD-323 SURFACE MOUNT
Small Outline Flat Lead Plastic Package
Fast Switching Diode

Green Product



SOD-323 Flat Lead

ELECTRICAL SYMBOL

Absolute Maximum Ratings
T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Peak Repetitive Reverse Voltage	85	V
V_R	DC Blocking Voltage	75	V
I_O	Continuous Forward Current	250	mA
I_{FSM}	Peak Forward Surge Current (Pulse Width=1us)	2	A
P_D	Power Dissipation	200	mW
T_{STG}	Storage Temperature Range	-55 to +150	°C
T_J	Operating Junction Temperature	+150	°C

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

Specification Features:

- § Fast Switching Device (T_{RR} <4.0 nS)
- § General Purpose Diodes
- § Flat Lead SOD-323 Small Outline Plastic Package
- § Surface Device Type Mounting
- § RoHS Compliant
- § Green EMC
- § Matte Tin(Sn) Lead Finish
- § Band Indicates Cathode

DEVICE MARKING CODE:

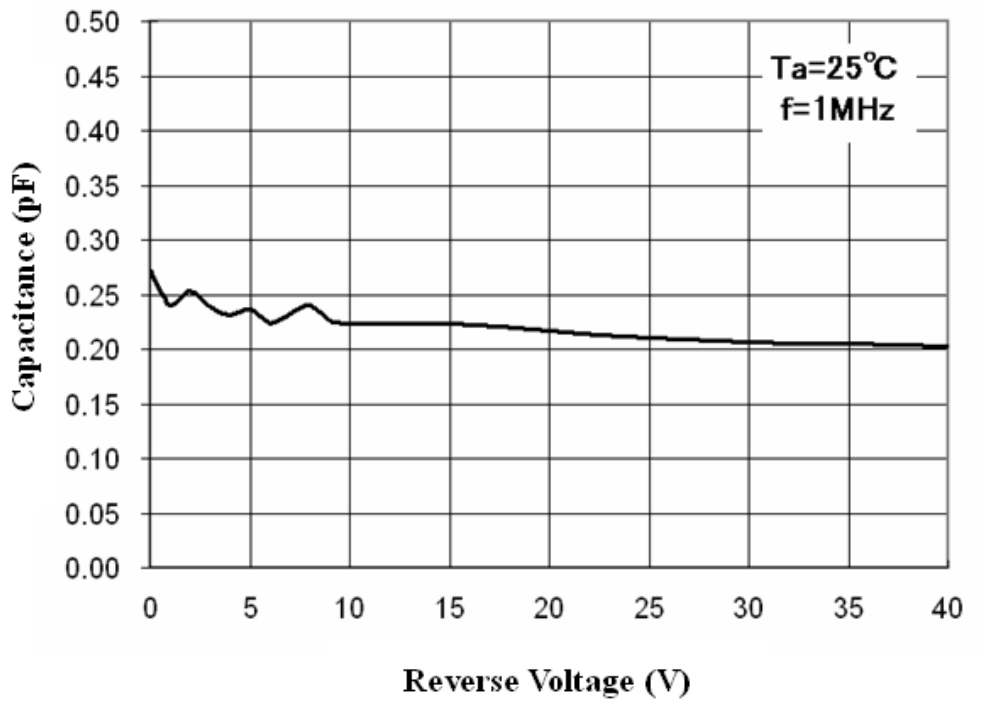
Device Type	Device Marking
BAS316	A6

Electrical Characteristics
T_A = 25°C unless otherwise noted

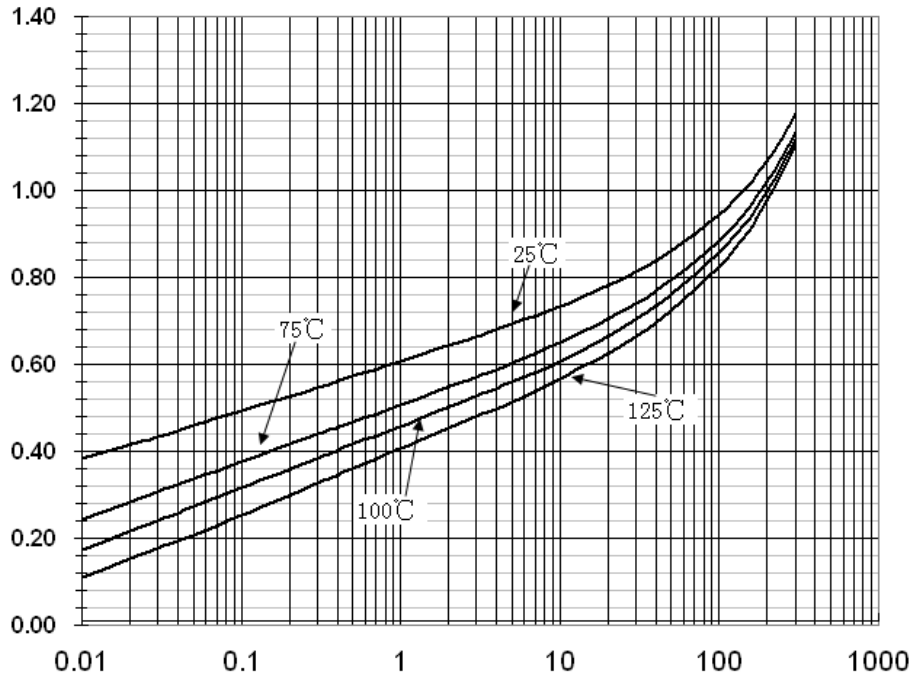
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	I_R=100μA	100		Volts
		I_R=5μA	75		
I_R	Reverse Leakage Current	V_R=25V		30	nA
		V_R=75V		1	μA
V_F	Forward Voltage	I_F=1mA		0.715	Volts
		I_F=10mA		0.885	
		I_F=50mA		1.00	
		I_F=150mA		1.25	
T_{RR}	Reverse Recovery Time	I_F=10mA, I_R=60mA, R_L=100Ω, I_{RR}=1mA		4	nS
C	Capacitance	V_R=0V, f=1M_{HZ}		4	pF

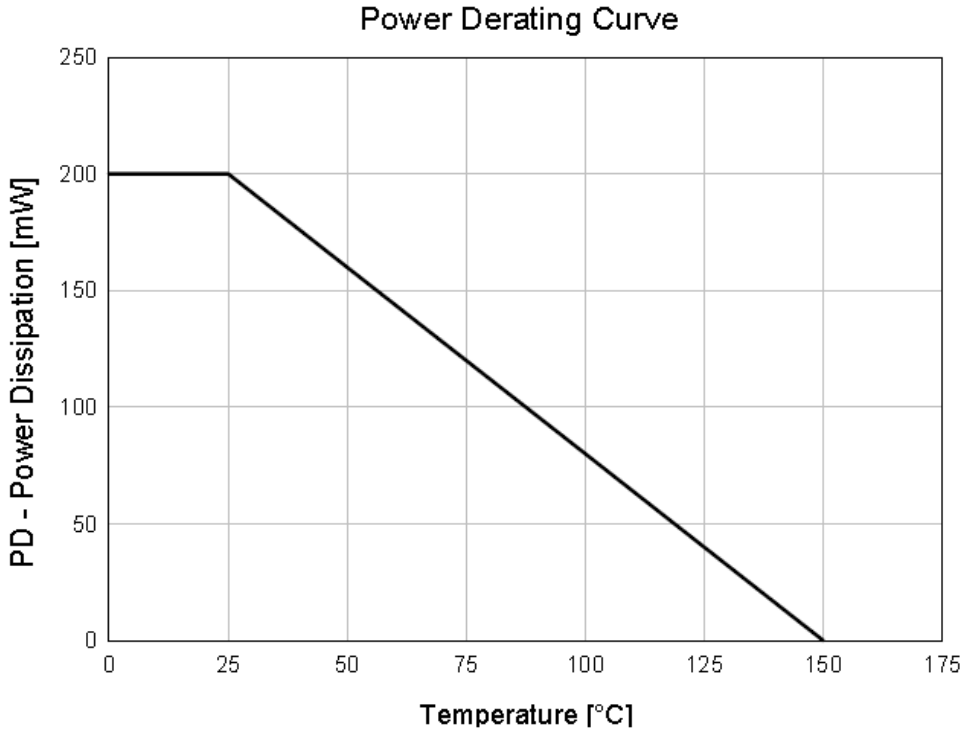
Typical Performance Characteristics

Total Capacitance

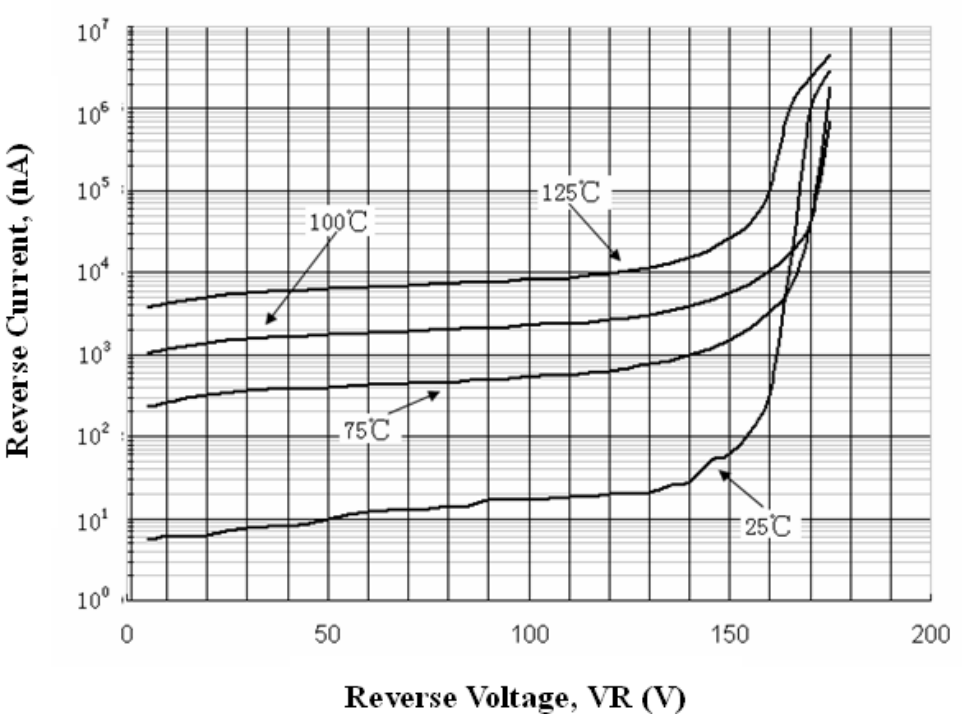


Forward Voltage vs Ambient Temperature

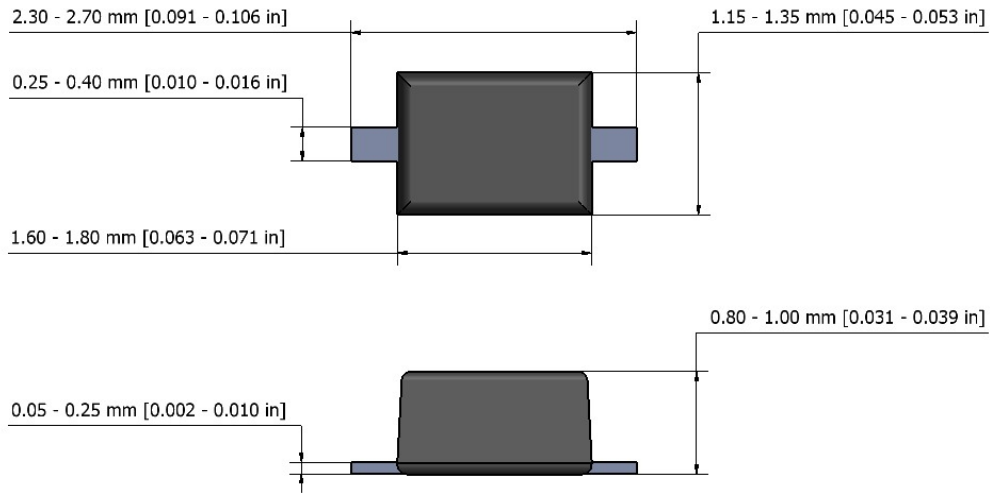




Reverse Current vs Reverse VoltageReverse



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.

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