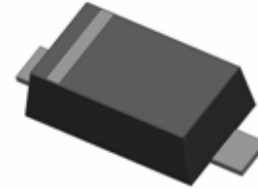


**200mW SOD-323 SURFACE MOUNT**  
**Small Outline Flat Lead Plastic Package**  
**High Speed Switching Diode**

Green Product



SOD-323 Flat Lead



ELECTRICAL SYMBOL

**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	-65 to +150	$^\circ\text{C}$
$T_J$	Operating Junction Temperature	+150	$^\circ\text{C}$
$V_R$	Reverse Voltage	80	V
$V_{RM}$	Repetitive Peak Reverse Voltage	90	V
$I_{FM}$	Forward Current	250	mA
$I_O$	Continuous Forward Current	150	mA
$I_{FRM}$	Repetitive Peak Forward Current	500	mA

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

**Specification Features:**

- High Speed Switching Device ( $T_{RR} < 4.0 \text{ nS}$ )
- 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:**

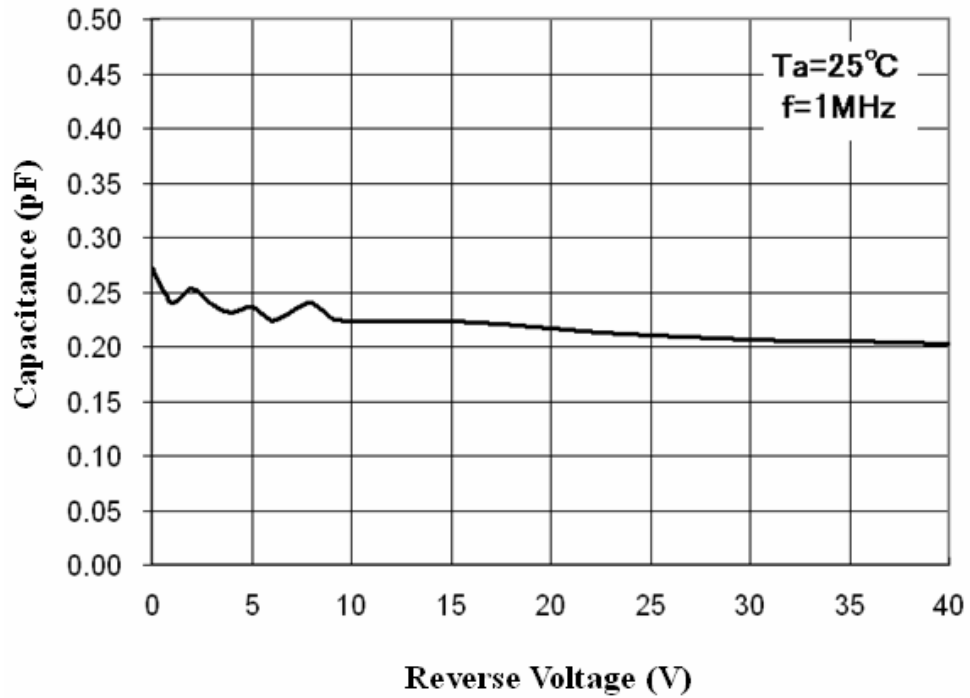
Device Type	Device Marking
1SS355	S4

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

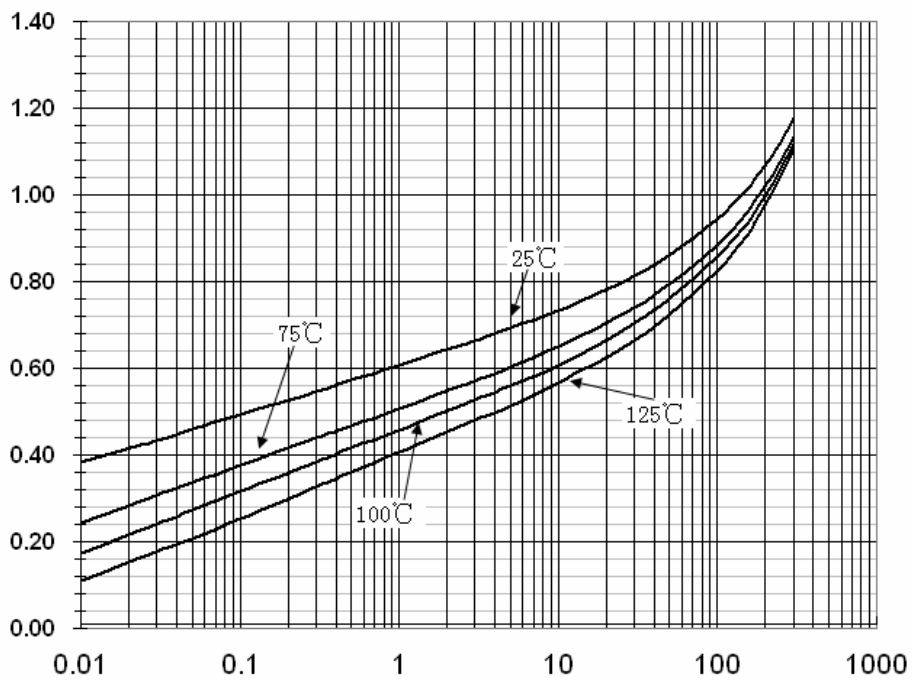
Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
$B_V$	Breakdown Voltage	$I_R=100\mu\text{A}$	80		Volts
$I_R$	Reverse Leakage Current	$V_R=80\text{V}$		100	nA
$V_F$	Forward Voltage	$I_F=100\text{mA}$		1.2	Volts
$T_{RR}$	Reverse Recovery Time	$I_F=10\text{mA}$ $V_R=6\text{V}$ $R_L=100\Omega$		4	nS
<b>C</b>	Capacitance	$V_R=0.5\text{V}, f=1\text{MHz}$		4	pF

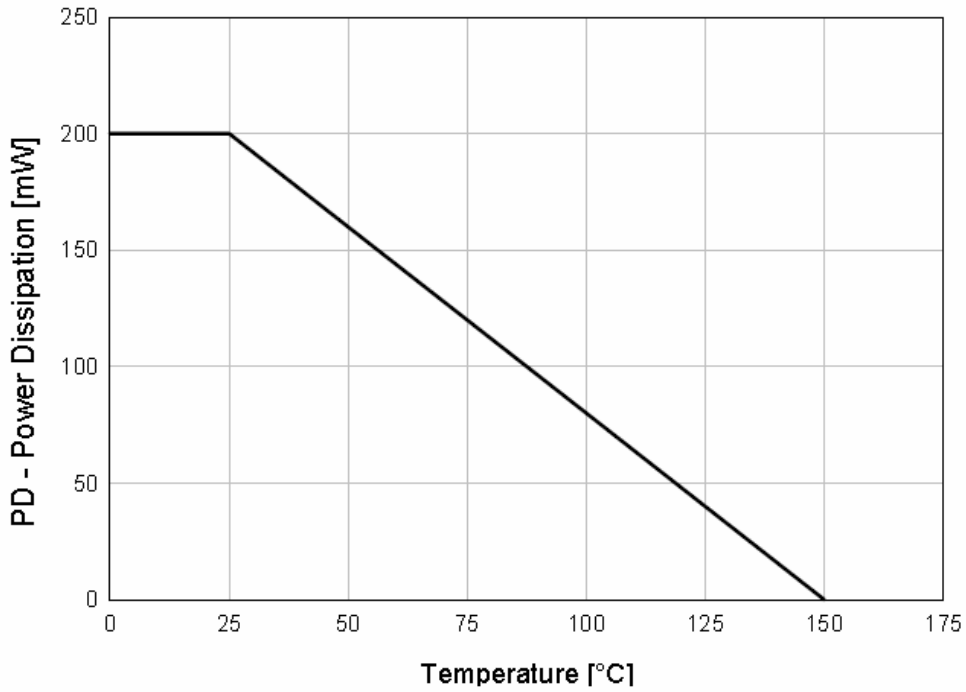
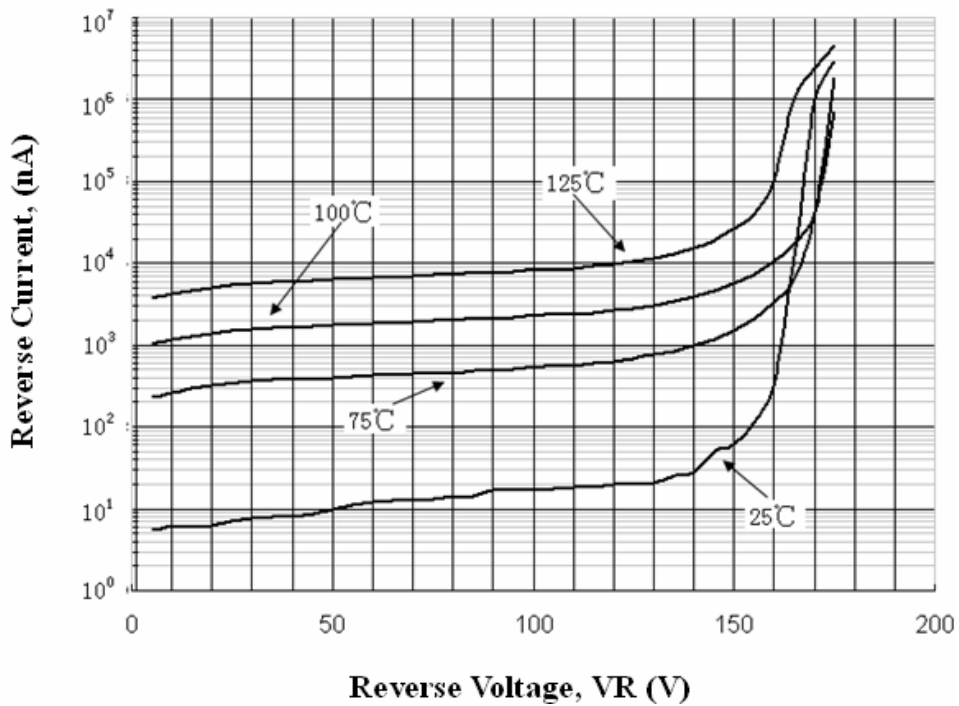
## Typical Performance Characteristics

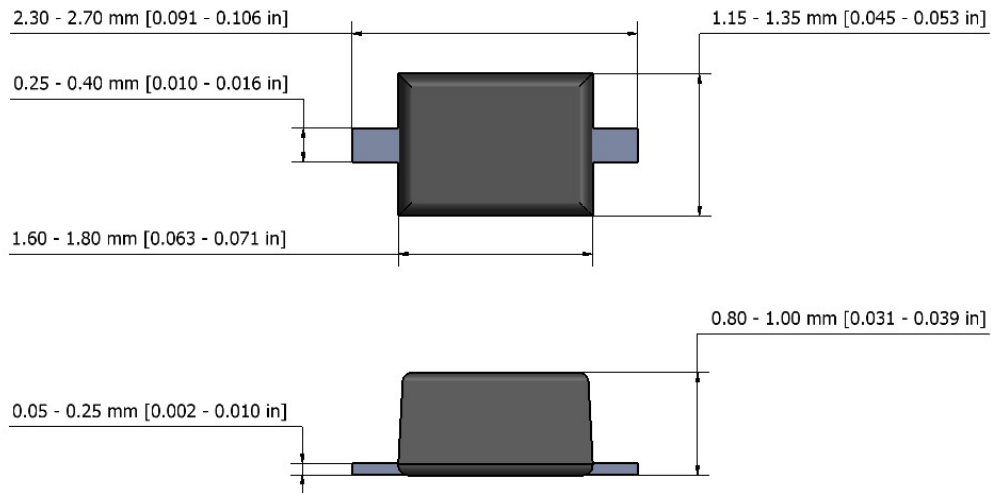
Total Capacitance



Forward Voltage vs Ambient Temperature



**Power Derating Curve**

**Reverse Current vs Reverse Voltage**



**SOD-323 Package Outline**

NOTE: The above package outline is similar to JEITA SC-90.

This datasheet presents technical data of Tak Cheong's Switching Diodes. Complete specifications for the individual devices are provided in the form of datasheets. A comprehensive Selector Guide is included to simplify the task of choosing the best set of components required for a specific application. For additional information, please visit our website <http://www.takcheong.com>.

Although information in this datasheet has been carefully checked, no responsibility for the inaccuracies can be assumed by Tak Cheong. Please consult your nearest Tak Cheong's sales office for further assistance.

Tak Cheong reserves the right to make changes without further notice to any products herein to further improve reliability, function or design, cost and productivity.

**TAK CHEONG**<sup>®</sup> and  are registered trademarks of Tak Cheong Electronics (Holdings) Co., Ltd.