

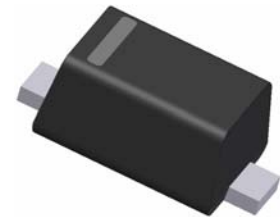


DATA SHEET

SEMICONDUCTOR

1SS400

200mW SOD-523 SURFACE MOUNT
Very Small Outline Flat Lead Plastic Package
General Purpose Application
High Speed Switching Diode

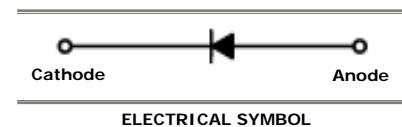


SOD-523 Flat Lead

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	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	+150	$^\circ\text{C}$
V_{RSM}	Non-Repetitive Peak Reverse Voltage	100	V
I_{FSM}	Peak Forward Surge Current	500	mA
I_{FM}	Forward Current	200	mA

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



Specification Features:

- Fast Switching Device ($T_{RR} < 4.0 \text{ nS}$)
- High Speed Switching Diodes
- Extremely Small SOD-523 Package
- Flat Lead SOD-523 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
1SS400	E4

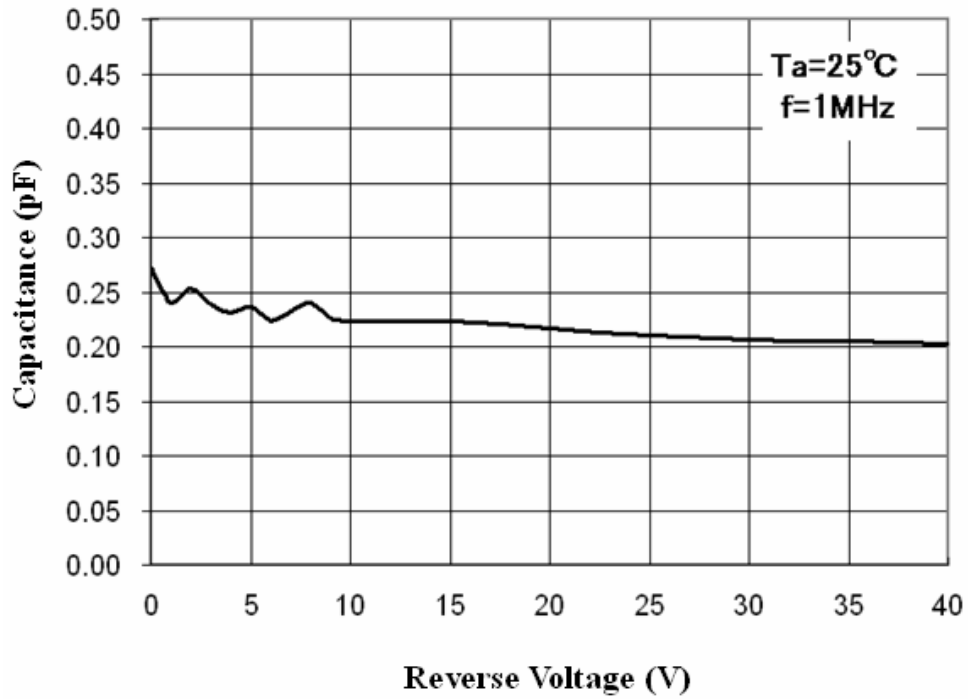
Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Test Condition	Limits		Unit
			Min	Max	
B_V	Breakdown Voltage	$I_R = 100\mu\text{A}$	100		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
C	Capacitance	$V_R = 0.5\text{V}, f = 1\text{MHz}$		4	pF

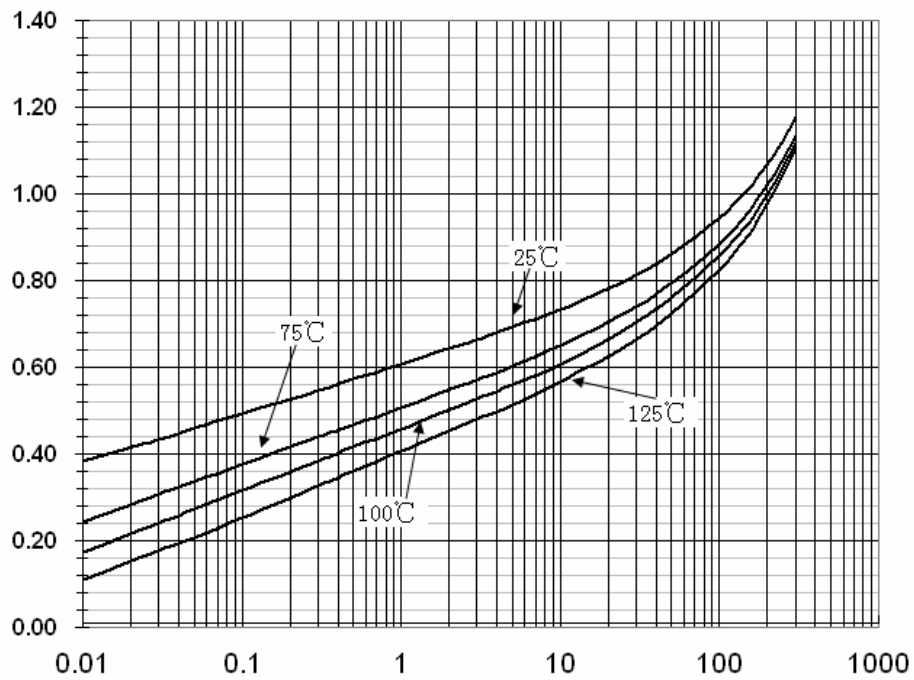
DEVICE CHARACTERISTICS

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Total Capacitance

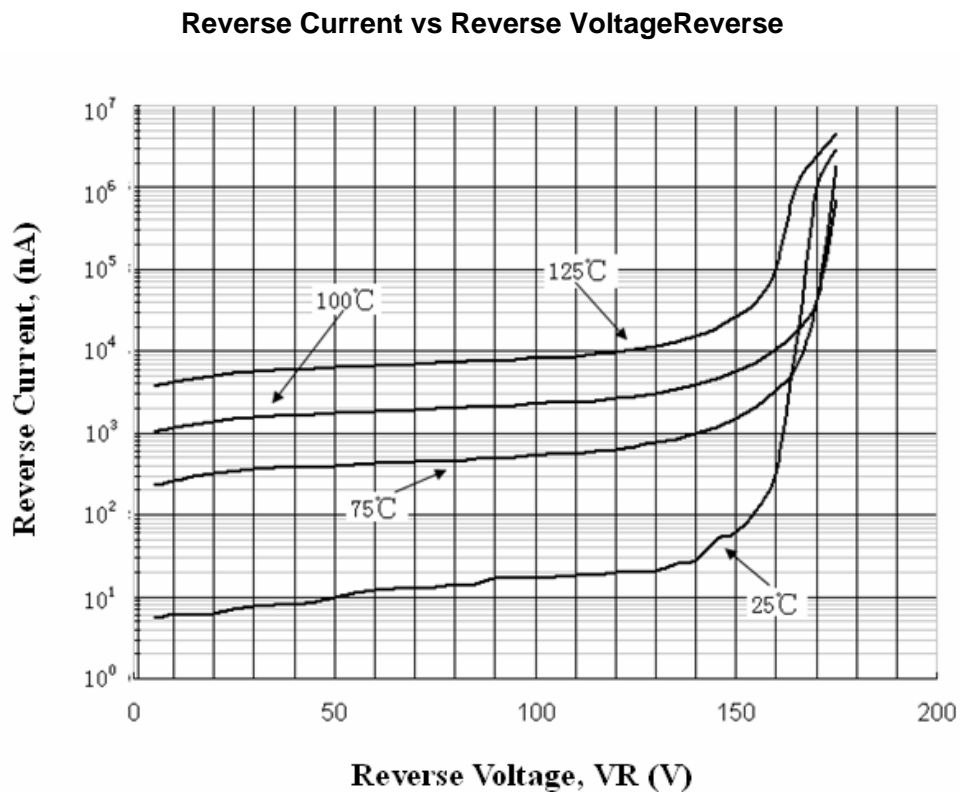
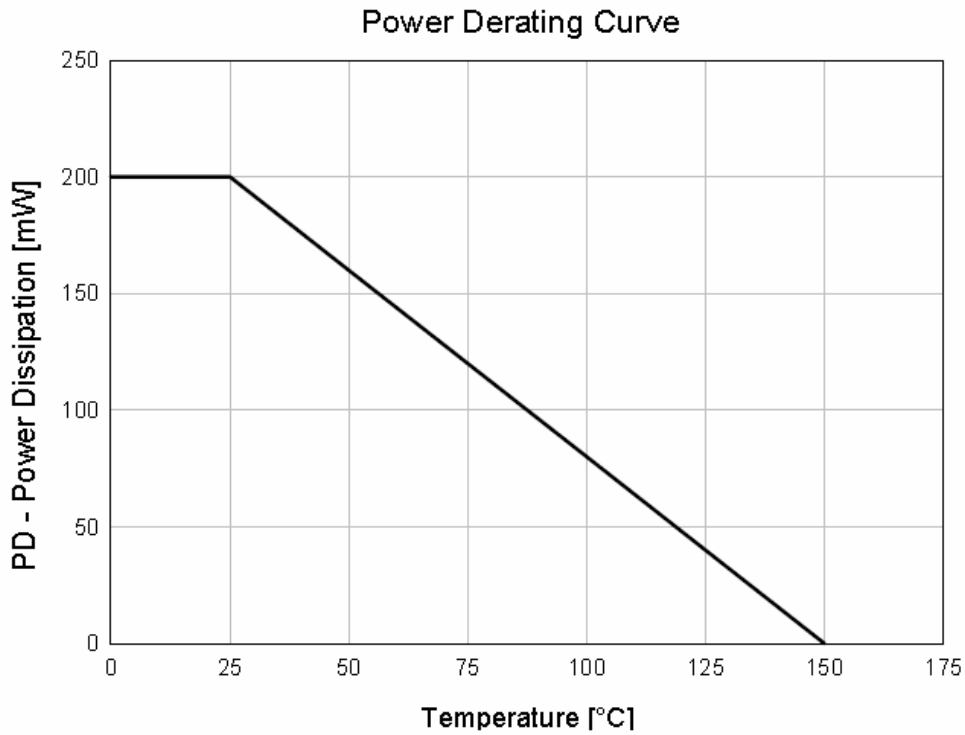


Forward Voltage vs Ambient Temperature



DEVICE CHARACTERISTICS

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PACKAGE OUTLINE & DIMENSIONS

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Flat Lead SOD-523 Package Outline

