

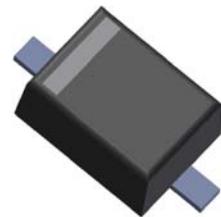


DATA SHEET

SEMICONDUCTOR

1SS355FL

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



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	°C
T_J	Operating Junction Temperature	+150	°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.

DEVICE MARKING CODES:

Device Type	Device Marking
1SS355FL	S4

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
- Moisture Sensitivity Level 1
- Clip Bonding Construction, Good Thermal Capability
- Pb Free Version and RoHS Compliant
- Matte Tin(Sn) Lead Finish with Nickel(Ni) Underplate
- Band Indicates Cathode

Electrical Characteristics

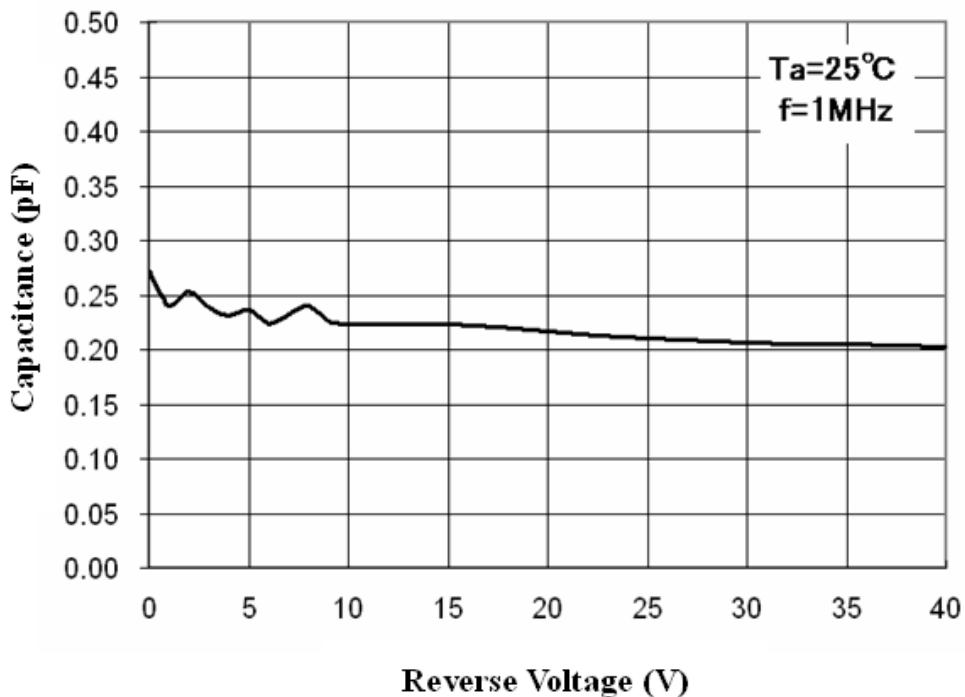
$T_A = 25^\circ\text{C}$ unless otherwise noted

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
C	Capacitance	$V_R=0.5\text{V}$, $f=1\text{MHz}$		4	pF

DEVICE CHARACTERISTICS

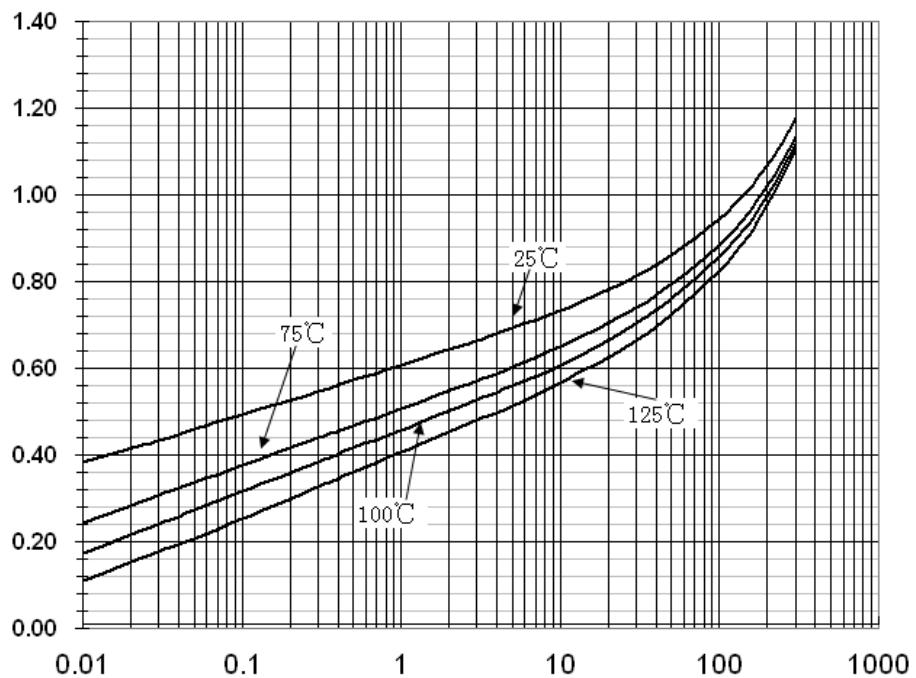
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Total Capacitance



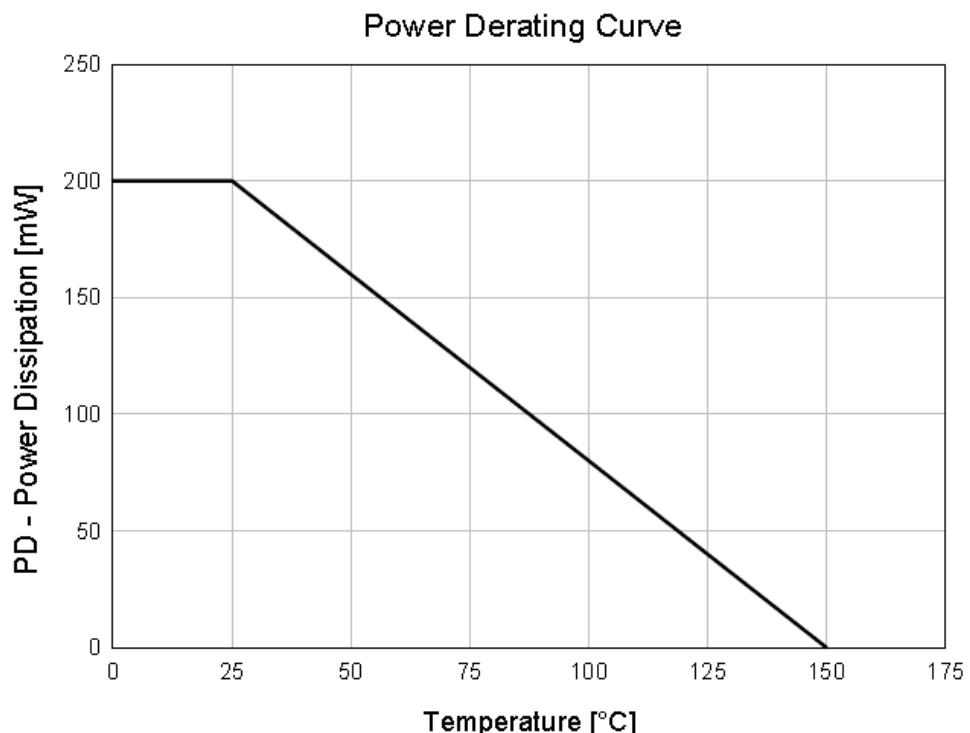
Reverse Voltage (V)

Forward Voltage vs Ambient Temperature

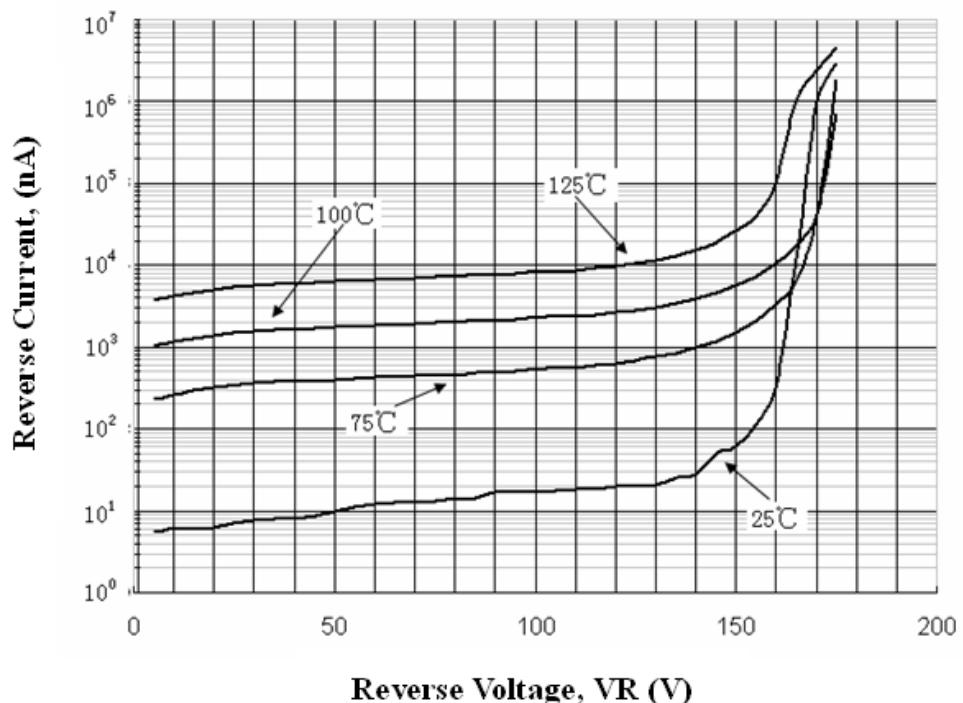


DEVICE CHARACTERISTICS

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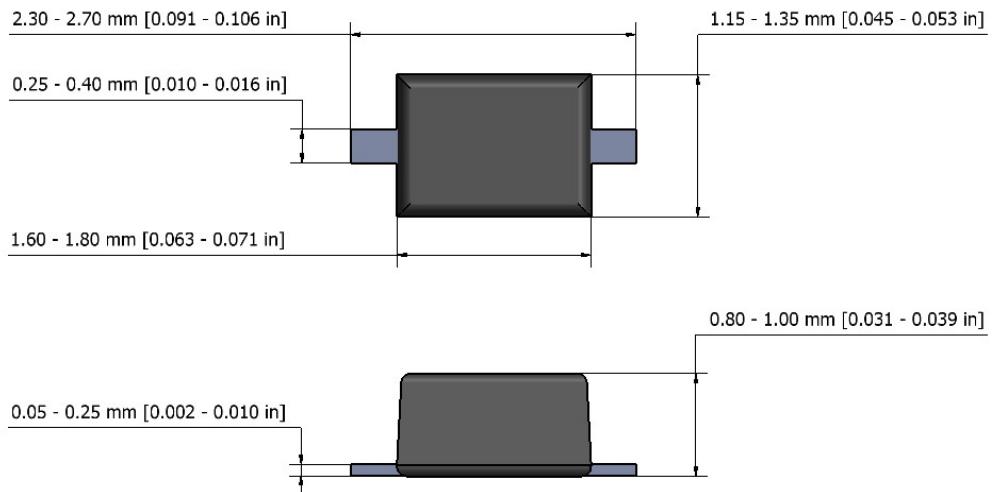


Reverse Current vs Reverse Voltage Reverse

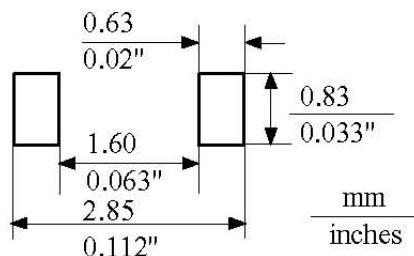


PACKAGE OUTLINE & DIMENSIONS

1SS355FL



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



Mounting Pad Layout