PANJIT SEMI CONDUCTOR

DATA SHEET

SS0520~SS0540

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 20 to 40 Volts **CURRENT** 0.50 Amperes

FEATURES

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

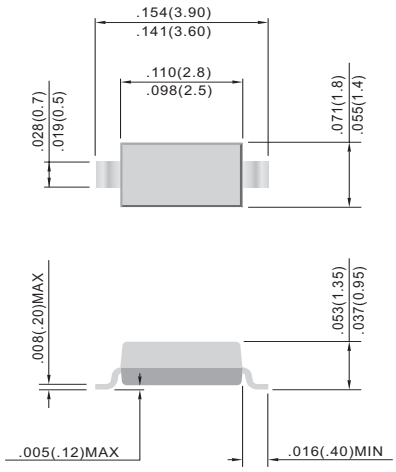
Case: SOD-123, Plastic

Terminals: Solderable per MIL-STD-202G, Method 208

Polarity: See Diagram Below

Approx. Weight: 0.008 gram

SOD-123 Unit: inch (mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

For capacitive load, derate current by 20%.

Parameter	Symbol	SS0520	SS0530	SS0540	Units
Marking Code		B2	B3	B4	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	V
Maximum Average Forward Current at Ta=75°C	I_{AV}	0.5			A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	5.5			A
Maximum Instantaneous Forward Voltage	V_F	0.3@ 0.1A 0.385@ 0.5A	0.375@ 0.1A 0.430@ 0.5A	0.51@ 0.5A 0.62@ 1.0A	V
Maximum Reverse Current	I_R	75@ Vr=10V	20@ Vr=15V	10@ Vr=20V	uA
Typical junction capacitance at V_R=0V DC	C_J	170			pF
Maximum Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	150 206			°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 TO +125			°C

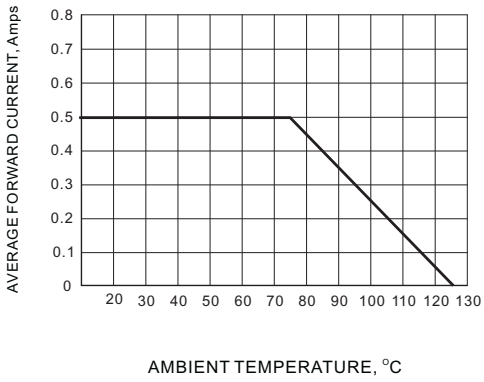


Fig.1 FORWARD CURRENT DERATING

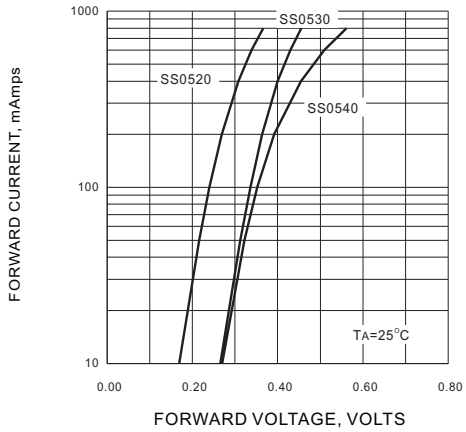


Fig.2 TYPICAL FORWARD VOLTAGE

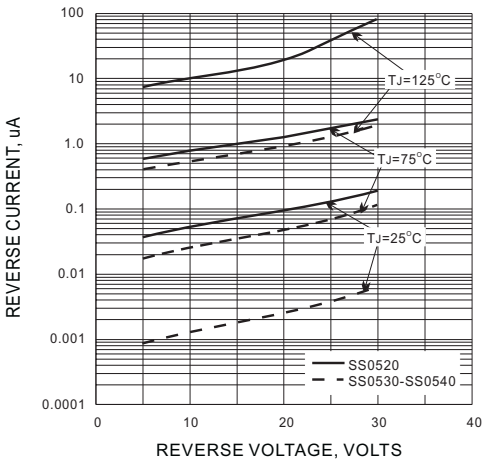


Fig.3 TYPICAL REVERSE CURRENT

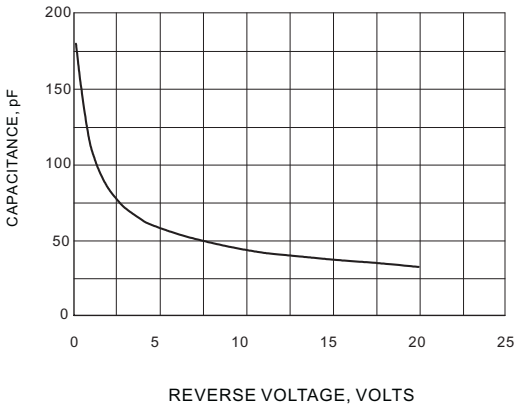
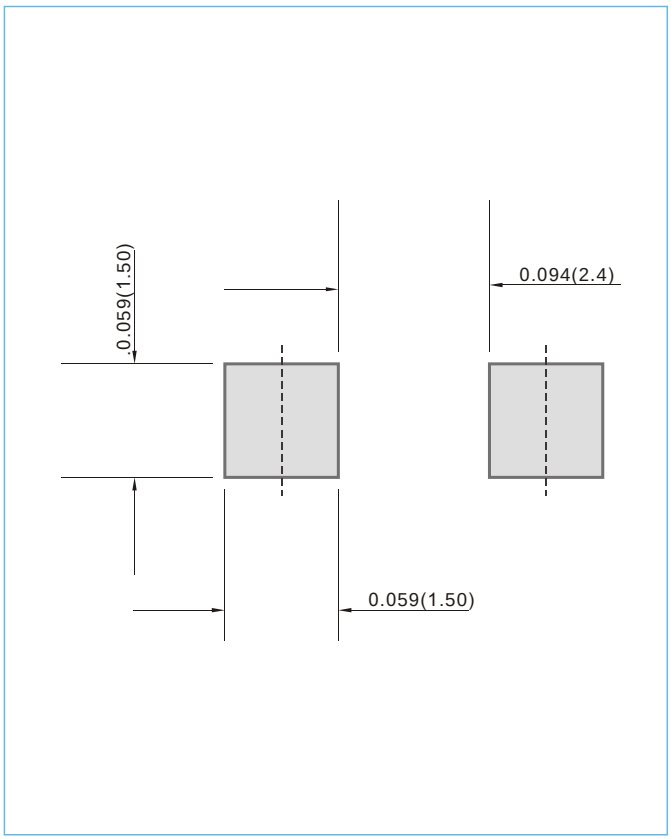


Fig.4 TYPICAL JUNCTION CAPACITANC

MOUNTING PAD LAYOUT

SOD-123 Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3.0K per 7" plastic Reel

LEGAL STATEMENT

IMPORTANT NOTICE

This information is intended to unambiguously characterize the product in order to facilitate the customer's evaluation of the device in the application. The information will help the customer's technical experts determine that the device is compatible and interchangeable with similar devices made by other vendors. The information in this data sheet is believed to be reliable and accurate. The specifications and information herein are subject to change without notice. New products and improvements in products and product characterization are constantly in process. Therefore, the factory should be consulted for the most recent information and for any special characteristics not described or specified.