



SS0520~SS0540

SURFACE MOUNT SCHOTTKY BARRIER

VOLTAGE 20 to 40 Volts

CURRENT 0.50 Amperes

SOD-123

Unit: inch (mm)

FEATURES

- Low turn-on voltage
- Fast switching
- PN Junction Guard Ring for Transient and ESD Protection.
- In compliance with EU RoHS 2002/95/EC directives

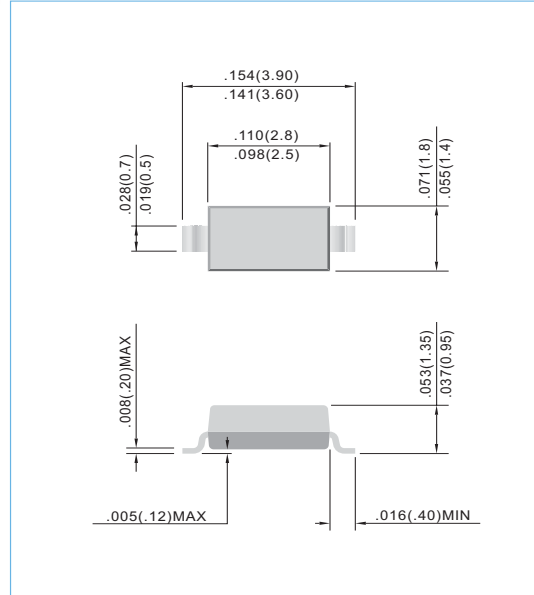
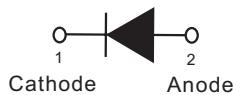
MECHANICAL DATA

Case: SOD-123, Plastic

Terminals: Solderable per MIL-STD-750, Method 2026

Polarity : Color band cathode

Approx. Weight: 0.008 gram



MAXIMUM RATINGS

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 $T_A=75^\circ\text{C}$	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
Typical junction capacitance at $V_R=0\text{V DC}$	C_J	170			pF
Typical Thermal Resistance	$R_{\theta JL}$ $R_{\theta JA}$	150 206			$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +125			$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. For capacitive load, derate current by 20%.

Parameter	Symbol	SS0520	SS0530	SS0540	Units
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@ $V_R=10\text{V}$	20@ $V_R=15\text{V}$	10@ $V_R=20\text{V}$	μA



SS0520~SS0540

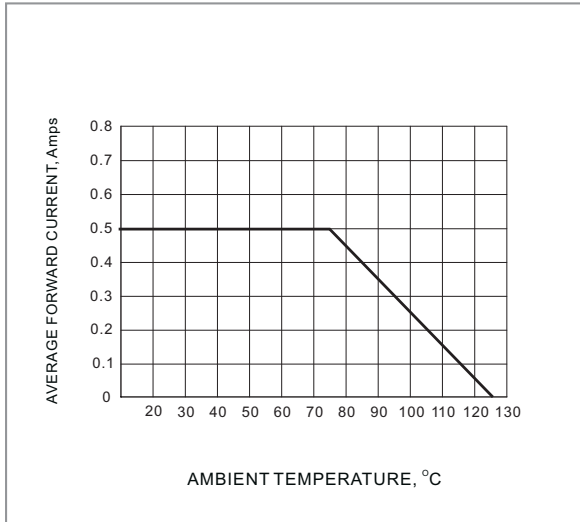


Fig. 1 FORWARD CURRENT DERATING

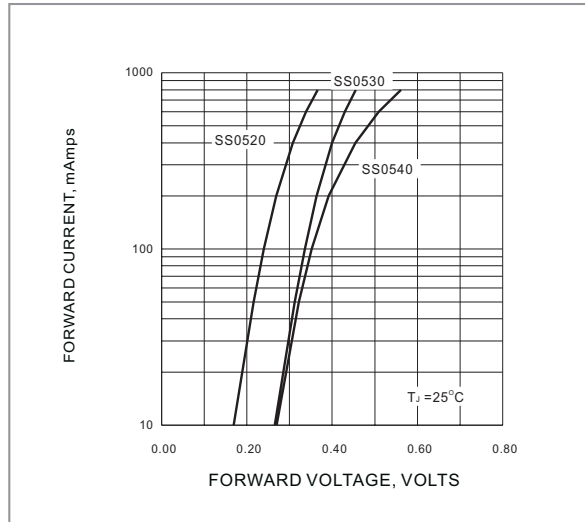


Fig. 2 TYPICAL FORWARD VOLTAGE

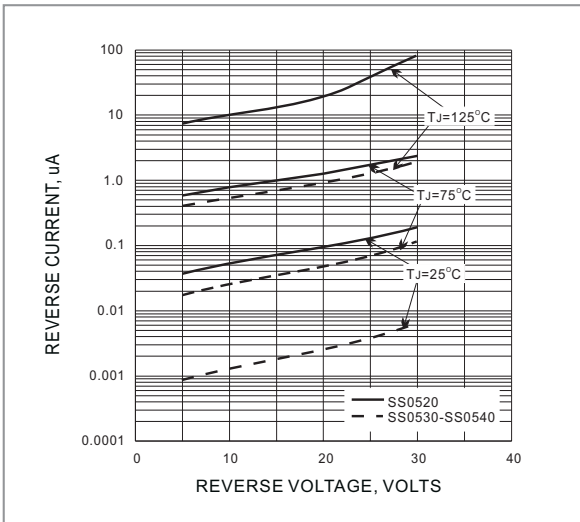


Fig. 3 TYPICAL REVERSE CURRENT

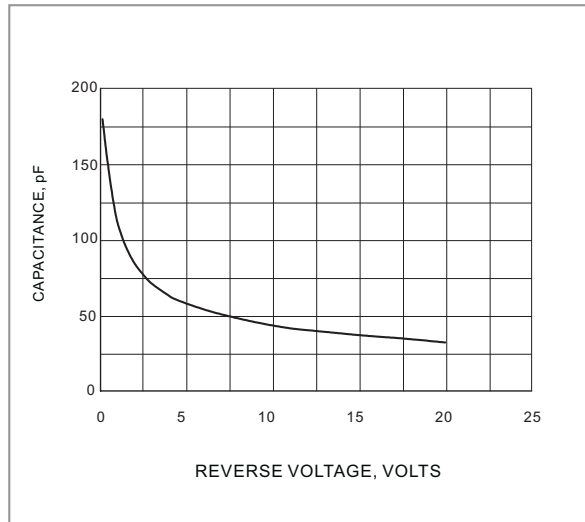
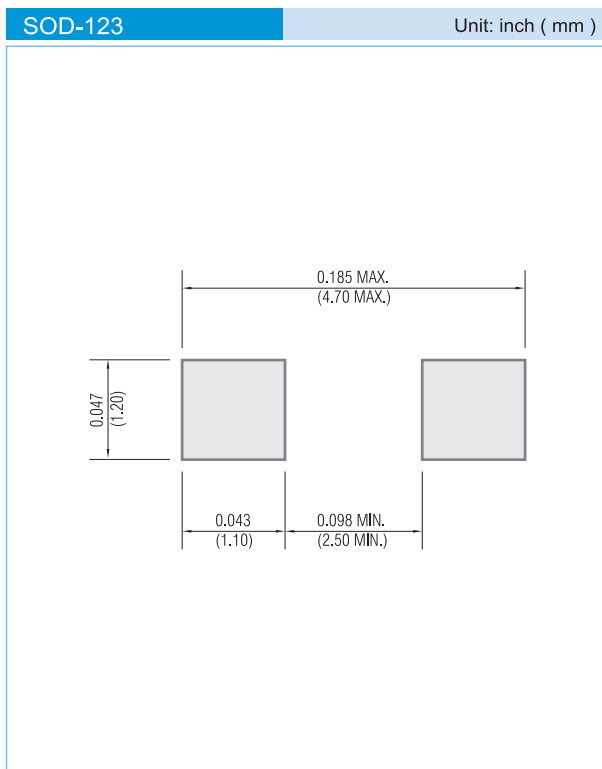


Fig. 4 TYPICAL JUNCTION CAPACITANC



SS0520~SS0540

MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 10K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

Copyright PanJit International, Inc 2009

The information presented in this document is believed to be accurate and reliable. The specifications and information herein are subject to change without notice. Pan Jit makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose. Pan Jit products are not authorized for use in life support devices or systems. Pan Jit does not convey any license under its patent rights or rights of others.