



# SS0520FL~SS0540FL

## SURFACE MOUNT SCHOTTKY BARRIER

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

SOD-123FL/DO-219AB

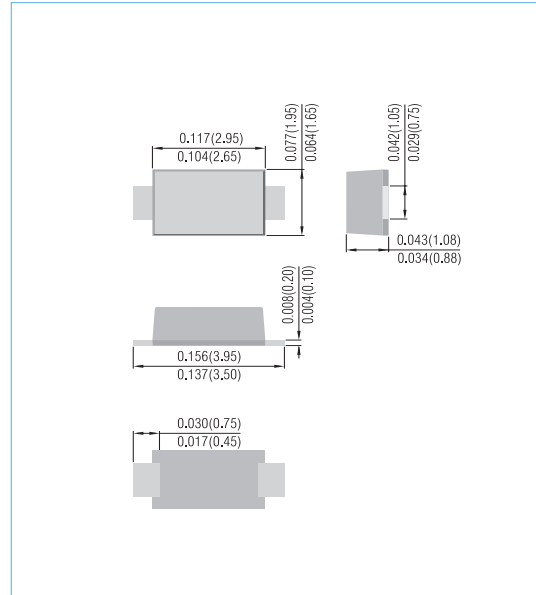
Unit: inch ( mm )

### FEATURES

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

### MECHANICAL DATA

- Case: JEDEC DO-219AB, Molded plastic over passivated junction.
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes positive end (cathode)
- Approx. Weight: 0.0168 gram
- Standard Packaging : 8mm tape (EIA-481)



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

For capacitive load, derate current by 20%.

Parameter	Symbol	SS0520FL	SS0530FL	SS0540FL	Units
Marking Code		B02	B03	B04	
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 $T_A=75^\circ\text{C}$	$I_{F(AV)}$	0.5			A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	20			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 @ $V_r=10V$	20 @ $V_r=15V$	10 @ $V_r=20V$	$\mu\text{A}$
Maximum 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			$^\circ\text{C}$



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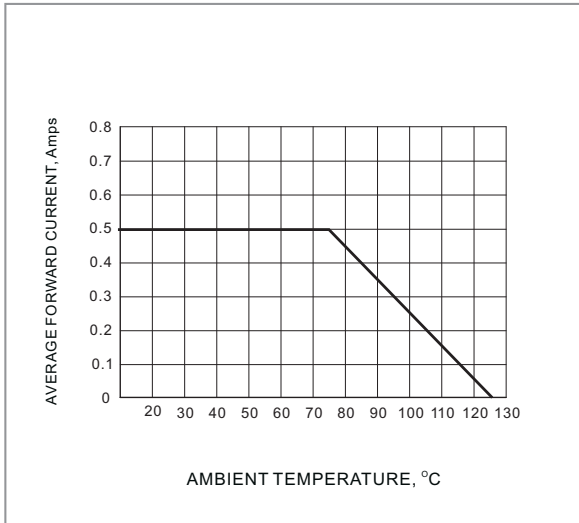


Fig. 1 FORWARD CURRENT DERATING

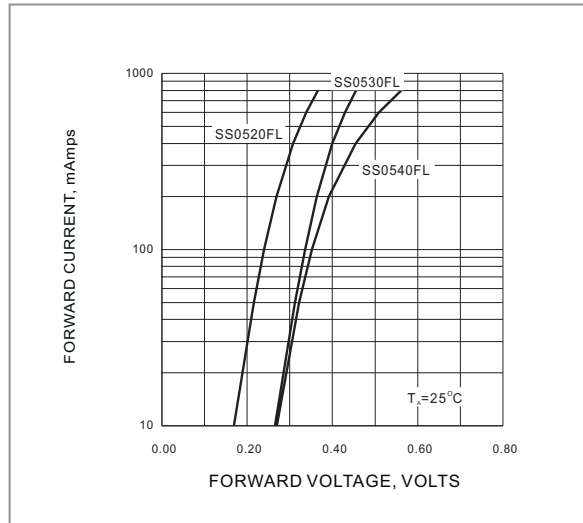


Fig. 2 TYPICAL FORWARD VOLTAGE

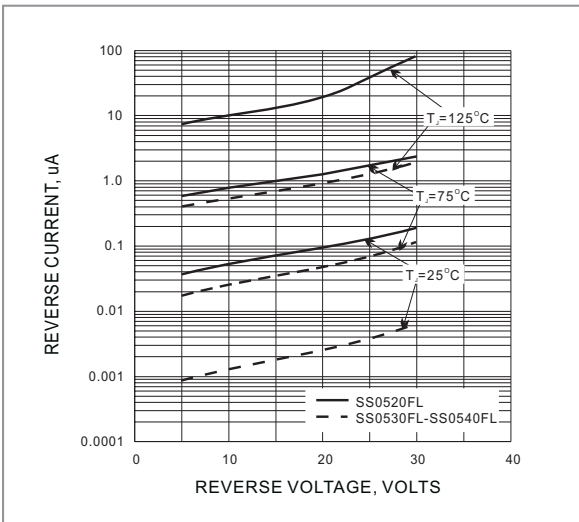


Fig. 3 TYPICAL REVERSE CURRENT

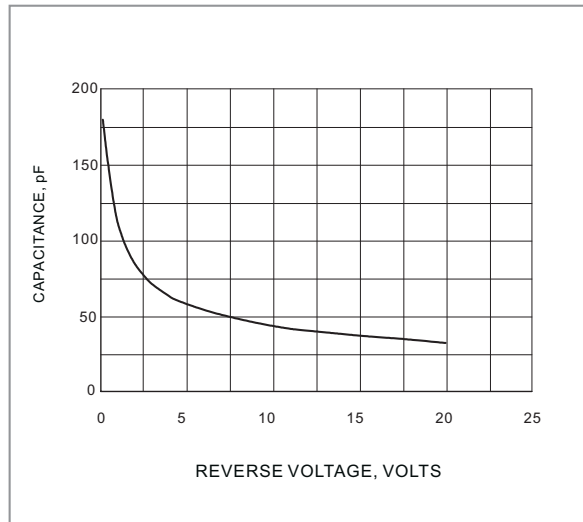
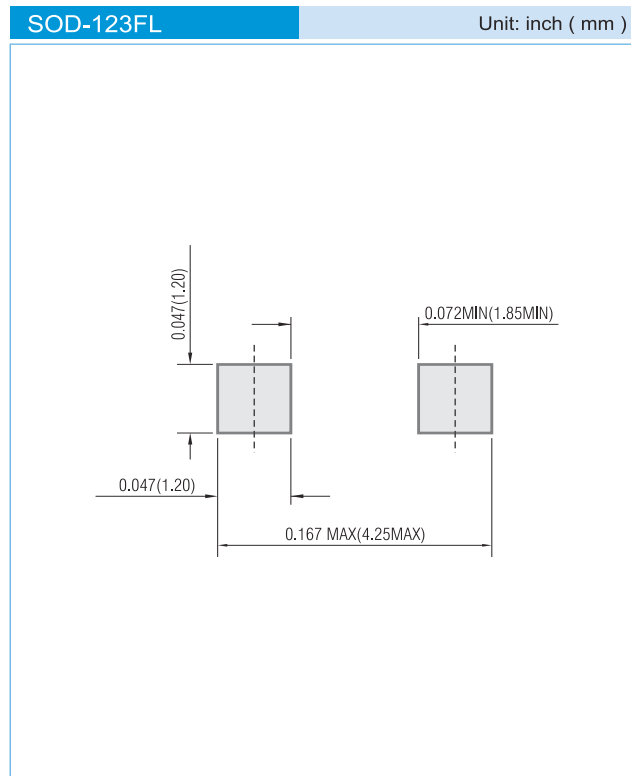


Fig. 4 TYPICAL JUNCTION CAPACITANCE



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### MOUNTING PAD LAYOUT



### ORDER INFORMATION

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

### LEGAL STATEMENT

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