

SS0520FL~SS0540FL

SURFACE MOUNT SCHOTTKY BARRIER

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

SOD-123FL/DO-219AB

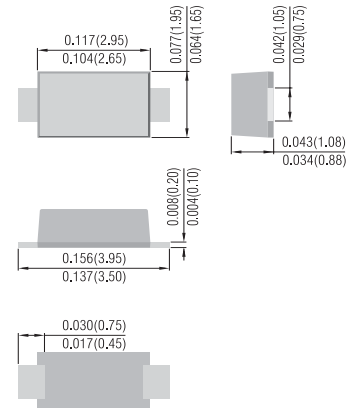
Unit: inch (mm)

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
- Standrad 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 $T_A=75^{\circ}C$ | $I_{F(AV)}$ | 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 @ $V_r=20V$ | μA |
| Maximum Thermal Resistance | $R_{\theta JL}$ $R_{\theta JA}$ | 150 206 | | | $^{\circ}C / W$ |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | -55 TO +125 | | | $^{\circ}C$ |

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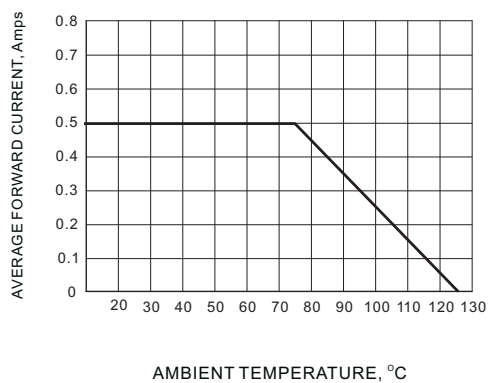


Fig.1 FORWARD CURRENT DERATING

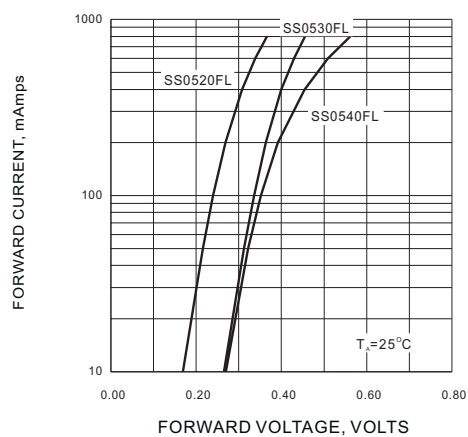


Fig.2 TYPICAL FORWARD VOLTAGE

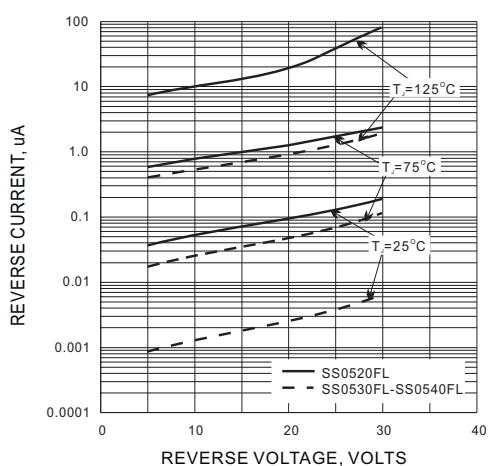


Fig.3 TYPICAL REVERSE CURRENT

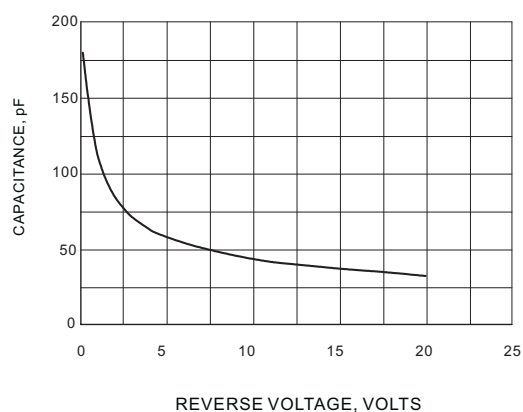
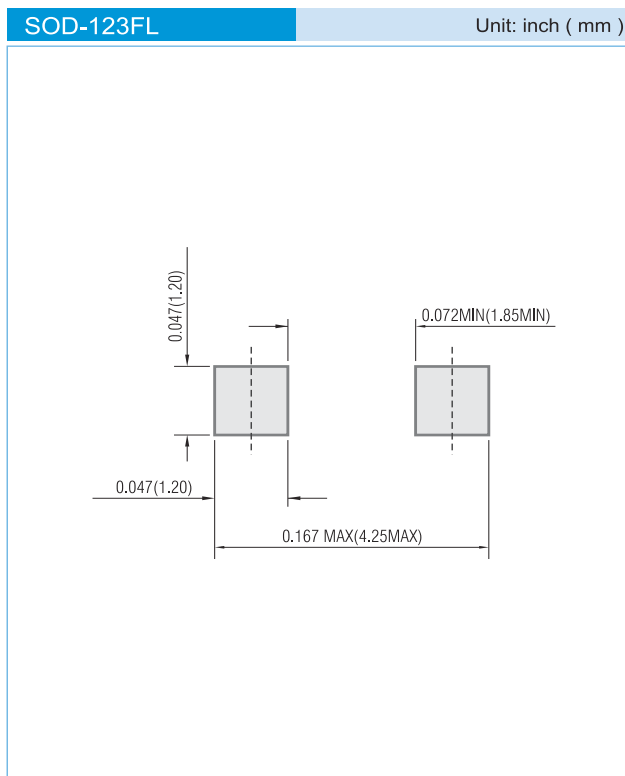


Fig.4 TYPICAL JUNCTION CAPACITANCE

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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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