



## RS1001FL~RS1008FL

### SMALL SURFACE MOUNT FAST DIODES

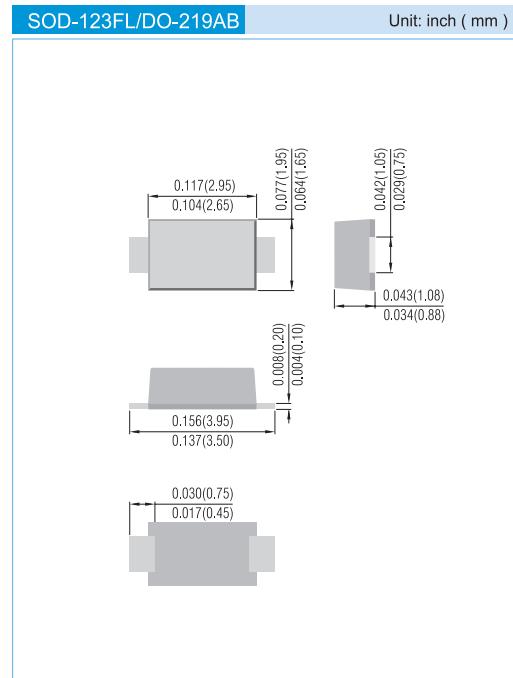
**VOLTAGE** 100 to 800 Volts    **CURRENT** 1.0 Amperes

#### FEATURES

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- Glass Passivated Chip Junction
- High temperature soldering : 260°C / 10 seconds at terminals
- 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
- Standard Packaging : 8mm tape (EIA-481)
- Approx. Weight: 0.0168 gram



#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

| Rating  | Test condition   | Symbol          | RS1001FL | RS1002FL | RS1004FL    | RS1006FL | RS1008FL | Units            |
|---|--|-----------------|----------|----------|-------------|----------|----------|------------------|
| Maximum repetitive peak reverse voltage                 |  | $V_{RRM}$       | 100      | 200      | 400         | 600      | 800      | V                |
| Maximum RMS voltage                                     |  | $V_{RMS}$       | 70       | 140      | 280         | 420      | 560      | V                |
| Maximum DC blocking voltage                             |  | $V_{DC}$        | 100      | 200      | 400         | 600      | 800      | V                |
| Maximum average forward rectified current               | $T_J=65^\circ\text{C}$<br>$T_A=45^\circ\text{C}$           | $I_{F(AV)}$     |          |          | 1.4<br>0.5  |          |          | A                |
| Maximum instantaneous forward voltage                   | 0.7A   | $V_F$           |          |          | 1.15        |          |          | V                |
| Maximum DC reverse current at rated DC blocking voltage | $T_A=25^\circ\text{C}$<br>$T_A=125^\circ\text{C}$          | $I_R$           |          |          | 10<br>50    |          |          | $\mu\text{A}$    |
| Thermal resistance junction to ambient air              |  | $R_{\theta JA}$ |          |          | 180         |          |          | $\text{K/W}$     |
| Operating junction and storage temperature range        |  | $T_J, T_{STG}$  |          |          | -50 TO +150 |          |          | $^\circ\text{C}$ |
| Reverse recovery time                                   | $I_F=0.5\text{A}$<br>$I_F=1\text{A}$<br>$I_F=0.25\text{A}$ | $t_{rr}$        |          | 150      |             | 250      | 500      | nS               |
| Typical capacitance                                     | 4V,1MHz  | $C_J$           |          | 9        |             |          |          | pF               |



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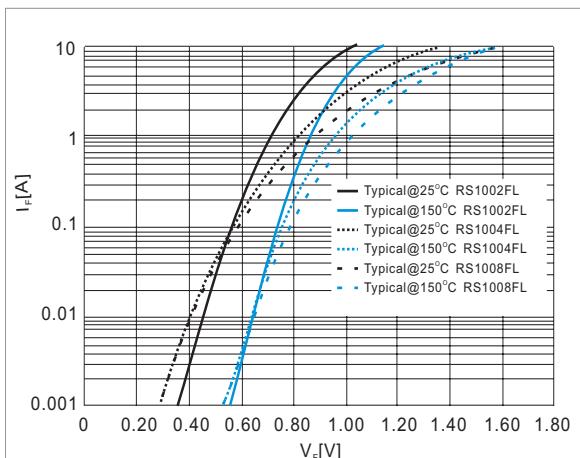


Fig.1-Typical forward characteristics

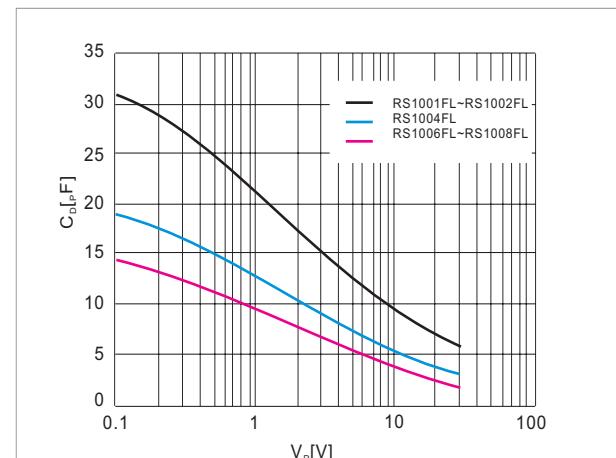


Fig.3-Typ. diode capacitance vs. Reverse voltage

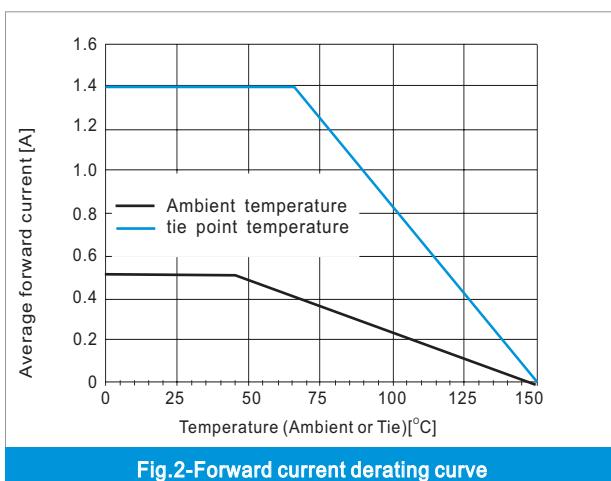
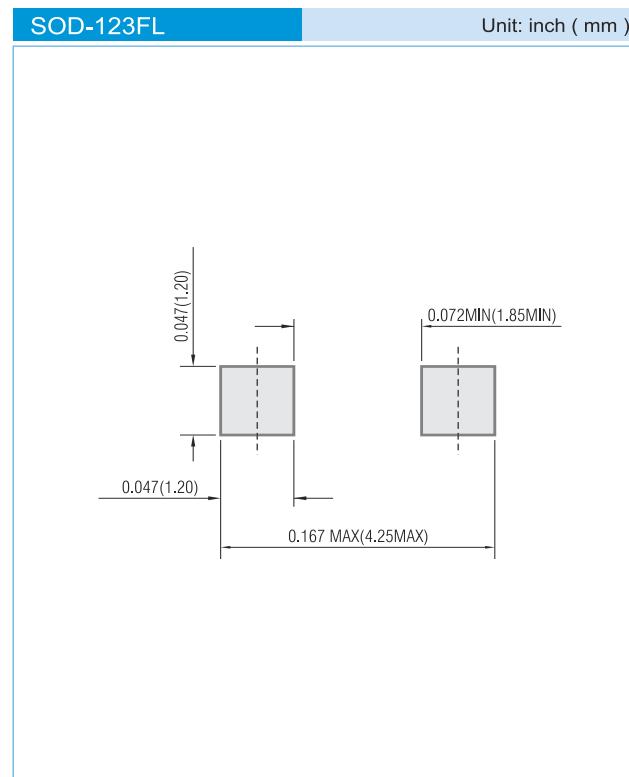


Fig.2-Forward current derating curve



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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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