

# RS1001FL~RS1010FL

## SMALL SURFACE MOUNT FAST DIODES

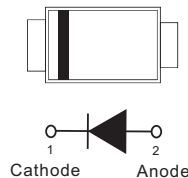
**VOLTAGE** 100 to 1000 Volts **CURRENT** 1.0 Amperes

### 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
- In compliance with EU RoHS 2002/95/EC directives

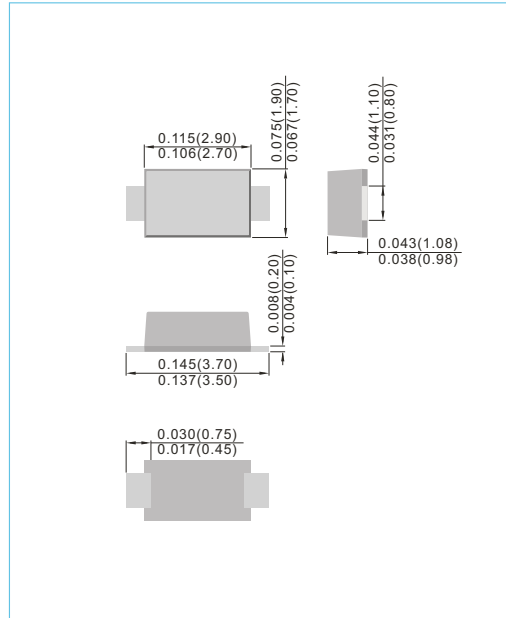
### MECHANICAL DATA

- Case : JEDEC SOD-123FL, Molded plastic over passivated junction
- Terminals : Solderable per MIL-STD-750, Method 2026
- Standard Packaging : 8mm tape (EIA-481)
- Apporx. Weight: 0.0006 ounce, 0.0172 gram
- Polarity : Color band cathode



### SOD-123FL

Unit : inch(mm)



## 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	RS1010FL	Units
Marking Code		-	R1B	R1D	R1G	R1J	R1K	R1M	-
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	100	200	400	600	800	1000	V
Maximum RMS voltage		V <sub>RMS</sub>	70	140	280	420	560	700	V
Maximum DC blocking voltage		V <sub>DC</sub>	100	200	400	600	800	1000	V
Maximum average forward rectified current Derate above T <sub>c</sub> =110°C		I <sub>F(AV)</sub>	1.0						A
Maximum instantaneous forward voltage	0.7A 1.0A	V <sub>F</sub>	1.15 1.3						V
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I <sub>FSM</sub>	30						A
Maximum DC reverse current at rated DC blocking voltage	T <sub>J</sub> =25°C T <sub>J</sub> =125°C	I <sub>R</sub>	1.0 50						μA
Typical capacitance	4V,1MHz	C <sub>J</sub>	9						pF
Reverse recovery time	I <sub>F</sub> =0.5A I <sub>R</sub> =1A I <sub>r</sub> =0.25A	t <sub>rr</sub>	150			250	500		nS
Thermal resistance junction to ambient air		R <sub>θJA</sub>	180						°C/W
Operating junction and storage temperature range		T <sub>J</sub> ,T <sub>STG</sub>	-55 to +150						°C

## RS1001FL~RS1010FL

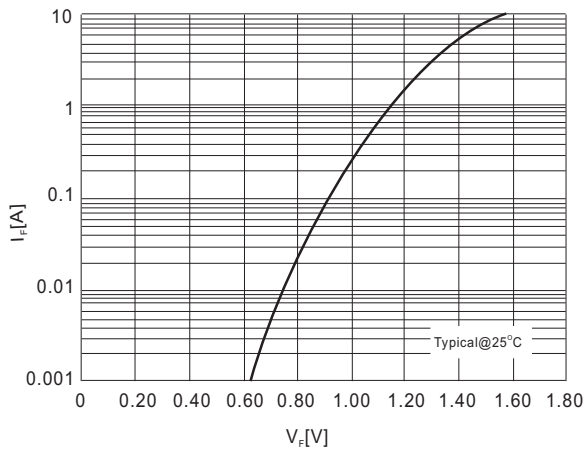


Fig.1-TYPICAL FORWARD CHARACTERISTICS

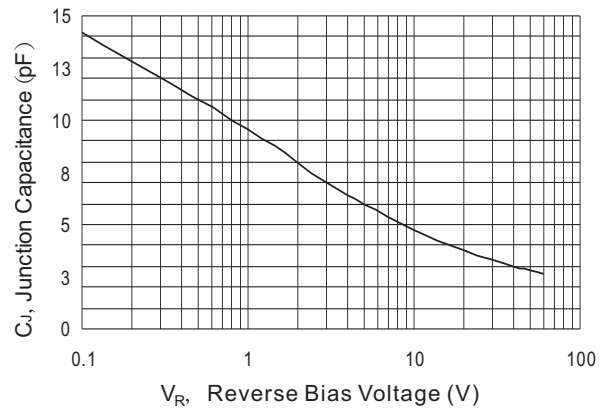


Fig.2-TYPICAL JUNCTION CAPACITANCE

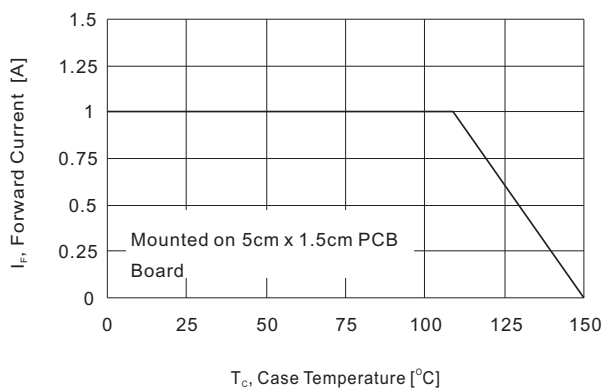


Fig.3-FORWARD CURRENT DERATING CURVE

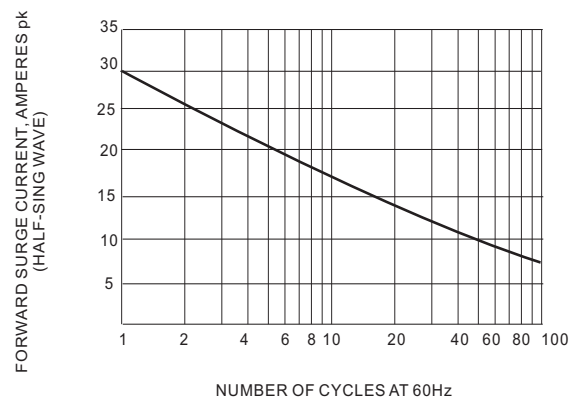
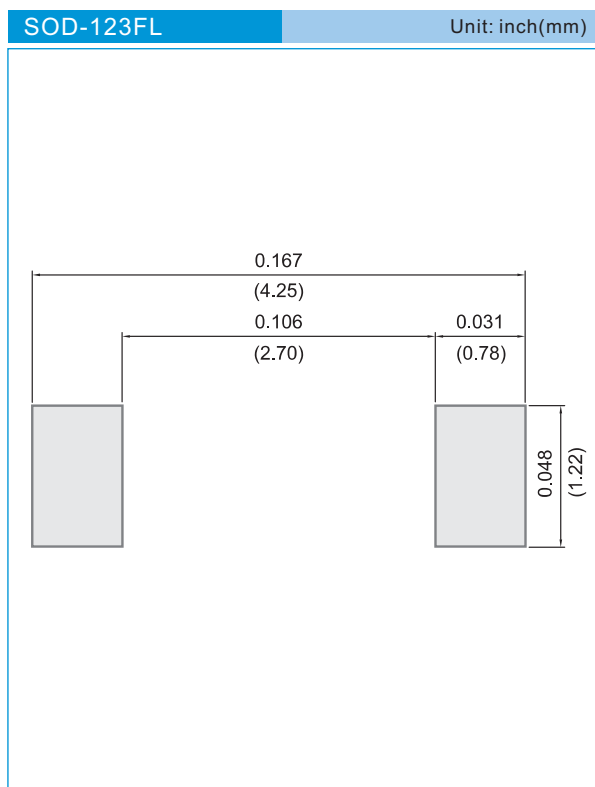


Fig.4-MAXIMUM NON-REPEITIVE SURGE CURRENT

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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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