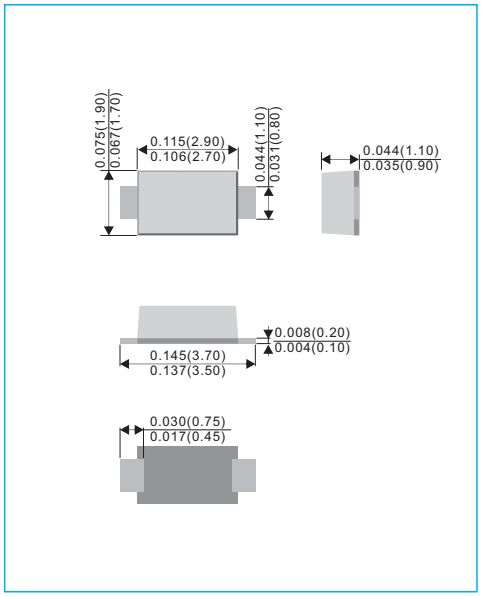
PANJIT SEMI CONDUCTOR

RS1001FL~RS1010FL

SMALL SURFACE MOUNT FAST DIODES

VOLTAGE 100 to 1000 Volt **CURRENT** 1 Ampere

SOD-123FL Unit : inch(mm)

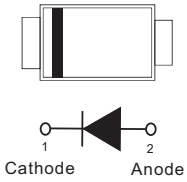


FEATURES

- For surface mounted applications in order to optimize board space
- Ideal for automated placement
- Glass Passivated Chip Junction
- High temperature soldering : 260°C / 10 seconds at terminals
- Ultra thin profile package for space constrained utilization
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

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 ounces, 0.0173 grams
- Polarity : Color band cathode



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 repetitve peak reverse voltage		V_{RRM}	100	200	400	600	800	1000	V
Maximum rms voltage		V_{RMS}	70	140	280	420	560	700	V
Maximum dc blocking voltage		V_{DC}	100	200	400	600	800	1000	V
Maximum average forward rectified current Derate above T_C=110°C		$I_{F(AV)}$	1						A
Maximum instantaneous forward voltage	0.7A 1A	V_F	1.15 1.3						V
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	30						A
Maximum dc reverse current at rated dc blocking voltage	T_J=25°C T_J=125°C	I_R	1 50						μA
Typical capacitance	4V,1MHz	C_J	9						pF
Reverse recovery time	I_F=0.5A I_R=-1A I_{rr}=-0.25A	t_{rr}	150			250	500		nS
Typical thermal resistance junction to ambient (Note1)		$R_{\theta JA}$	200						°C/W
Operating junction and storage temperature range		T_J ,T_{STG}	-55 to +150						°C

Note: 1. Mounted on a FR4 PCB, single-sided copper, mini pad.

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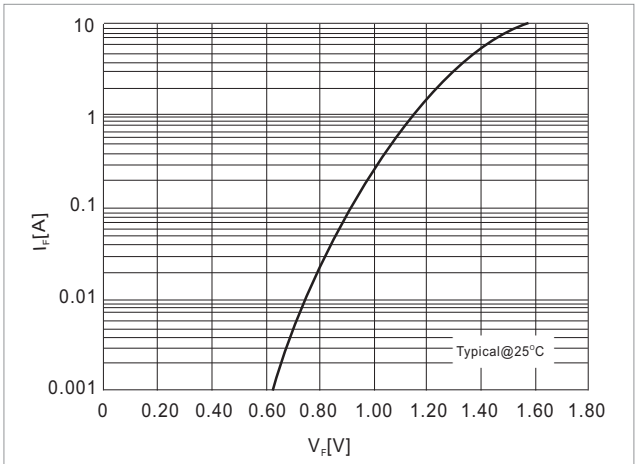

Fig.1-TYPICAL FORWARD CHARACTERISTICS

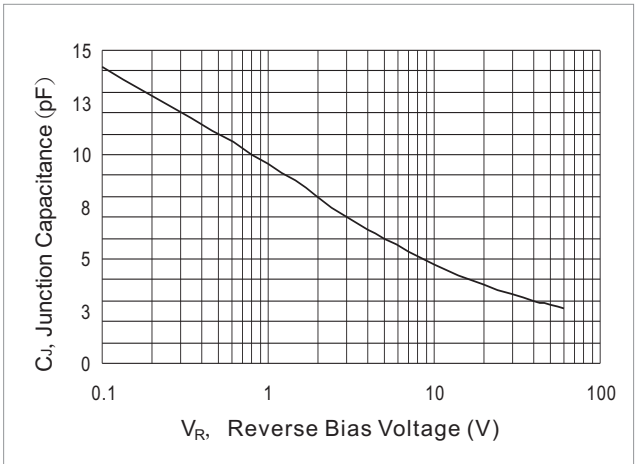

Fig.2-TYPICAL JUNCTION CAPACITANCE

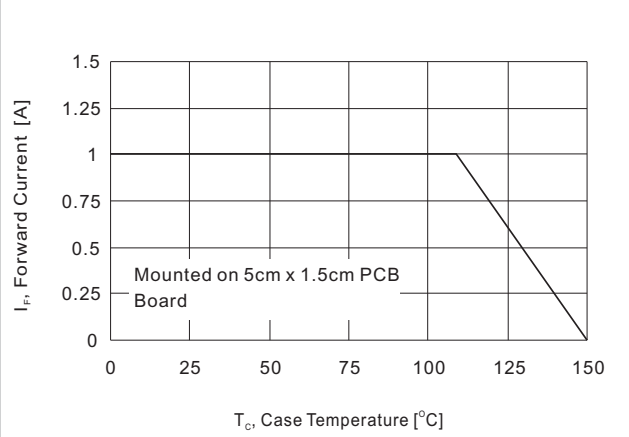

Fig.3-FORWARD CURRENT DERATING CURVE

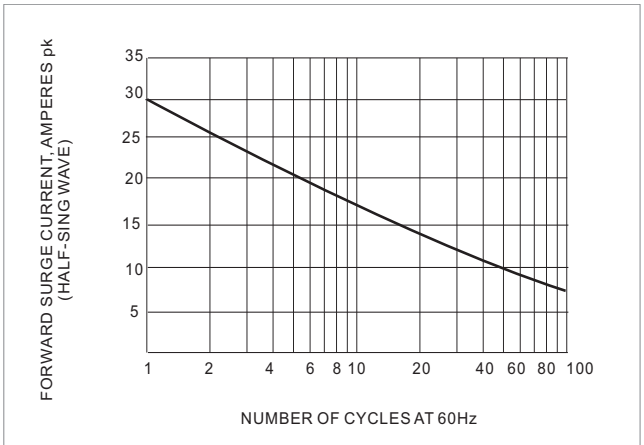

Fig.4-MAXIMUM NON-REPEITIVE SURGE CURRENT

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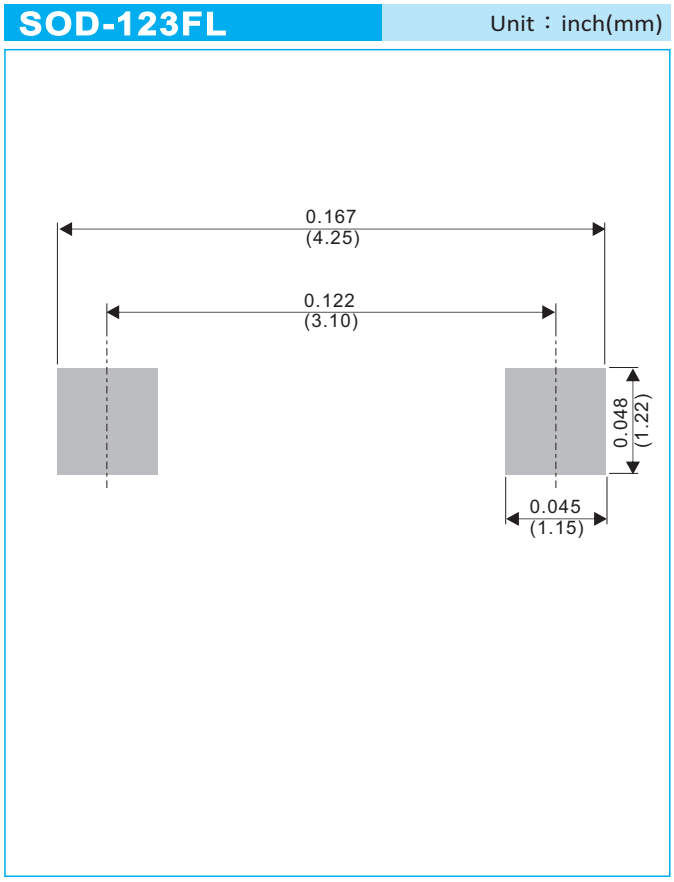
MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

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