US1001FL~US1008FL

SMALL SURFACE MOUNT FAST DIODES

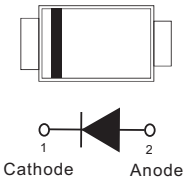
VOLTAGE 100 to 800 Volts **CURRENT** 1.0 Amperes

FEATURES

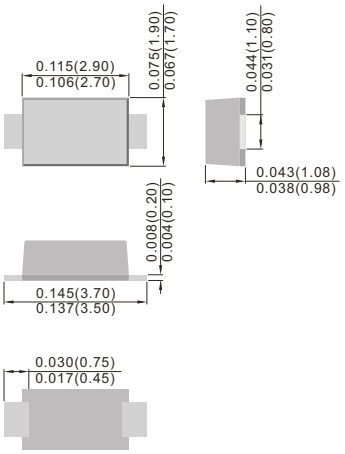
- For surface mounted applications
- Low profile package
- Ideal for automated placement
- Glass Passivated Chip Junction
- High temperature soldering : 260^{O}C / 10 seconds at terminals
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SOD-123FL, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. 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	US1001FL	US1002FL	US1004FL	US1006FL	US1008FL	Units
Marking code		-	U1B	U1D	U1G	U1J	U1K	-
Maximum repetitve 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_A=25^{O}C	$I_{F(AV)}$	1					A
Peak forward surge current 8.3ms single half sine-wave	T_L=25^{O}C	I_{FSM}	30					A
Maximum instantaneous forward voltage	1A	V_F	1		1.4	1.7		V
Maximum DC reverse current at rated DC blocking voltage	T_J=25^{O}C	I_R	1					μA
Reverse recovery time	I_F=0.5A I_R=1A I_{rr}=0.25A	t_{rr}	50			100		nS
Typical capacitance	4V,1MHz	C_J	9					pF
Thermal resistance junction to ambient air		$R_{\theta JA}$	180					^{O}C/W
Operating junction and storage temperature range		T_J,T_{STG}	-55 to +150					^{O}C

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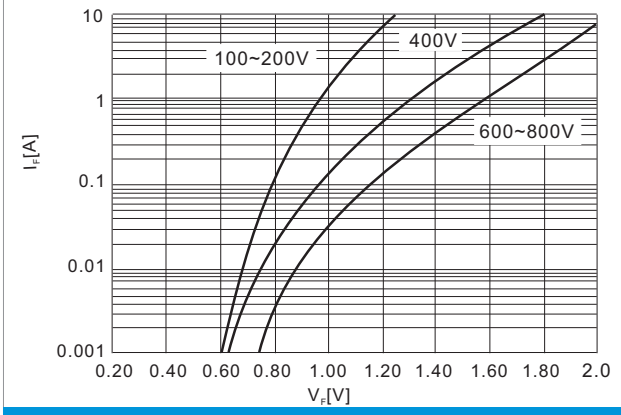


Fig.1-Typical forward characteristics

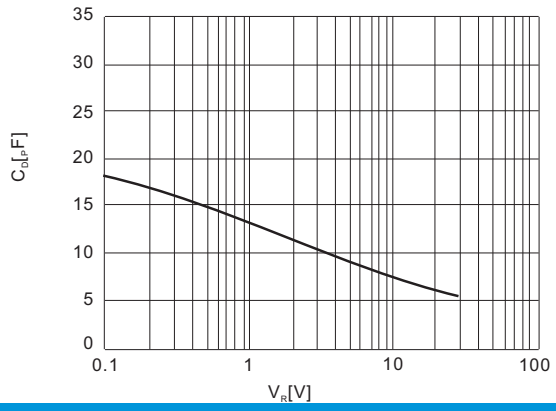


Fig.2-Typical diode capacitance vs. Reverse voltage

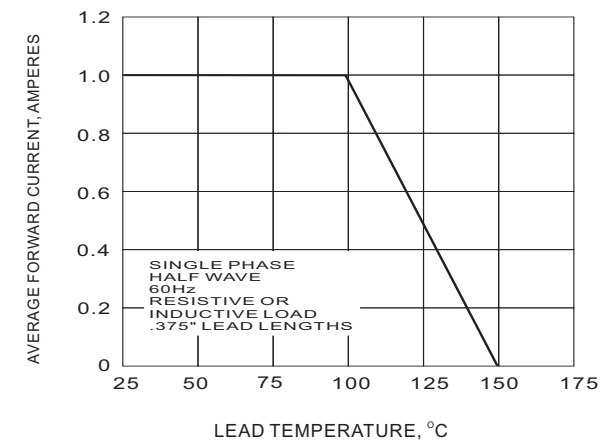


Fig.3 FORWARD CURRENT DERATING CURVE

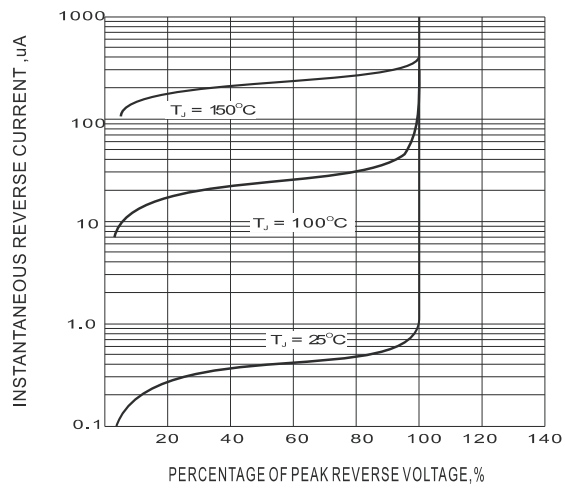


Fig.4-TYPICAL REVERSE CHARACTERISTIC

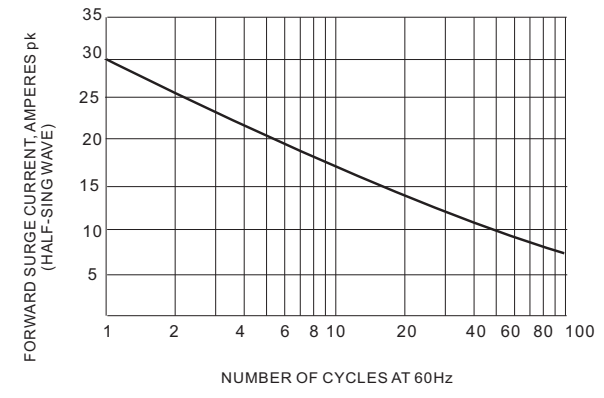
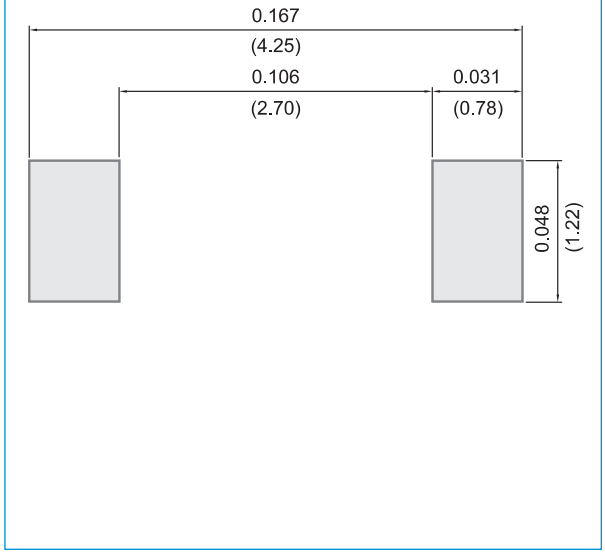


FIG.5 MAXIMUM NON-REPEITIVE SURGE CURRENT

US1001FL~US1008FL

MOUNTING PAD LAYOUT

SOD-123FL Unit: inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

LEGAL STATEMENT

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