

US1001FL~US1010FL

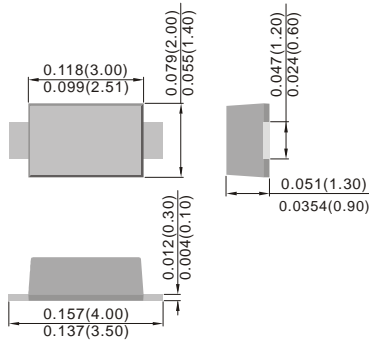
SMALL SURFACE MOUNT FAST DIODES

VOLTAGE 100 to 1000 Volts CURRENT 1.0 Amperes



SOD-123FL

Unit : inch(mm)

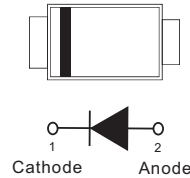


FEATURES

- 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)



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	US1010FL	Units
Marking Code		-	U1B	U1D	U1G	U1J	U1K	U1M	-
Maximum repetitive 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 $T_c=110^\circ\text{C}$		$I_{F(AV)}$	1.0						A
Maximum instantaneous forward voltage	1.0A	$V_F$	1.0	1.3	1.7			V	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)		$I_{FSM}$	30						A
Maximum DC reverse current at rated DC blocking voltage	$T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$	$I_R$	5 150						$\mu\text{A}$
Typical capacitance	4V,1MHz	$C_J$	9						pF
Reverse recovery time	$I_F=0.5\text{A}$ $I_R=1\text{A}$ $I_{rr}=0.25\text{A}$	$t_{rr}$	50			100			nS
Thermal resistance junction to ambient air		$R_{\theta JA}$	200						$^\circ\text{C/W}$
Operating junction and storage temperature range		$T_J, T_{STG}$	-55 to +150						$^\circ\text{C}$

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