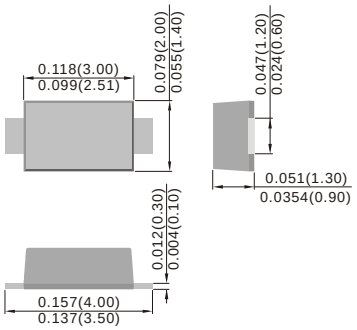
RS1001FL~RS1010FL

SMALL SURFACE MOUNT FAST DIODES

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

Green

SOD-123FL Unit : inch(mm)

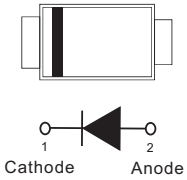


FEATURES

- 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	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		$I_{F(AV)}$	1.0						A
Maximum instantaneous forward voltage	1.0A	V_F	1.3						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°C T_J=125°C	I_R	5 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
Thermal resistance junction to ambient air		$R_{\theta JA}$	180						°C/W
Operating junction and storage temperature range		T_J,T_{STG}	-55 to +150						°C

RS1001FL~RS1010FL

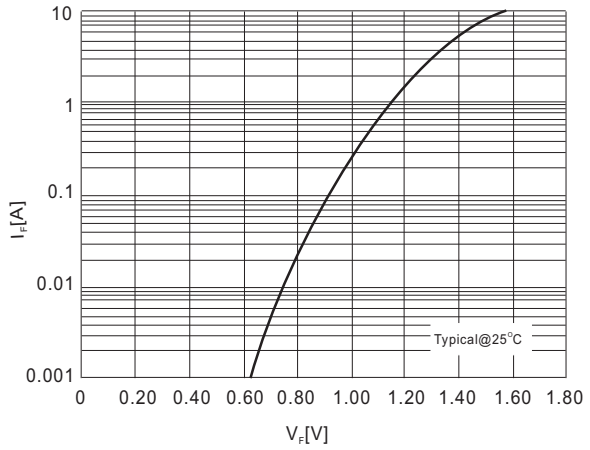


Fig.1-TYPICAL FORWARD CHARACTERISTICS

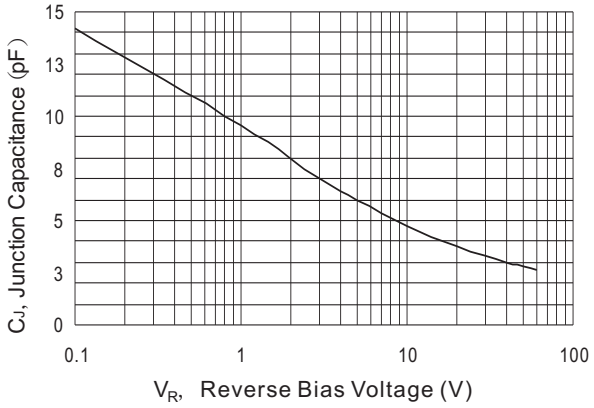


Fig.2-TYPICAL JUNCTION CAPACITANCE

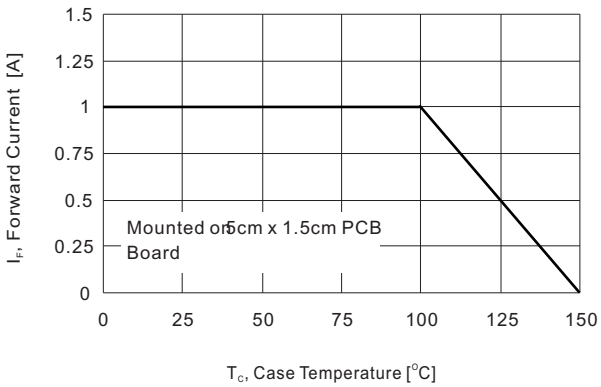


Fig.3-FORWARD CURRENT DERATING CURVE

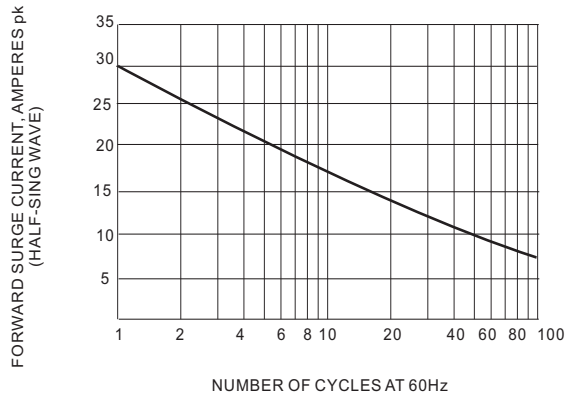


Fig.4-MAXIMUM NON-REPEITIVE SURGE CURRENT