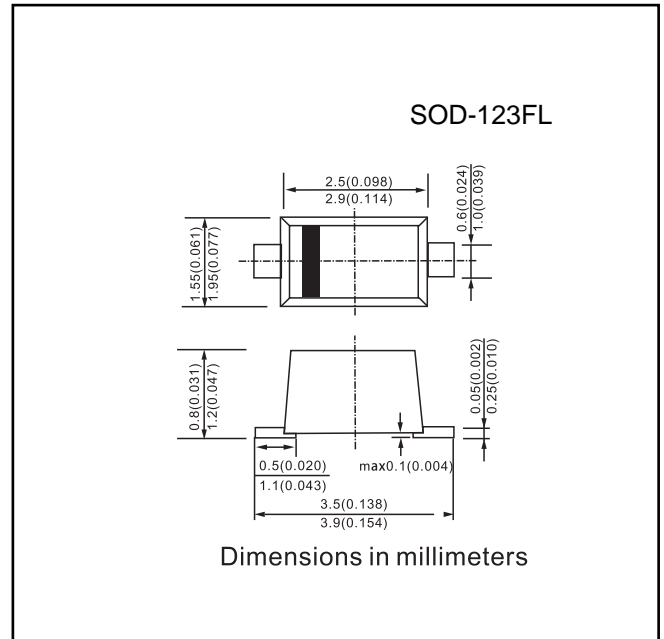


FEATURES

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- Glass Passivated
- High temperature soldering : 260°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
- Weight: 0.0006 ounce, 0.0172 gram
- Polarity : Color band cathode



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Test condition	Symbol	ES1001FL	ES1002FL	ES1004FL	ES1006FL	Units
Maximum repetitive peak reverse voltage		V_{RRM}	100	200	400	600	V
Maximum RMS voltage		V_{RMS}	70	140	280	420	V
Maximum DC blocking voltage		V_{DC}	100	200	400	600	V
Maximum average forward current	$T_L=120^\circ\text{C}$	$I_{F(AV)}$	1				A
Peak forward surge current 8.3ms single half sine-wave	$T_L=25^\circ\text{C}$	I_{FSM}	30				A
Maximum instantaneous forward voltage	1.0A	V_F	0.95		1.25	1.7	V
Maximum DC reverse current at rated DC blocking voltage	$T_J=25^\circ\text{C}$ $T_J=100^\circ\text{C}$	I_R		0.5		10	μA
Reverse recovery time	$I_F=0.5\text{A}$ $I_R=1\text{A}$ $I_{RR}=0.25\text{A}$	T_{RR}		35			ns
Typical capacitance	4V,1MHz	C_J		7			pF

ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	ES1001FL	ES1002FL	ES1004FL	ES1006FL	Units
Thermal resistance junction to ambient air	$R_{\theta JA}$ $R_{\theta JC}$	165 20				$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150				$^\circ\text{C}$

RATINGS AND CHARACTERISTIC CURVES

ES1001FL THRU ES1006FL

RATING AND CHARACTERISTIC CURVES

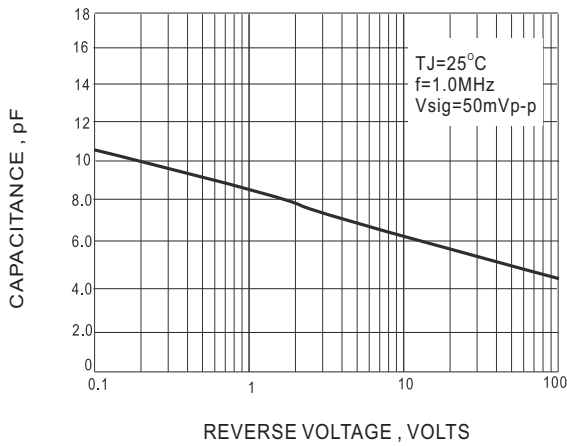


Fig. 1-TYPICAL JUNCTION CAPACITANCE

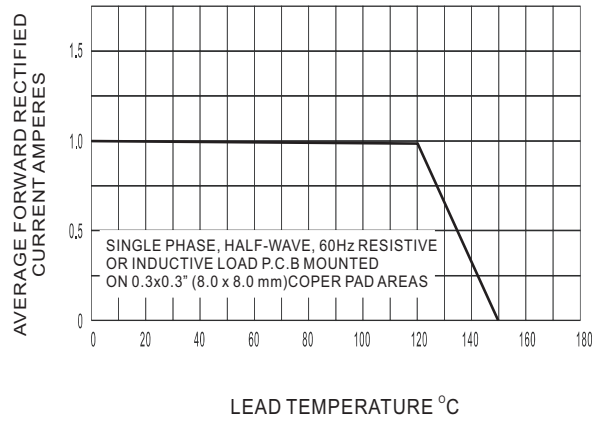


Fig. 2-AXIMUM AVERAGE FORWARD CURRENT DERATING

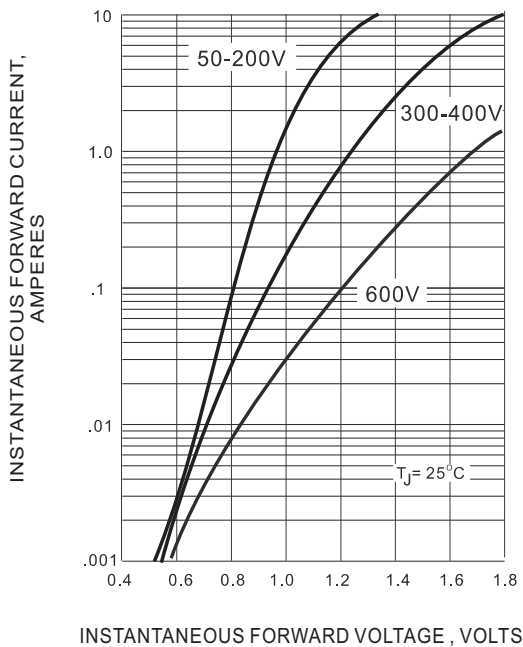


Fig. 3-TYPICAL FORWARD CHARACTERISTICS

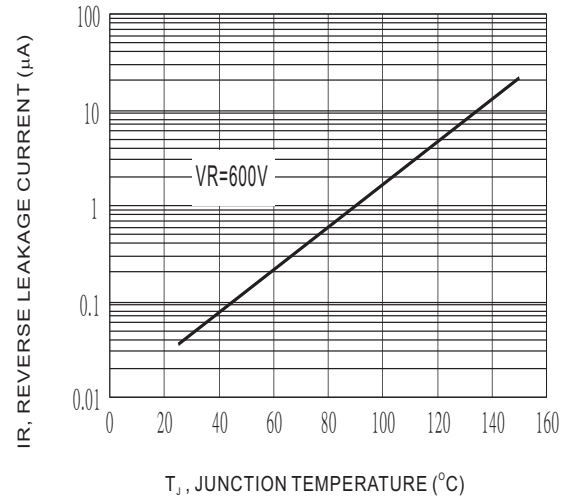


Fig. 4-TYPICAL LEAKAGE CURRENT vs JUNCTION TEMPERATURE