



ES1001FL~ES1002FL

SMALL SURFACE MOUNT ULTRAFAST DIODES

Voltage Range 100 to 200 Volts
Current 1.0 Amperes

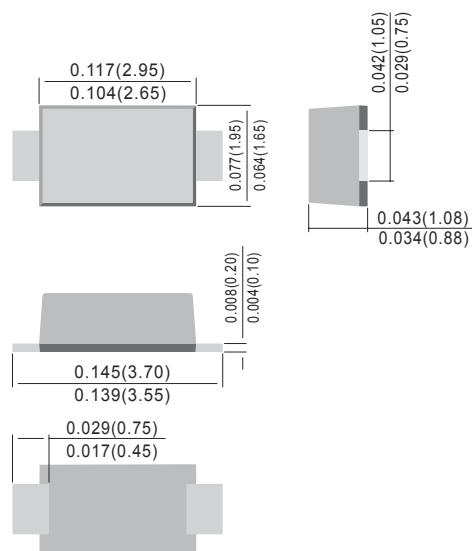
Features

- * For surface mounted applications
- * Low profile package
- * Ideal for automated placement
- * Glass Passivated
- * High temperature soldering : 260OC / 10 seconds at terminals
- * Pb free product are available : 99% Sn above can meet RoHS environment substance directive request

Mechanical Data

Case: SOD-123FL, Plastic
 Terminals: Solderable per MIL-STD-750, Method 2026
 Approx. Weight: 0.0168 gram

SOD-123FL



Dimensions in millimeters

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	Test condition	Symbol	ES 1001F	ES 1002F	UNITS
Maximum repetitive peak reverse voltage		V_{RRM}	100	200	V
Maximum RMS voltage		V_{RMS}	70	140	V
Maximum DC blocking voltage		V_{DC}	100	200	V
Maximum average forward rectified current	$T_{\theta} = 105^{\circ}C$ $T_A = 65^{\circ}C$	$I_{F(AV)}$	1.2 0.5		A
Peak forward surge current 8.3ms single half sine-wave	$T_L = 25^{\circ}C$	I_{FSM}	16.5		A
Maximum instantaneous forward voltage	1.0 A	V_F	0.95		V
Maximum DC reverse current at rated DC blocking voltage	$T_A = 25^{\circ}C$ $T_A = 100^{\circ}C$	I_R	10 50		μA
Thermal resistance junction to ambient air		$R_{\theta JA}$	180		K/ W
Operating junction and storage temperature range		T_J, T_{STG}	-50 to +150		$^{\circ}C$
Reverse recovery time	$I_F = 0.5A$ $I_R = 1A$ $T_{RR} = 0.25A$	t_{rr}	35		ns
Typical capacitance	z4V,1MH	C_J	4		pF



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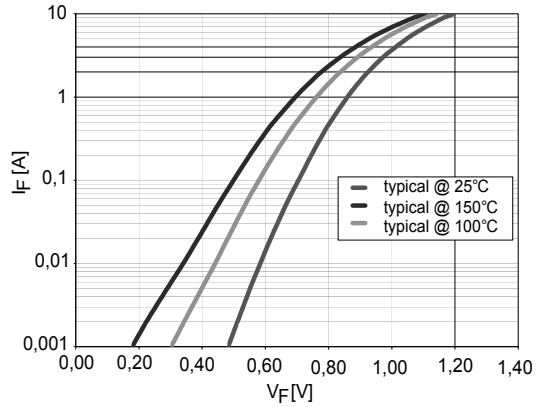


Fig. 1 - Typical Forward Characteristics

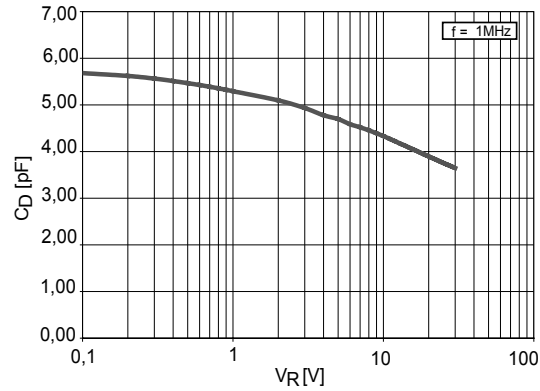


Fig. 3 - Typ. Diode Capacitance vs. Reverse Voltage

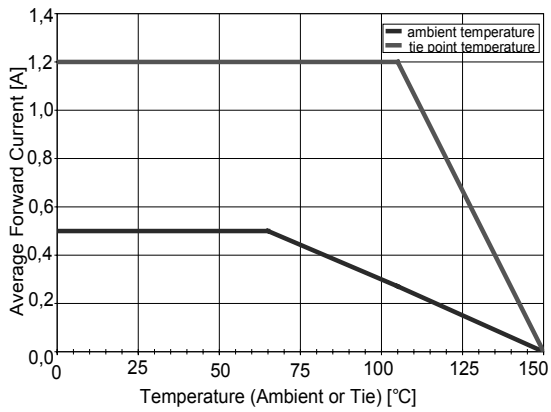


Fig. 2 - Forward Current Derating Curve

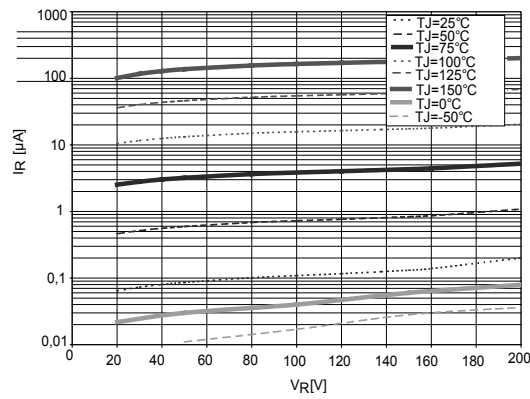


Fig. 4 - Typical Reverse Characteristics

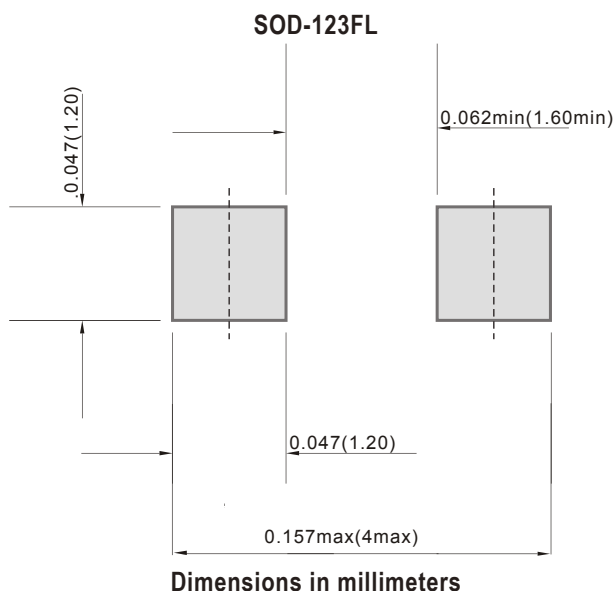


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Mounting Pad Layout



Order Information

Packing information

T/R - 10K per 13" plastic Reel

T/R - 3.0K per 7" plastic Reel

Legal Statement

* Important Notice

This information is intended to unambiguously characterize the product in order to facilitate the customer's evaluation of the device in the application. The information will help the customer's technical experts determine that the device is compatible and interchangeable with similar devices made by other vendors. The information in this data sheet is believed to be reliable and accurate. The specifications and information herein are subject to change without notice. New products and improvements in products and product characterization are constantly in process. Therefore, the factory should be consulted for the most recent information and for any special characteristics not described or specified.

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