

ES1BFL~ES1JFL

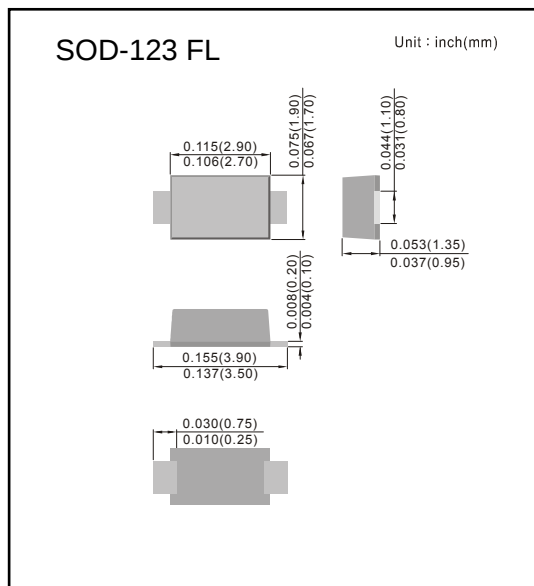
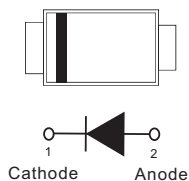
SMALL SURFACE MOUNT SUPER FAST DIODES

FEATURES

- For surface mounted applications in order to optimize board space
- Ideal for automated placement
- Glass passivated
- High temperature soldering : 260°C / 10 seconds at terminals
- Lead free in compliance with EU RoHS 2011/65/EU directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

MECHANICAL DATA

- Case: SOD-123FL, Plastic
- Terminals: Solderable per MIL-STD-750, Method 2026
- Weight: 0.0006 ounce, 0.0172 gram
- Polarity: Color band denotes cathode end



ABSOLUTE RATINGS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Test condition	Symbol	ES1BFL	ES1DFL	ES1GFL	ES1JFL	Units
Marking Code		-	E1B	E1D	E1G	E1J	-
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	$T_L=120^{\circ}C$	$I_{F(AV)}$	1				A
Peak forward surge current 8.3ms single half sine-wave	$T_L=25^{\circ}C$	I_{FSM}	30				A
Maximum instantaneous forward voltage	0.1A	V_F				0.90	V
	0.3A					1.20	V
	1.0A		0.95		1.25	1.55	V
	1.1A					1.70	V
Maximum DC reverse current at rated DC blocking voltage	$T_J=25^{\circ}C$ $T_J=100^{\circ}C$	I_R	0.5 10				μA
Reverse recovery time	$I_F=0.5A$ $I_R=1A$ $I_{RR}=0.25A$	T_{RR}	33				ns
Typical capacitance	4V,1MHz	C_J	7				pF

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ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	ES1BFL	ES1DFL	ES1GFL	ES1JFL	Units
Typical Thermal Resistance (Notes 1) (Notes 2)	$R_{\theta JA}$ $R_{\theta JC}$	40 28				°C/W
Operating Junction	TJ	-55 to +150				°C
Storage temperature range	TSTG	-65 to +175				°C

NOTES : 1.Mounted on an FR4 PCB, single-sided copper, mini pad.
2.Mounted on an FR4 PCB, single-sided copper, with 10cm*10cm copper pad area.

RATING AND CHARACTERISTIC CURVES

