

SURFACE MOUNT RECTIFIERS

SOD1H1--SOD1H8

FEATURES

- Glass passivated device
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction
- High temperature soldering: 250°C/10 seconds at terminals



Lead-free

MECHANICAL DATA

- Case: JEDEC SOD-123FL, molded plastic over passivated chip
- Terminals: Solder Plated, solderable perMIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0008 ounces, 0.022 gram
- Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

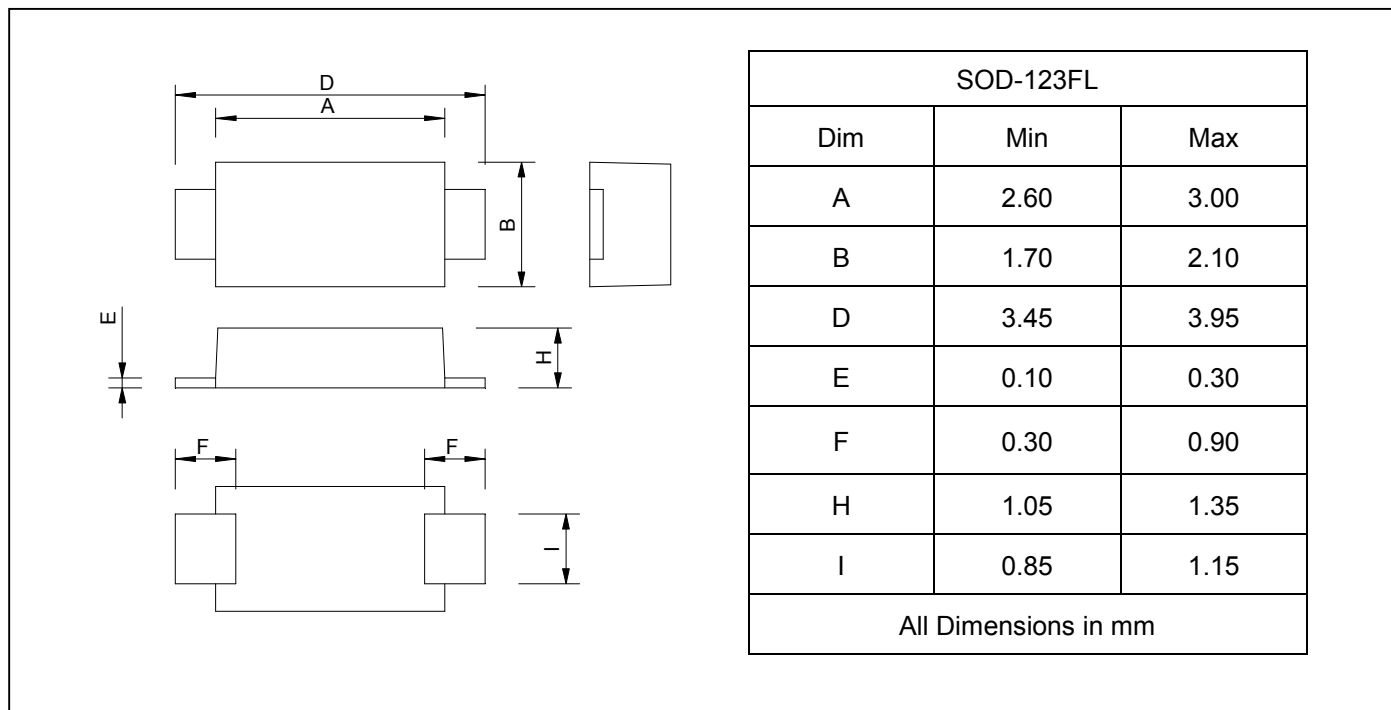
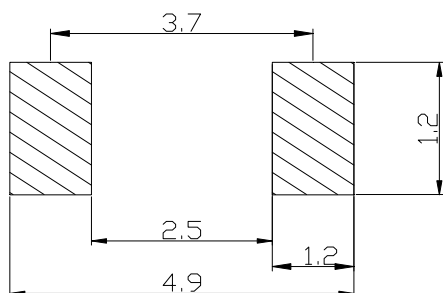
Ratings at 25°C ambient temperature unless otherwise specified.

Single hase , half wave,60Hz,resistive or inductive load. For capacitive, load derate current by 20%.

		SOD 1H1	SOD 1H2	SOD 1H3	SOD 1H4	SOD 1H5	SOD 1H6	SOD 1H7	SOD 1H8	UNITS
Device marking		H1	H2	H3	H4	H5	H6	H7	H8	
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current $T_A=65^\circ\text{C}$	$I_{(AV)}$	1.0								A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load $T_L=25^\circ\text{C}$	I_{FSM}	25								A
Maximum forward voltage at 1.0A (Note 1)	V_F	1.0			1.3		1.7			V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	I_R	10 200								μA
Maximum reverse recovery time (NOTE 2)	t_{rr}	50					75			ns
Operating temperature range	T_J	- 55 --- + 150								$^\circ\text{C}$
Storage temperature range	T_{STG}	- 55 --- + 150								$^\circ\text{C}$

 NOTES: 1. Pulse test: pulse width 300 μ sec, duty cycle 2%.

 2. Measured with $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$.

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SOD1H1--SOD1H8
PACKAGE OUTLINE DIMENSIONS

SOLDERING FOOTPRINT


Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
SOD1H1--SOD1H8	SOD-123FL	2500/Tape&Reel

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FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

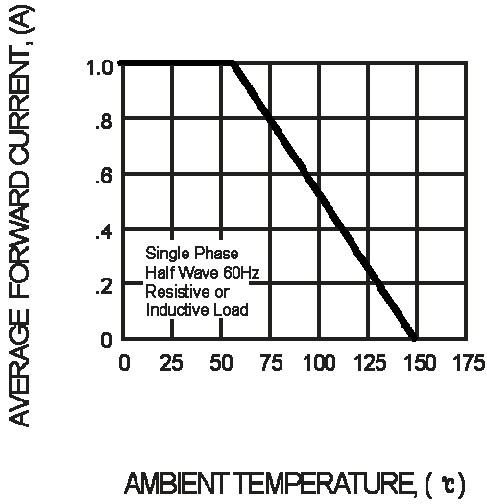


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

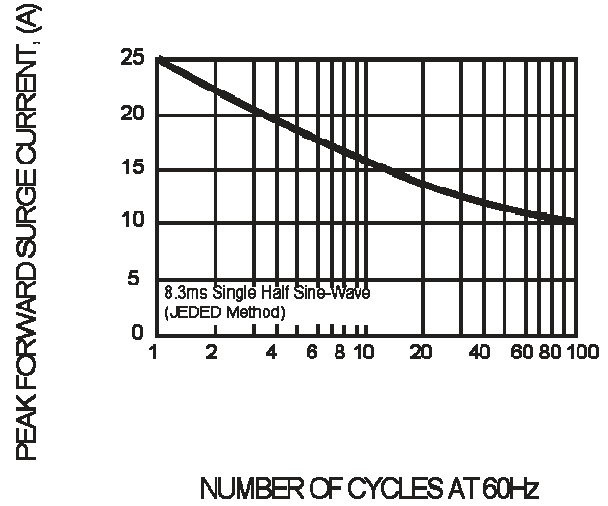


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

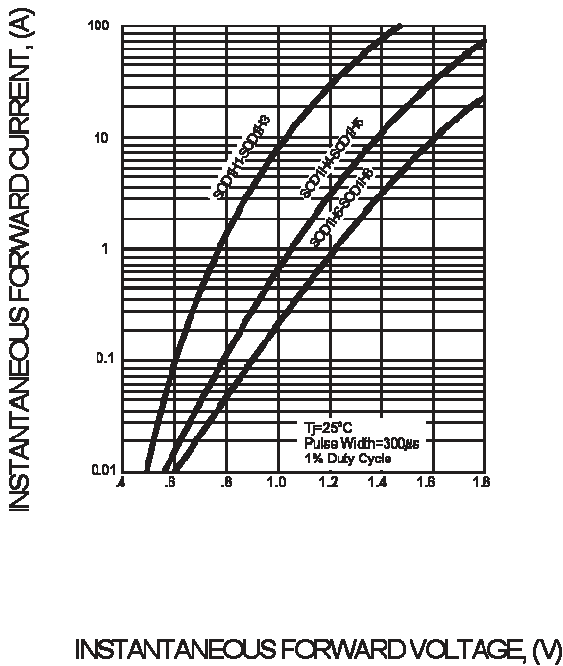


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

