

## 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

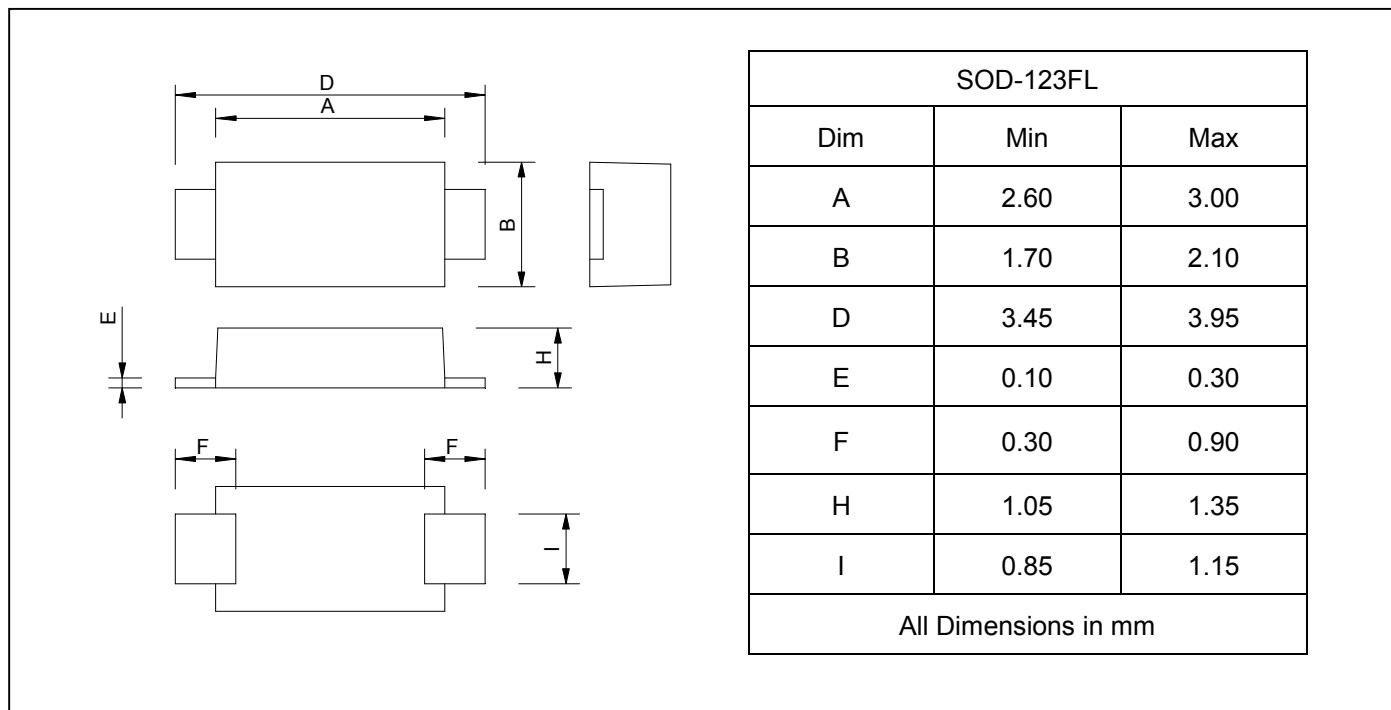
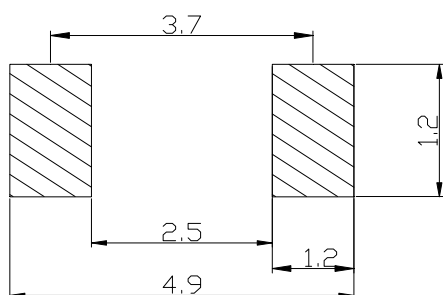
Ratings at 25°C ambient temperature unless otherwise specified.

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								$\mu\text{A}$
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  $\mu$  sec, duty cycle 2%.

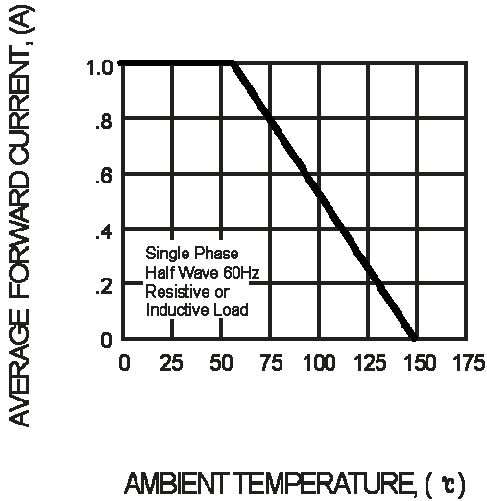
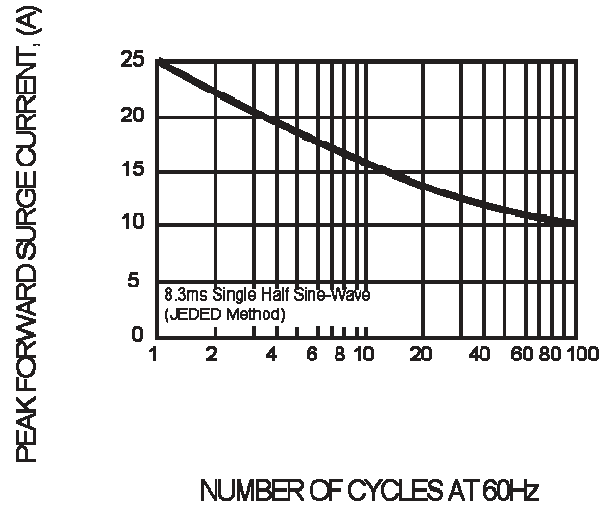
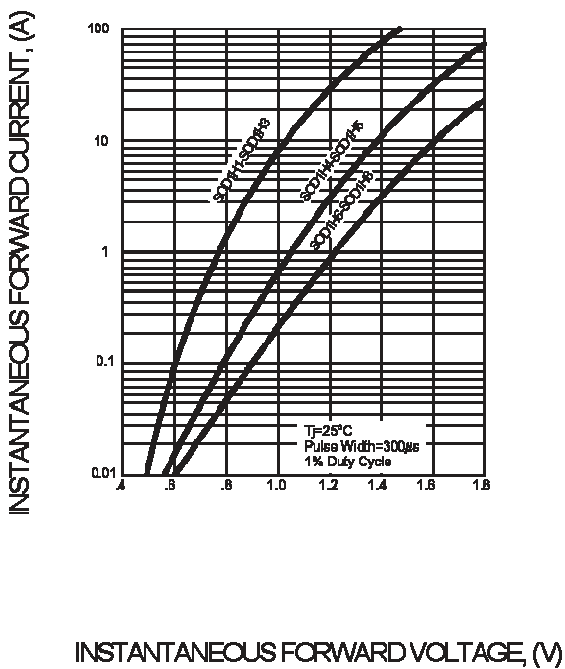
 2. Measured with  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$ .

**SURFACE MOUNT RECTIFIERS**
**SOD1H1--SOD1H8**
**PACKAGE OUTLINE DIMENSIONS**

**SOLDERING FOOTPRINT**


Unit : mm

**PACKAGE INFORMATION**

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

**SURFACE MOUNT RECTIFIERS**
**SOD1H1--SOD1H8**
**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**
