

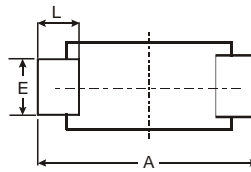
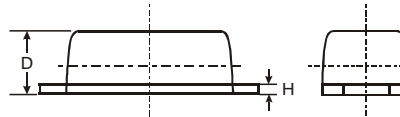
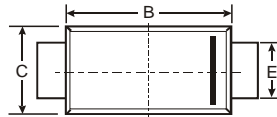
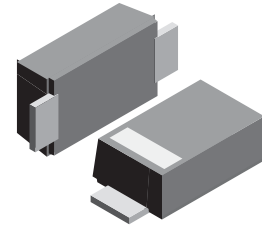
VOLTAGE RANGE: 50 - 1000V
CURRENT: 1.0A

Features

- Glass passivated device
- Ideal for surface mounted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:
 250°C/10 seconds, 0.375" (9.5mm) lead length,
 5 lbs. (2.3kg) tension

Mechanical Data

- Case: SOD-123FL
 plastic body over passivated junction
- Terminals : Plated axial leads,
- solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight: 0.0007 ounce, 0.02 grams



SOD-123FL			
Dim	Min	Max	Typ
A	3.58	3.72	3.65
B	2.72	2.78	2.75
C	1.77	1.83	1.80
D	1.02	1.08	1.05
E	0.097	1.03	1.00
H	0.13	0.17	0.15
L	0.53	0.57	0.55
All Dimensions in mm			



Maximum Ratings and Electrical Characteristics $T_A = 25^\circ\text{C}$ unless otherwise specified

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

Characteristic	Symbol	SOD1H1	SOD1H2	SOD1H3	SOD1H4	SOD1H5	SOD1H6	SOD1H7	SOD1H8	Unit	
Maximum repetitive 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 at $T_A=65^\circ\text{C}$ (NOTE 1)	$I_{(AV)}$	1.0								A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) $T_L=25^\circ\text{C}$	I_{FSM}	25.0								A	
Maximum instantaneous forward voltage at 1.0A	V_F	1.0		1.4		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	10.0 200.0								μA	
Maximum reverse recovery time (NOTE 2)	t_{rr}	50					75				ns
Typical thermal resistance (NOTE 4)	$R_{\theta JA}$	180								K/W	
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +150								$^\circ\text{C}$	

- Note:**
1. Averaged over any 20ms period.
 2. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.
 3. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 4. Thermal resistance junction to ambient, 6.0 mm² copper pads to each terminal.



RATINGS AND CHARACTERISTIC CURVES SOD1H1 THRU SOD1H8

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

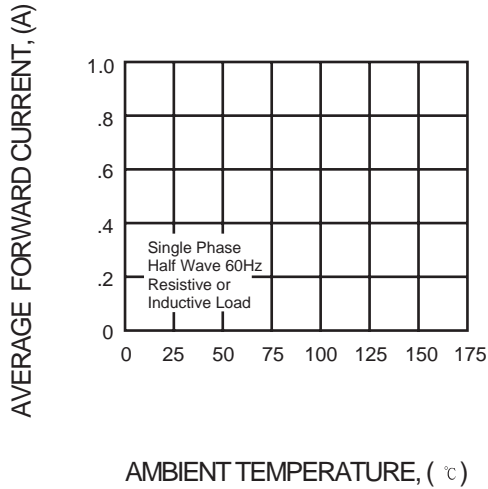


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

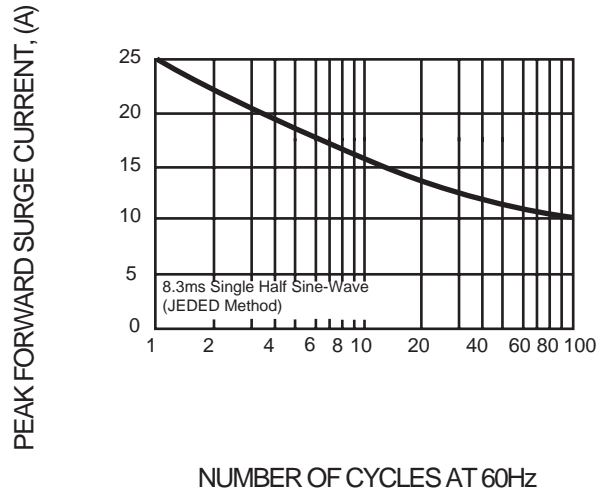


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

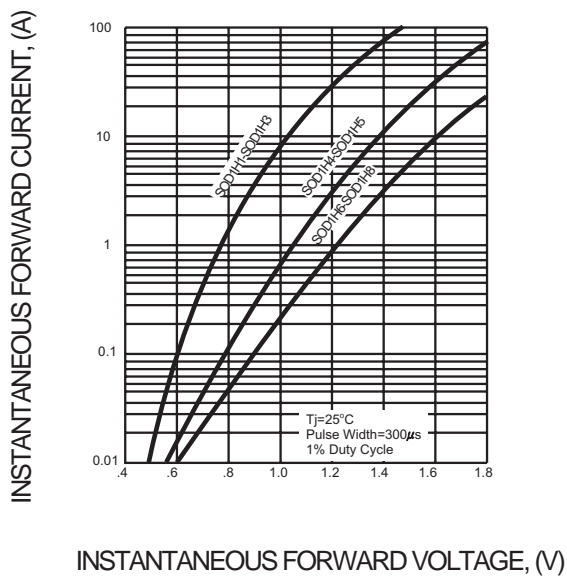


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

