

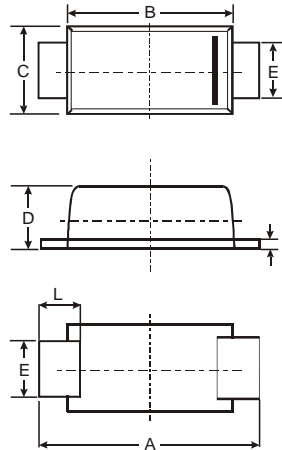
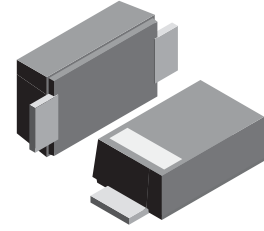
VOLTAGE RANGE: 50 - 600V
CURRENT: 1.0 A

Features

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

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°C unless otherwise specified

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

Characteristic	Symbol	SOD1E1	SOD1E2	SOD1E3	SOD1E4	SOD1E5	SOD1E6	SOD1E7	SOD1E8	Unit	
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	150	200	300	400	500	600	V	
Maximum RMS voltage	V _{RMS}	35	70	105	140	210	280	350	420	V	
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	500	600	V	
Maximum average forward rectified current <small>T_A=65</small>	I _(AV)	1.0								A	
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load <small>T_L=25</small>	I _{FSM}	25								A	
Maximum instantaneous (NOTE 1) forward voltage at 1.0A	V _F	0.95			1.25		1.7			V	
Maximum DC reverse current @T _A =25 at rated DC blocking voltage @T _A =125	I _R	5.0					150				μA
Maximum reverse recovery time (NOTE 2)	t _{rr}	35								ns	
Operating temperature range	T _j	- 55 --- + 150									
Storage temperature range	T _{STG}	- 55 --- + 150									

NOTES: 1. Pulse test: 300ms pulse width, 1% duty cycle.
 2. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.



FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

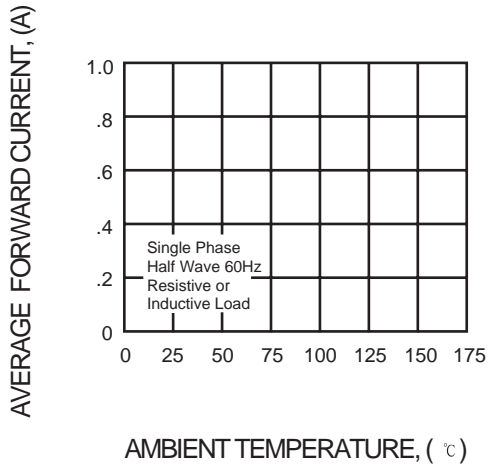


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

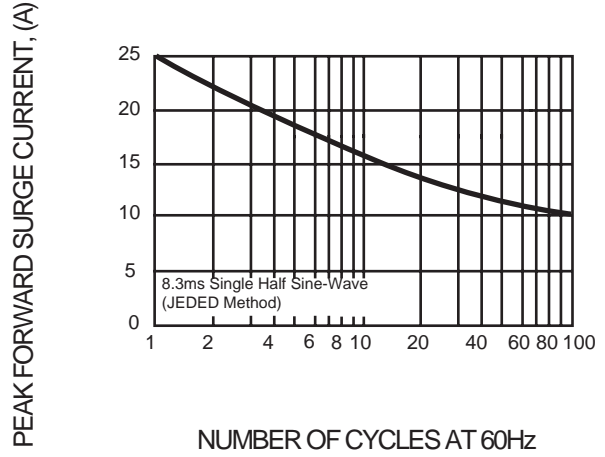


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

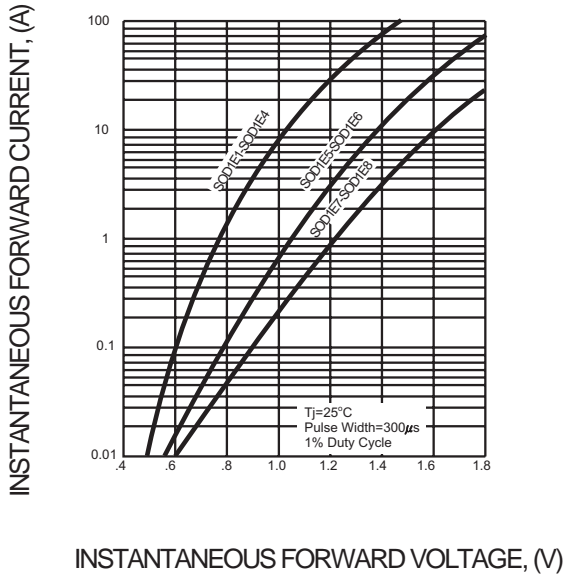


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

