

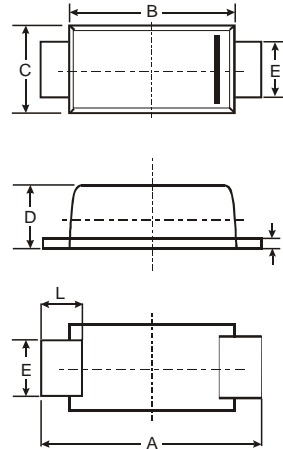
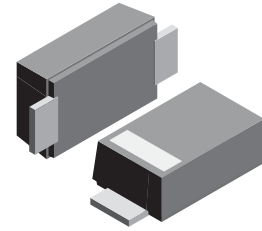
VOLTAGE RANGE: 50 - 1000V
CURRENT: 1.0 A

Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: JEDEC SOD-123FL molded plastic body over passivated chip
- 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



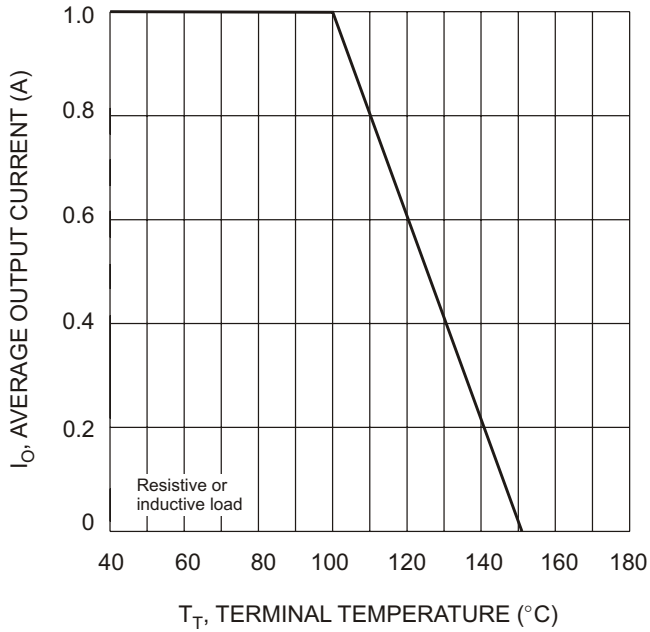
SOD-123FL			
Dim	Min	Max	Typ
A	3.58	3.72	3.65
B	2.72	2.78	2.75
C	1.77	1.83	1.80
D	1.02	1.08	1.05
E	0.097	1.03	1.00
H	0.13	0.17	0.15
L	0.53	0.57	0.55
All Dimensions in mm			

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

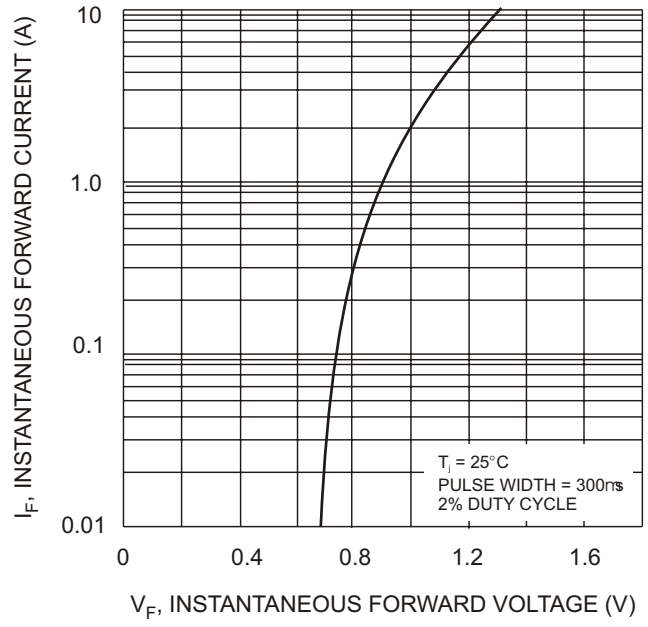
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	S1AL	S1BL	S1DL	S1GL	S1JL	S1KL	S1ML	Unit
	Marking	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								
Working Peak Reverse Voltage	V _{VRM}	50	100	200	400	600	800	1000	V
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _L = 100°C	I _o	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30							A
Forward Voltage @I _F = 1.0A	V _{FM}	1.10							V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C	I _{RM}	5.0 200							μA
Reverse Recovery Time (Note 1)	t _{rr}	2.5							μS
Typical Junction Capacitance (Note 2)	C _j	15							pF
Typical Thermal Resistance (Note 3)	R _{θJL}	30							°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +175							°C

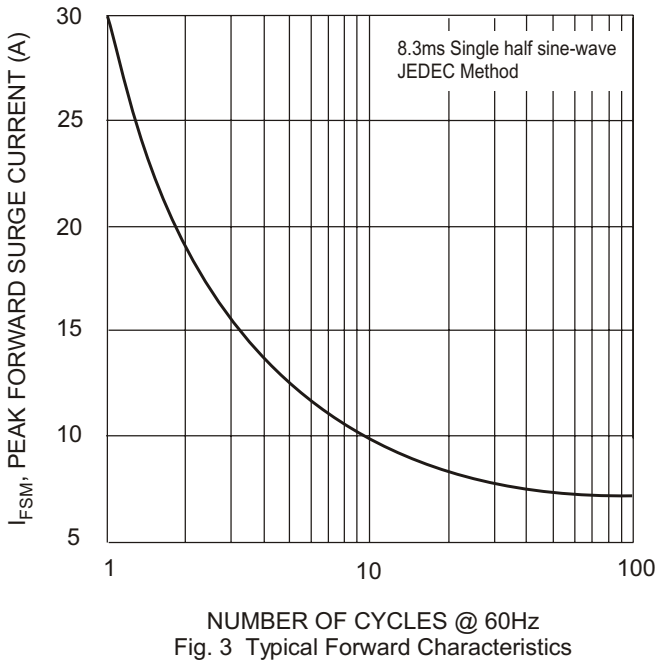
Note: 1. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A,
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 3. Mounted on P.C. Board with 8.0mm² land area.



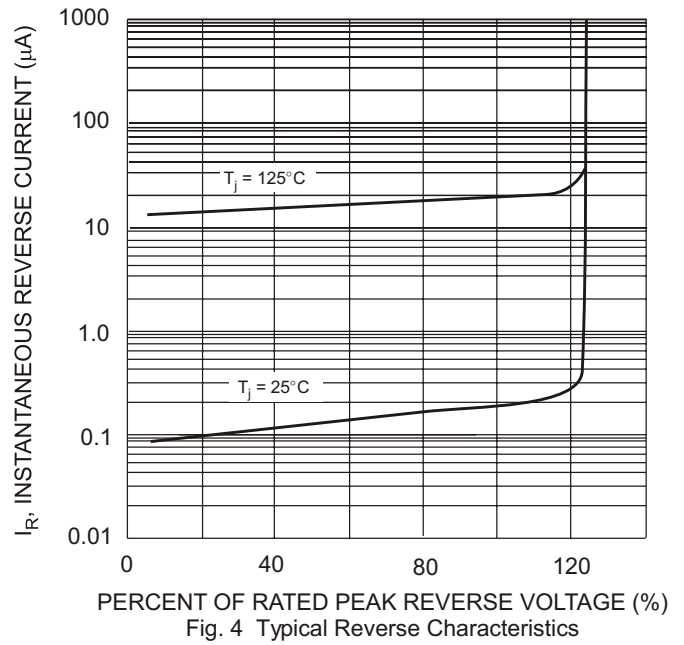
T_T , TERMINAL TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES @ 60Hz
Fig. 3 Typical Forward Characteristics



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 4 Typical Reverse Characteristics