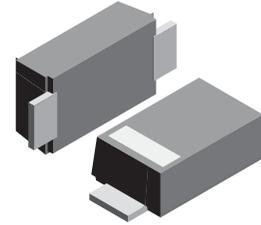


VOLTAGE RANGE: 50 - 600V
CURRENT: 1.0A

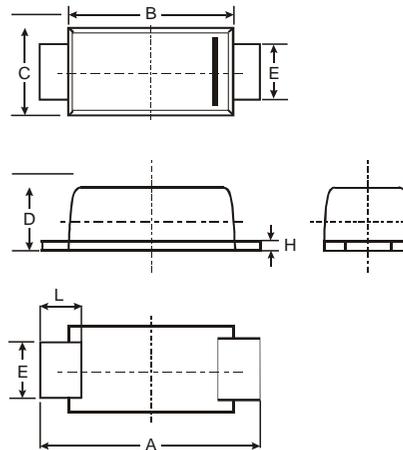
Features

- 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	3.50	3.80	3.65
B	2.60	2.90	2.75
C	1.70	1.90	1.80
D	0.09	1.10	1.00
E	0.08	1.10	0.095
H	0.12	0.20	0.16
L	0.07	0.09	0.08
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	ES1AFL	ES1BFL	ES1CFL	ES1DFL	ES1EFL	ES1GFL	ES1JFL	Unit	
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	300	400	600	VOLTS	
Maximum RMS voltage	VRMS	35	70	105	140	210	280	420	VOLTS	
Maximum DC blocking voltage	V _{DC}	50	100	150	200	300	400	600	VOLTS	
Maximum average forward rectified current	I(AV)	1.0							Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	25.0							Amps	
Maximum instantaneous forward voltage at 1.0A	VF	0.95			1.25		1.7		Volts	
Maximum DC reverse current at rated DC blocking voltage	IR	TA=25°C		5.0					μA	
		TA=100°C		100.0						
Maximum reverse recovery time (NOTE 1)	trr	35								ns
Typical junction capacitance (NOTE 2)	CJ	10								pF
Typical thermal resistance (NOTE 3)	R _{θJA}	85								K/W
Operating junction and storage temperature range	TJTSTG	-55 to +150							°C	

Note: 1. Measured with IF=0.5A, IR=1A, Irr=0.25A.
 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 3. PCB mounted on 0.2*0.2" (5.0*5.0mm) copper pad area.

RATINGS AND CHARACTERISTIC CURVES ES1AL THRU ES1JL

FIG. 1- FORWARD CURRENT DERATING CURVE

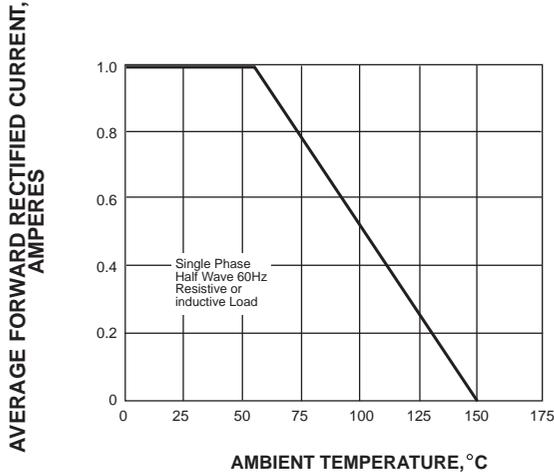


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

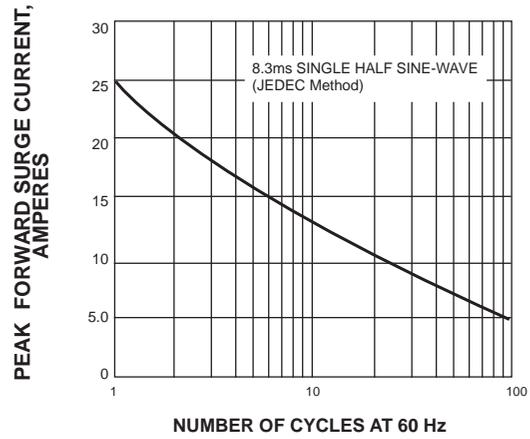


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

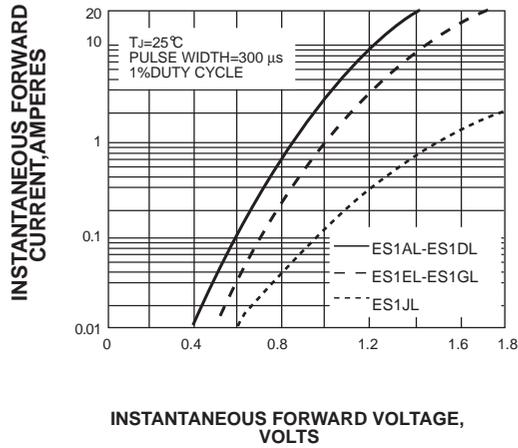


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

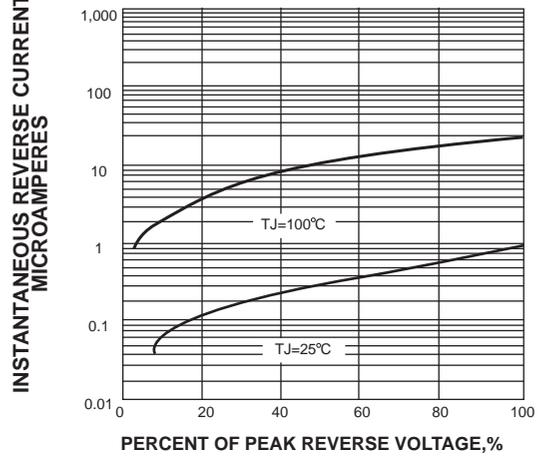


FIG. 5-TYPICAL JUNCTION CAPACITANCE

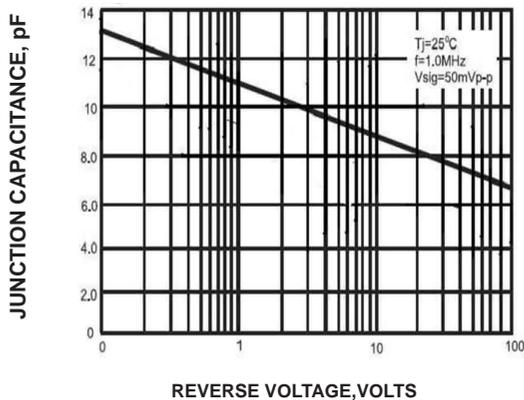


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

