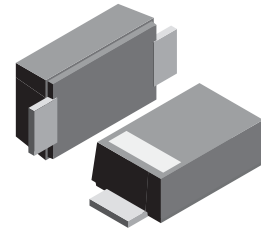


**VOLTAGE RANGE: 50 - 600V**  
**CURRENT: 2.0 A**

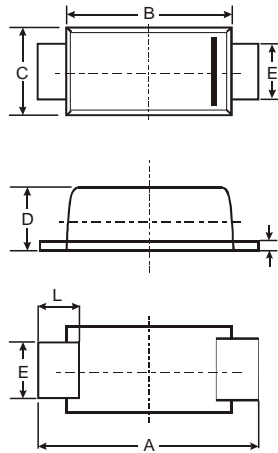


### Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop, High Efficiency
- Low Power Loss
- Super-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O

### 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<sub>A</sub> = 25°C unless otherwise specified

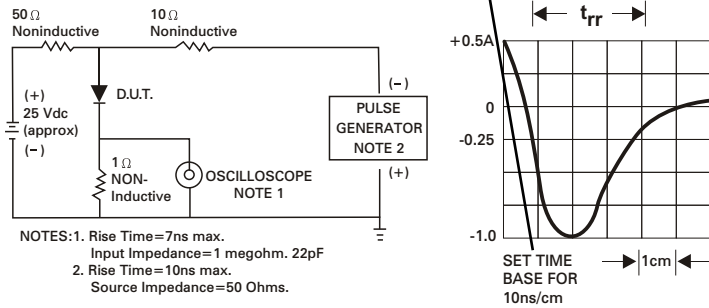
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	ES2AL	ES2BL	ES2CL	ES2DL	ES2EL	ES2GL	ES2JL	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>								
Working Peak Reverse Voltage	V <sub>RWM</sub>	50	100	150	200	300	400	600	V
DC Blocking Voltage	V <sub>R</sub>								
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	105	140	210	280	420	V
Average Rectified Output Current @ T <sub>L</sub> = 75 °C	I <sub>O</sub>	2.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50							A
Forward Voltage @ I <sub>F</sub> = 2.0A	V <sub>FM</sub>	0.95				1.25		1.7	V
Peak Reverse Current @ T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @ T <sub>A</sub> = 100°C	I <sub>RM</sub>	5.0 200							μA
Reverse Recovery Time (Note 1)	t <sub>rr</sub>	35							nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	62							pF
Typical Thermal Resistance (Note 3)	R <sub>θJL</sub>	40							°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150							°C

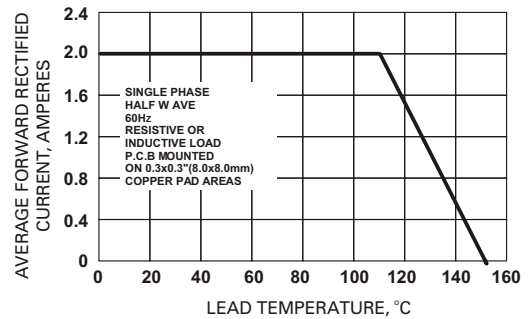
- Note: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>rr</sub> = 0.25A. See figure 5.  
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.  
 3. Mounted on P.C. Board with 8.0mm<sup>2</sup> land area.

## RATING AND CHARACTERISTIC CURVES ES2ALTHRUES2JL

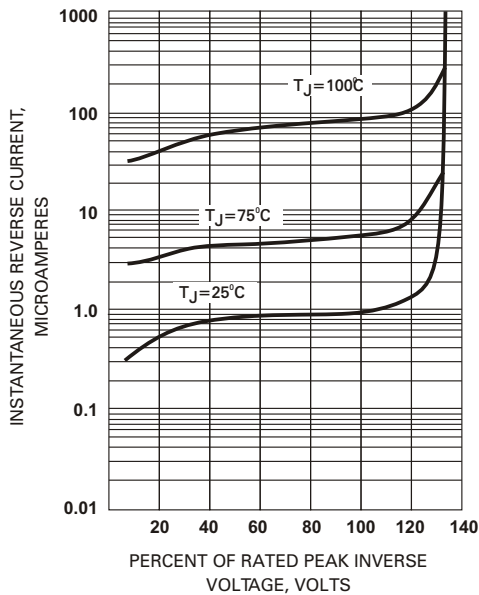
**Fig. 1 - REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM ES1A THRU ES1G**



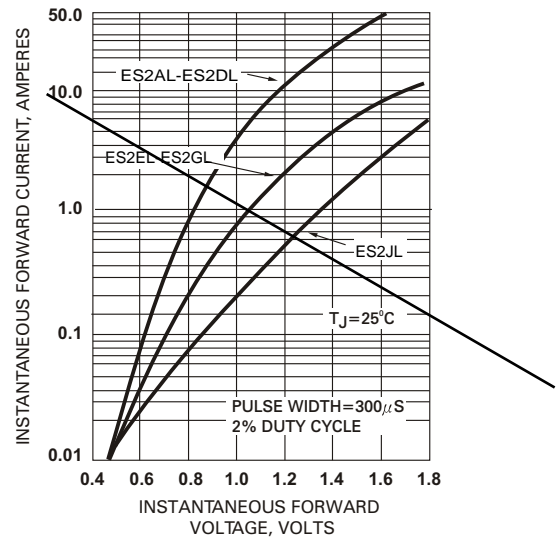
**Fig. 2 - MAXIMUM AVERAGE FORWARD CURRENT RATING**



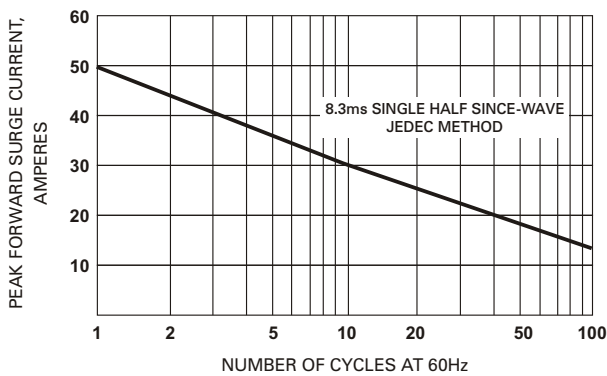
**Fig. 3 - TYPICAL REVERSE CHARACTERISTICS**



**Fig. 4 - TYPICAL FORWARD CHARACTERISTICS**



**Fig. 5 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**Fig. 6 - TYPICAL JUNCTION CAPACITANCE**

