

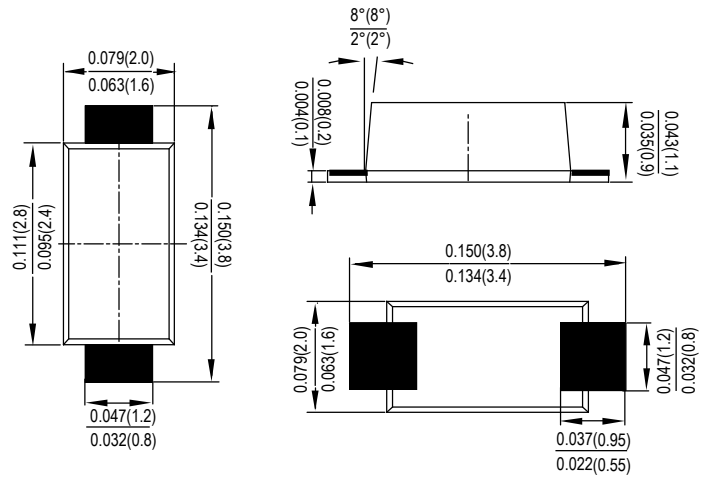
### Features

- Glass passivated device
- Ideal for surface mouted applications
- Low reverse leakage
- Metallurgically bonded construction
- High temperature soldering guaranteed:  
260°C/10 seconds,0.375"(9.5mm) lead length,  
5 lbs. (2.3kg) tension
- Plastic material-UL flammability 94V-0

### Mechanical Data

- Case: SOD-123FL, molded plastic
- Terminals: plated leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

### SOD-123FL



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	ES1AL	ES1BL	ES1DL	ES1GL	ES1JL	UNITS
	Code	EA	EB	ED	EG	EJ	
Peak Repetitive Reverse Voltage	$V_{RRM}$	50	100	200	400	600	V
Working Peak Reverse Voltage	$V_{RWM}$						
DC Blocking Voltage	$V_{DC}$						
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	V
Average Rectified Output Current @ $T_A=30^\circ C$	$I_o$	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 per element @ $I_F=1.0A$	$V_{FM}$	0.95			1.25	1.7	V
Peak Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=100^\circ C$	$I_R$	5.0			100		$\mu A$
Maximum reverse recovery time (NOTE 1)	$t_{rr}$	35					ns
Typical junction capacitance (NOTE 2)	$C_J$	10					pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	85					$^\circ C/W$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55to+150					$^\circ C$

Note:1. Measured with  $I_F=0.5A$ ,  $I_R=1A$ ,  $I_{rr}=0.25A$ .

2. Thermal resistance from junction to ambient at 0.375" (9.5mm)lead length,P.C.B. mounted

3. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

FIG. 1- FORWARD CURRENT DERATING CURVE

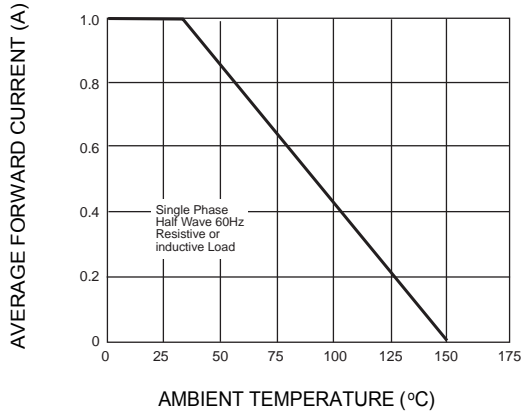


FIG. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

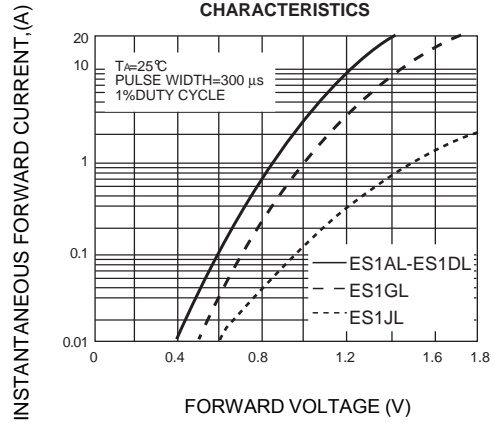


FIG. 3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

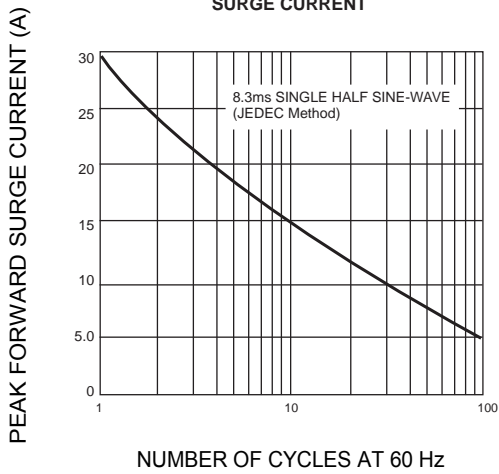


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

