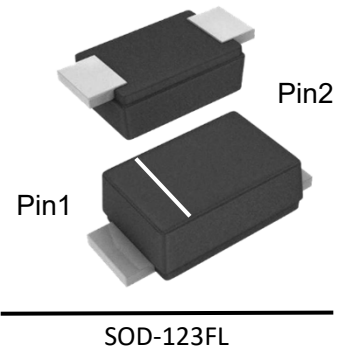
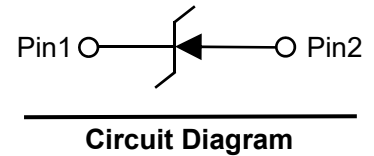


Feature

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0.
- For surface mounted applications.
- Built-in strain relief, ideal for automated placement.
- Low reverse leakage.
- High forward surge current capability.
- High temperature soldering guaranteed 260 °C/10 seconds at terminals.


Mechanical Characteristics

- Case : Molded plastic body
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Polarity symbol marking on body
- Mounting Position : Any
- Weight : 0.0007 ounce, 0.02 grams


Absolute maximum rating@25°C

Parameter	Symbol	PSBD1D F20V3H X	PSBD1D F40V3H X	PSBD1D F60V3H X	PSBD1D F80V3H X	PSBD1D F100V3 HX	PSBD1D F150V3 HX	PSBD1D F200V3 HX	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	40	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	40	60	80	100	150	200	V
Forward Current @ $T_L = 100^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load	I_{FSM}	70							A
Max Instantaneous Forward Voltage at 3 A	V_F	0.55	0.7	0.85	0.95				V
Reverse Current	$T_a = 25^\circ\text{C}$	0.2			0.05			mA	
	$T_a = 100^\circ\text{C}$	20			5.0				
Typical Thermal Resistance	$R_{\theta JA}$	85							$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-55 ~ +125			-55 ~ +150			$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 ~ +150							$^\circ\text{C}$

Typical Characteristics

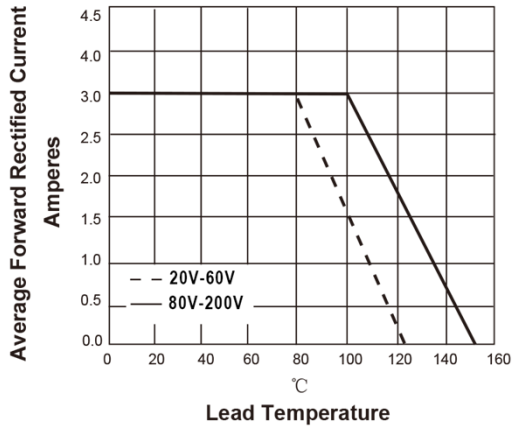


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

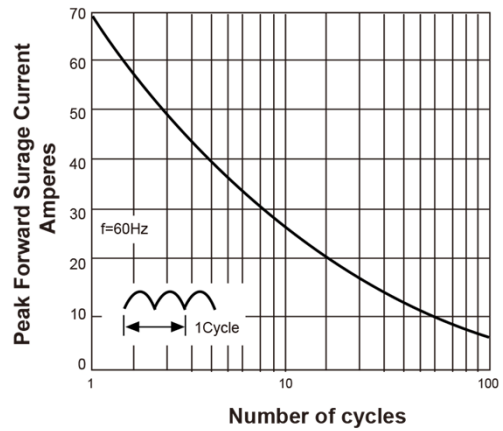


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

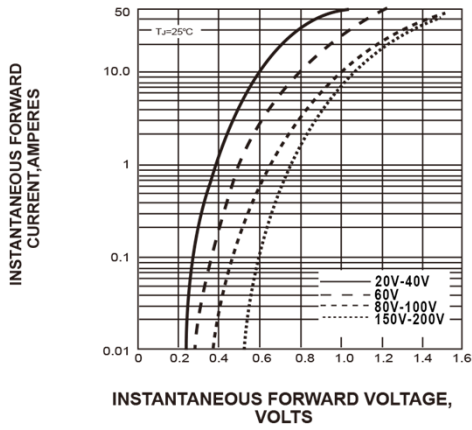


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

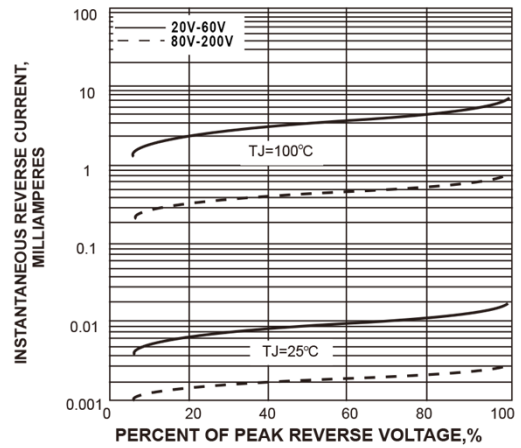
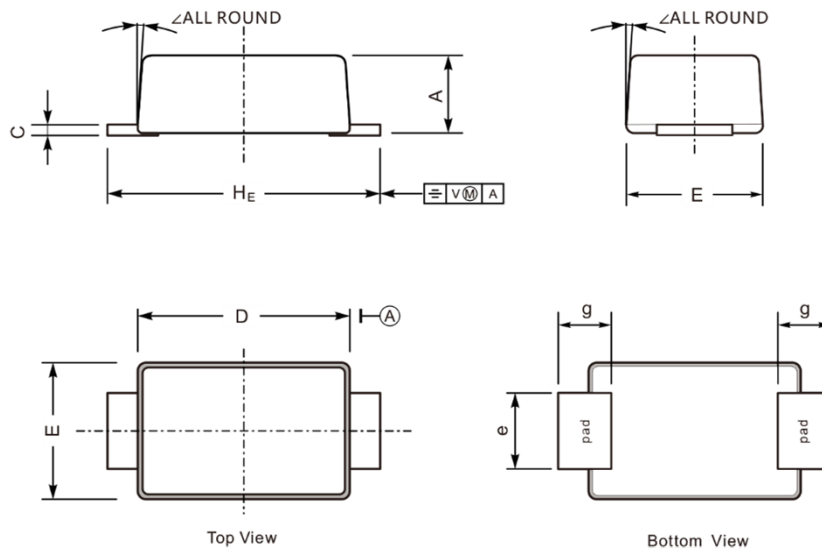
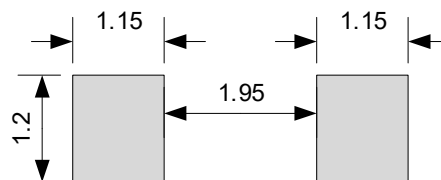


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

Product Dimension (SOD-123FL)



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	0.90	1.30	0.035	0.051
C	0.10	0.30	0.004	0.012
D	2.60	3.00	0.102	0.118
E	1.60	2.00	0.063	0.079
e	0.80	1.10	0.031	0.043
g	0.70	0.90	0.028	0.035
HE	3.60	4.00	0.142	0.157
∠	7°			

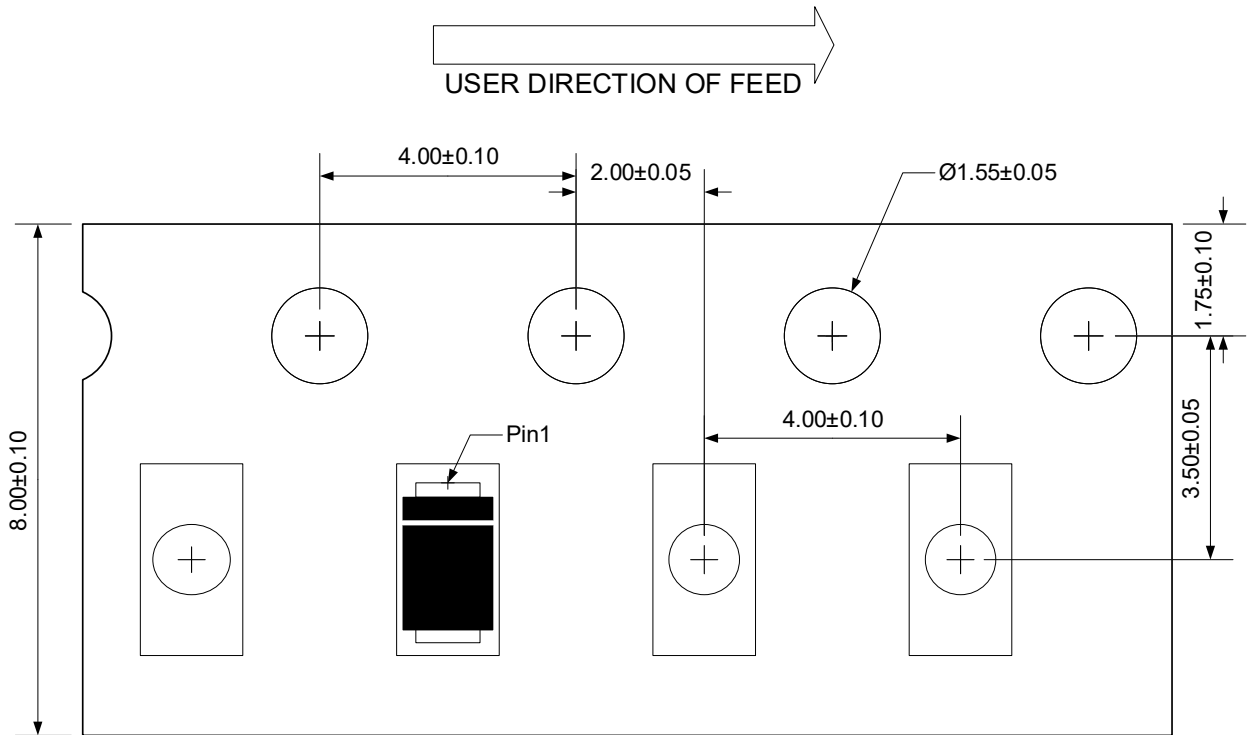


Unit: mm

Suggested PCB Layout


Ordering information

Package	Reel	Shipping
SOD-123FL	7"	3000 / Tape & Reel



Unit:mm


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