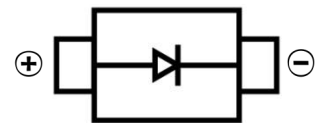


GENERAL PURPOSE RECTIFIER DIODE**FEATURES**

- Surface Mount device
- Low Reverse voltage leakage current
- Glass passivated junction
- High forward surge current capability
- Low forward voltage drop

**SOD-123FL****MECHANICAL DATA**

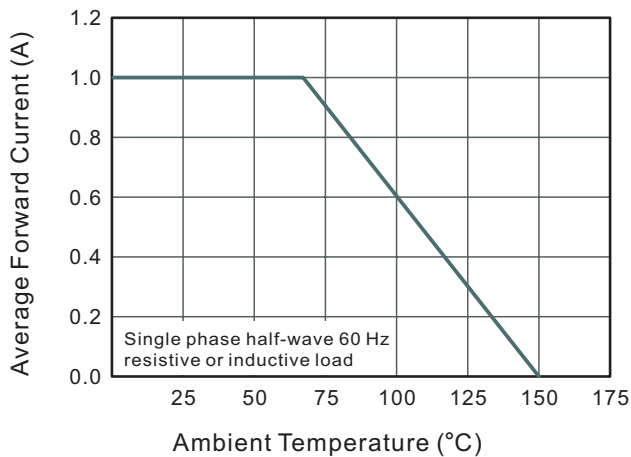
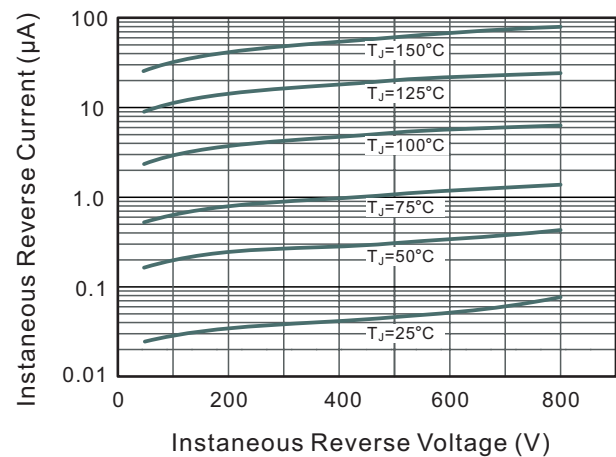
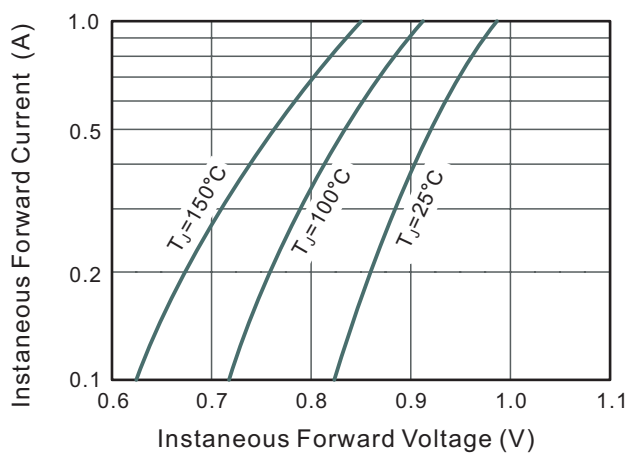
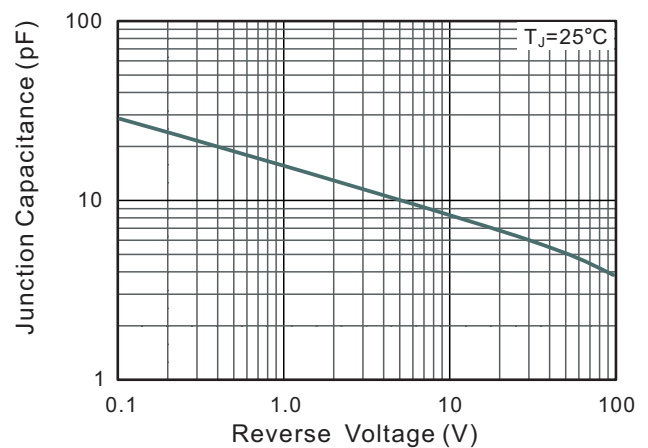
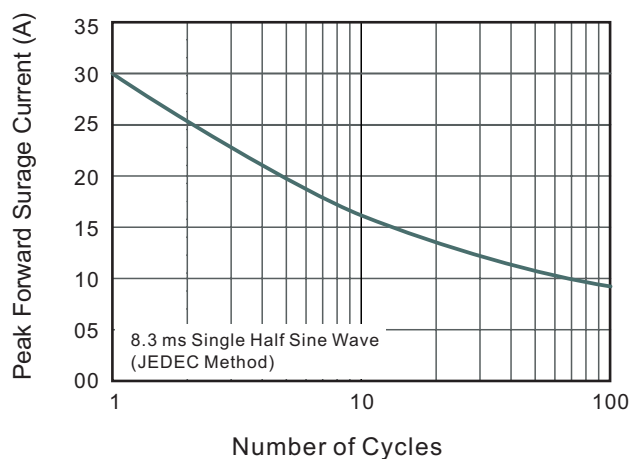
- Case: SOD-123FL
- Case Material: Molded Plastic. UL flammability
- Classification Rating: 94V-0
- Weight: 0.0155 grams (approximate)

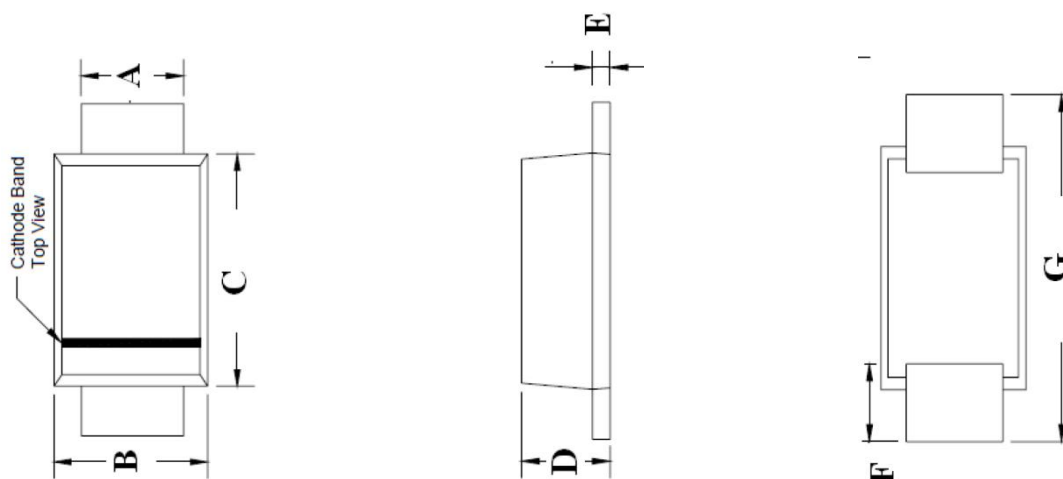
**MARKING:A1-A7****MAXIMUM RATINGS ($T_A = 25^\circ\text{C}$ unless otherwise noted)**

Parameter	Symbol	1N4001L	1N4002L	1N4003L	1N4004L	1N4005L	1N4006L	1N4007L	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
DC Blocking Reverse Voltage	V_R	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	I_F	1							A
Non-Repetitive Peak Forward Surge Current (@ $t=8.3\text{ms}$)	I_{FSM}	30							A
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	120							$^\circ\text{C/W}$
Junction and Storage Temperature Range	T_J, T_{STG}	$-50 \sim +150$							$^\circ\text{C}$

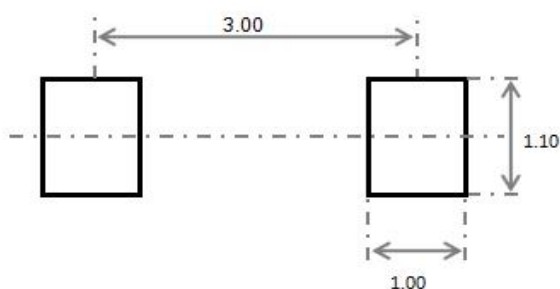
ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F			1.1	V	$I_F=1\text{A}$
Reverse current	I_R			5	μA	$V=V_R$
				50		$V=V_R, T_a=125^\circ\text{C}$
Diode capacitance	C_D		9		pF	$V_R=4V_{DC}, f=1\text{MHz}$

GENERAL PURPOSE RECTIFIER DIODE**Typical Characteristics****Fig.1 Forward Current Derating Curve****Fig.2 Typical Instantaneous Reverse Characteristics****Fig.3 Typical Forward Characteristic****Fig.4 Typical Junction Capacitance****Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**

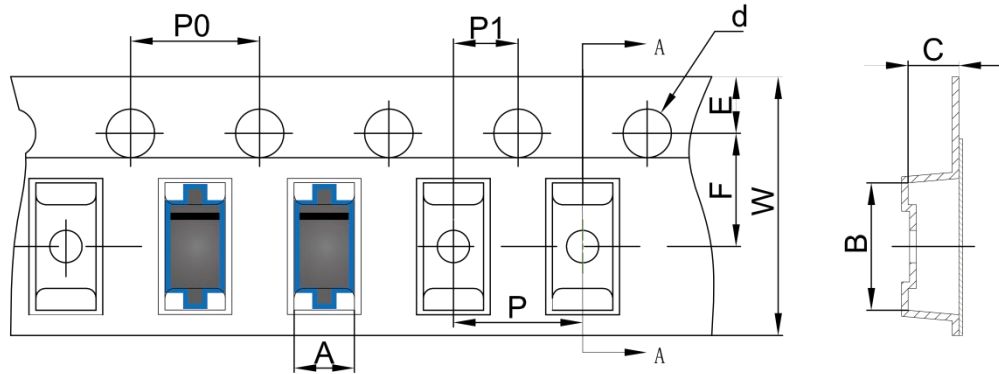
GENERAL PURPOSE RECTIFIER DIODE**SOD-123FL Package Outline Dimensions**

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	0.75	0.95	0.029	0.037
B	1.60	2.00	0.063	0.079
C	2.60	3.00	0.103	0.119
D	0.90	1.20	0.036	0.047
E	0.12	0.22	0.005	0.009
F	0.8Typ		0.032Typ	
G	3.50	3.90	0.138	0.159

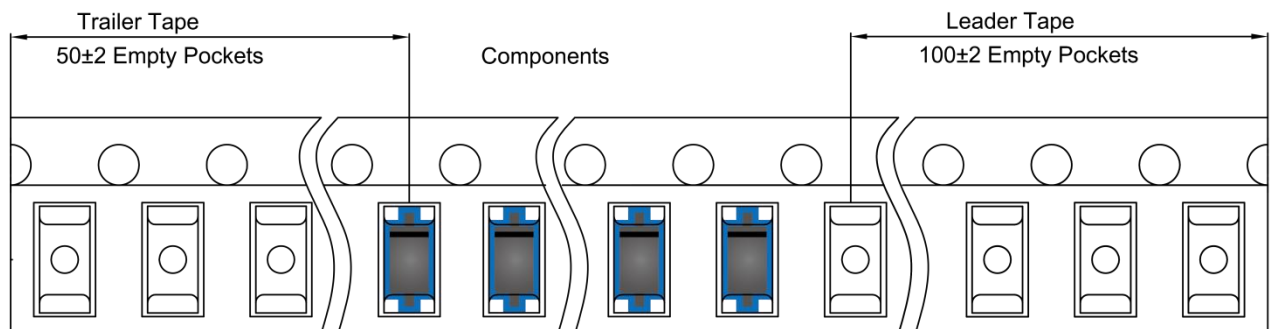
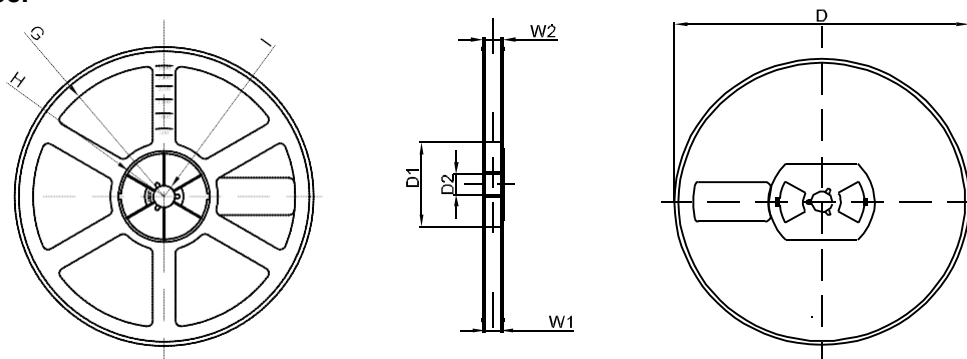
SOD-123FL Suggested Pad Layout**Note:**

1. Controlling dimension: in millimeters
2. General tolerance: $\pm 0.05\text{mm}$
3. The pad layout is for reference purposes only

GENERAL PURPOSE RECTIFIER DIODE

SOD-123FL Tape and Reel**SOD-123FL Embossed Carrier Tape**

DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-123FL	2.10	4.00	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

SOD-123FL Tape Leader and Trailer**SOD-123FL Reel**

DIMENSIONS ARE IN MILLIMETER								
REEL OPTION	D	D1	D2	G	H	I	W1	W2
7" DIA	Ø178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1