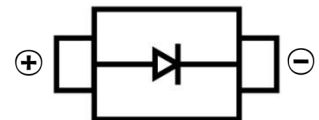


SWITCHING DIODE
FEATURES

- Fast Switching Speed
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- High Conductance


SOD-123FL
MECHANICAL DATA

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


MAXIMUM RATINGS (T_A = 25°C unless otherwise noted)

Parameter	Symbols	1N4148WL	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	V
Maximum RMS voltage	V _{RMS}	75	V
Continuous Forward Current	I _F	150	mA
Non-repetitive Peak Forward Surge Current at 1ms	I _{FSM}	4	A
Total Power Dissipation	P _{tot}	400	mW
Typical Thermal Resistance ⁽¹⁾	R _{θJA}	450	°C/W
Operating and Storage Temperature Range	T _j , T _{stg}	-55 ~ +150	°C

(1) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Parameter	Symbols	1N4148WL	Units
Reverse Breakdown Voltage at I _R =1μA	V _{(BR)R}	75	V
Maximum Forward Voltage at 1 mA at 10 mA at 50 mA at 150 mA	V _F	0.715 0.855 1.00 1.25	V
Peak Reverse Current at V _R =20V T _j =25°C at V _R =75V T _j =25°C at V _R =25V T _j =150°C at V _R =75V T _j =150°C	I _R	0.025 1 30 50	μA
Typical Junction Capacitance	C _j	5	pF
Maximum Reverse Recovery Time	t _{rr} Typical	8	ns

SWITCHING DIODE

Typical Characteristics

Fig.1 Forward Current Derating Curve

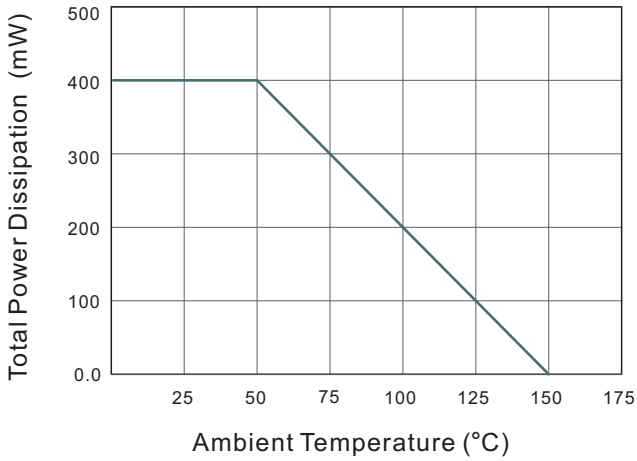


Fig.2 Typical Reverse Characteristics

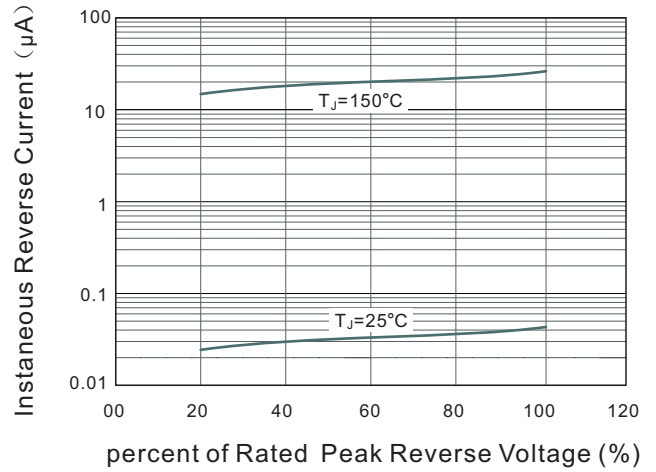


Fig.3 Typical Instantaneous Forward Characteristics

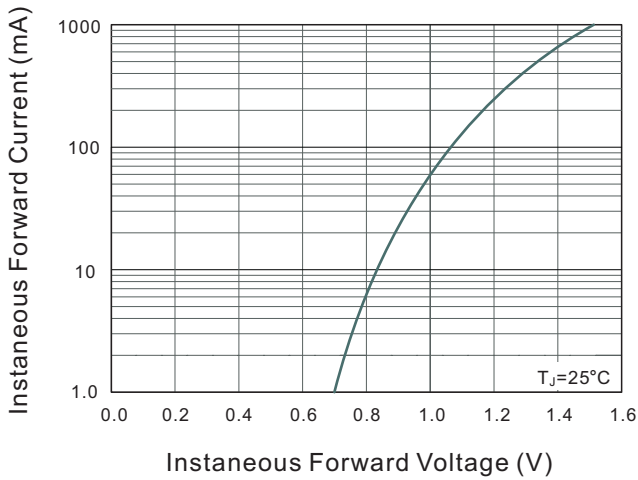
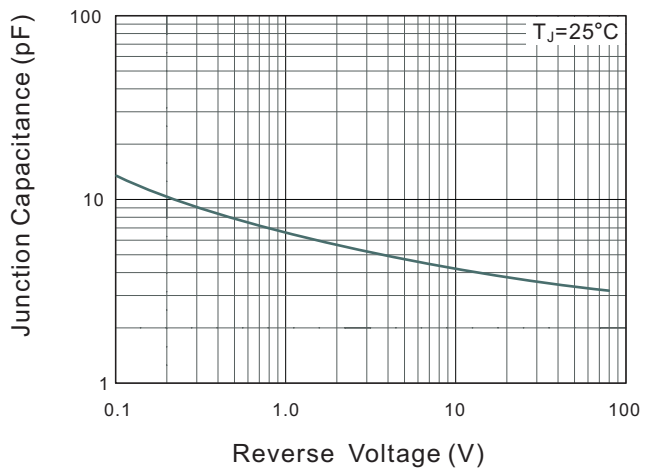
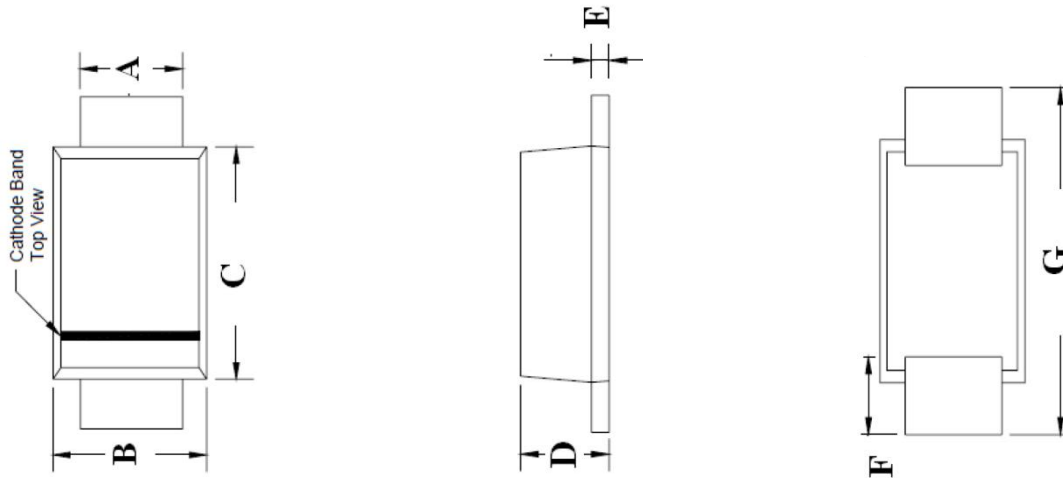


Fig.4 Typical Junction Capacitance



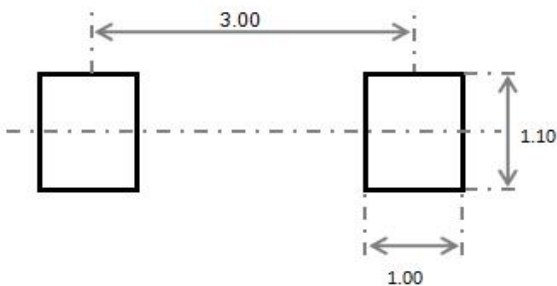
SWITCHING DIODE

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



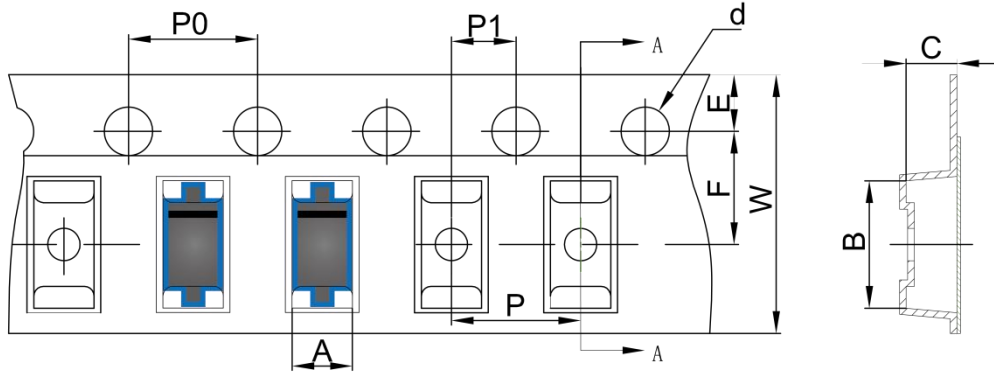
Note:

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

SWITCHING DIODE

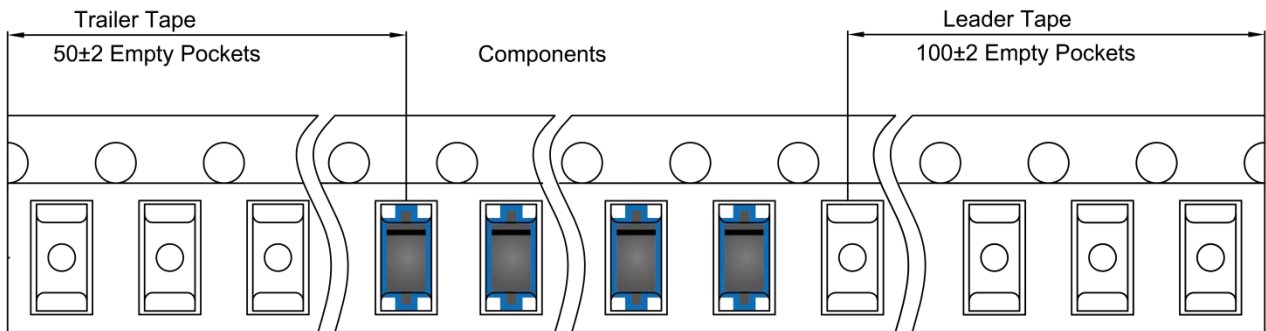
SOD-123FL Tape and Reel

SOD-123FL Embossed Carrier Tape

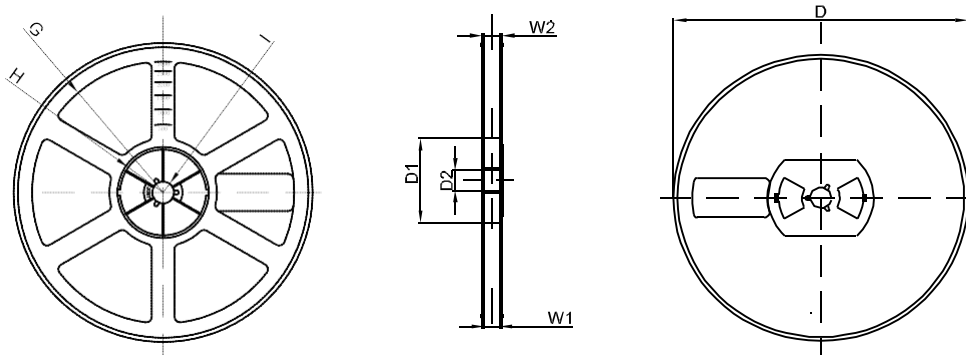


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
SOD-123FL	2.10	4.00	1.25	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
TOLERANCE	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

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