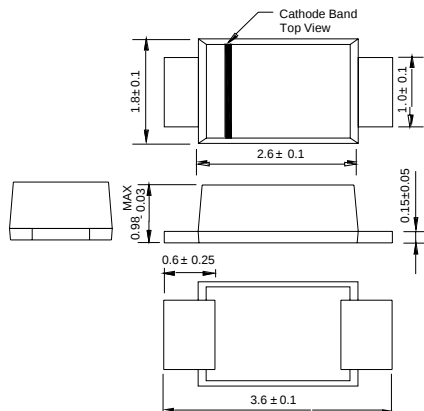




SOD-123FL



Dimensions in millimeters

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

MECHANICAL DATA

Case: SOD-123FL molded plastic body over passivated chip

Terminals: Solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight:0.0007 ounce, 0.02 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

	SYMBOLS	SOD4001 S1A	SOD4002 S1B	SOD4003 S1D	SOD4004 S1G	SOD4005 S1J	SOD4006 S1K	SOD4007 S1M	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at $T_L=100^{\circ}\text{C}$ (NOTE 1)	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	25.0							A
Maximum instantaneous forward voltage at 1.0A	V_F	1.1							V
Maximum DC reverse current $T_A=25^{\circ}\text{C}$ at rated DC blocking voltage $T_A=125^{\circ}\text{C}$	I_R	10.0 50.0							μA
Typical junction capacitance (NOTE 2)	C_J	4							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	95							$^{\circ}\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150							$^{\circ}\text{C}$

Note: 1. Averaged over any 20ms period.

2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3. PCB mounted on 0.2*0.2" (5.0*5.0mm) copper pad area.

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE

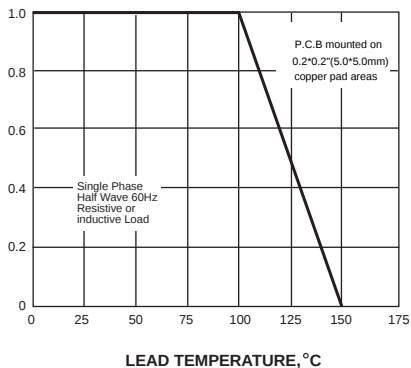
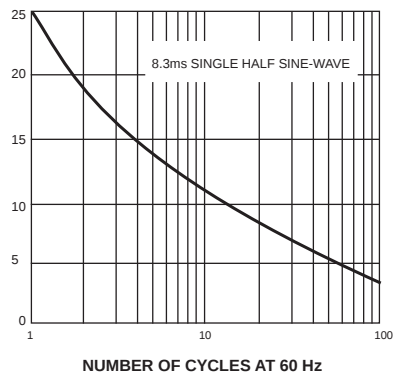
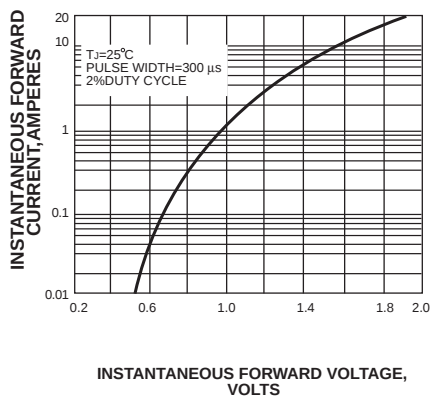
FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD
SURGE CURRENTPEAK FORWARD SURGE CURRENT,
AMPERESFIG. 3-TYPICAL INSTANTANEOUS FORWARD
CHARACTERISTICS

FIG. 4-TYPICAL REVERSE CHARACTERISTICS

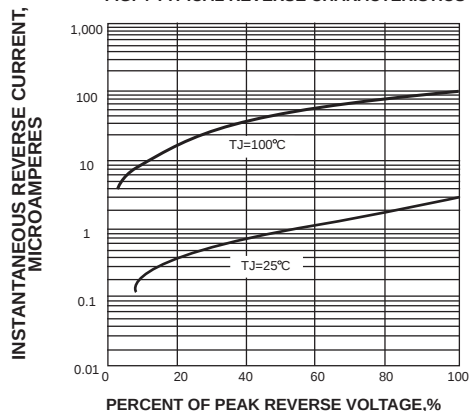
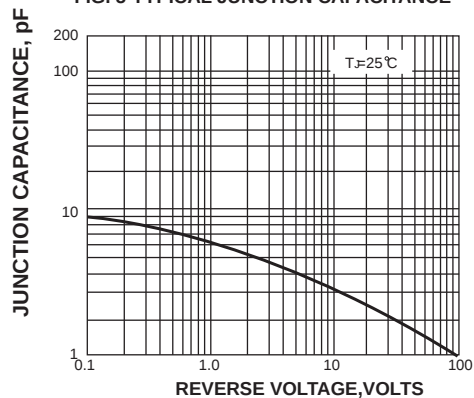
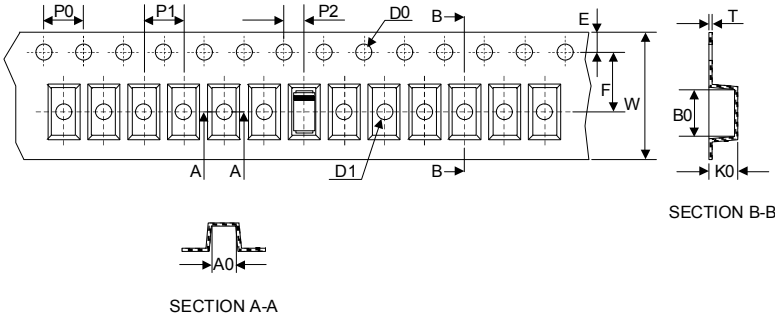
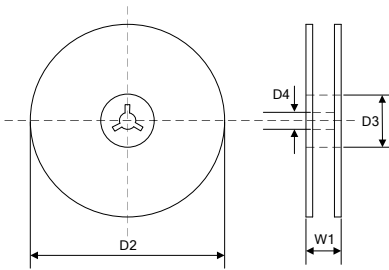
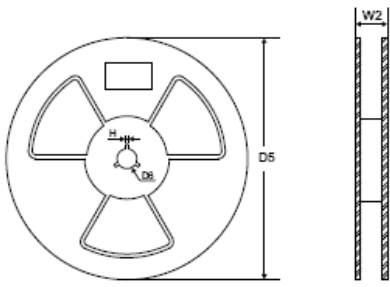


FIG. 5-TYPICAL JUNCTION CAPACITANCE





Packaging

Tape  SECTION A-A	Symbol	Dimension (mm)			
	W	12.00±0.20			
	P0	4.00±0.10			
	P1	4.00±0.10			
	P2	2.00±0.10			
	D0	Φ1.5±0.10			
	D1	Φ1.5±0.10			
	E	1.75±0.10			
	F	5.50±0.05			
	A0	2.79±0.10			
	B0	5.33±0.10			
	K0	2.55±0.15			
	T	0.25±0.05			
	SECTION B-B				
7" Reel 	D2	Φ178.0±2.0			
	D3	Φ50.0Min.			
	D4	Φ13.0±0.5			
	W1	16.0±2.0			
	Quantity: 3000PCS				
13" Reel 	D5	Φ330.0±2.0			
	D6	Φ13.5±0.5			
	H	2.5±1.0			
	W2	16.0±2.0			
	Quantity: 10000PCS				