



FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop



SOD-123FL

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
SOD1F1- SOD1F7	SOD-123F	F*	3000

* : From 1-7



Maxmim Ratings (Ta=25 unless otherwise noted)

Rating 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	1F1	1F2	1F3	1F4	1F5	1F8	1F7	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at Ta=25°C	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	30							A
Maximum Instantaneous Forward Voltage at 1.0A	1.3							V
Maximum DC Reverse Current Ta=25°C	5.0							μA
at Rated DC Blocking Voltage Ta=100°C	100							μA
Maximum Reverse Recovery Time (Note 1)	150			250		500		nS
Typical Junction Capacitance (Note 2)	15							pF
Typical Thermal Resistance R JA (Note 3)	80							°C/W
Operating and Storage Temperature Range T _J , T _{STG}	-65 — +150							°C

NOTES:

1. Reverse Recovery Time test condition: IF=0.5A, IR=1.0A, IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3. Thermal Resistance from Junction to Ambient.



Typical Characteristics

FIG.1-TYPICAL FORWARD CHARACTERISTICS

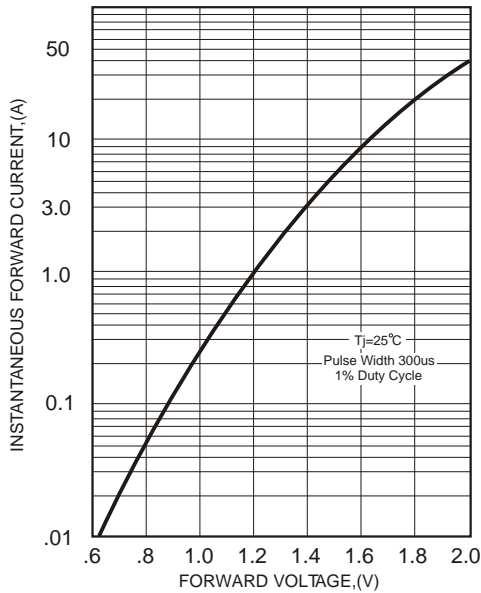


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

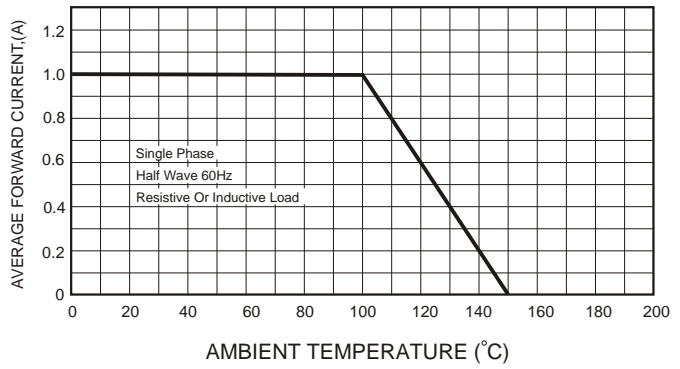
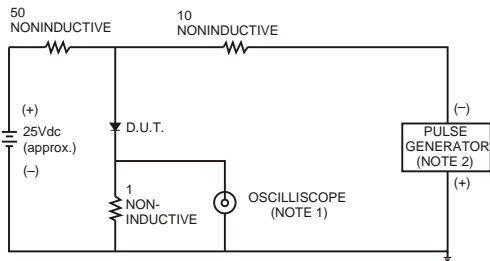


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm,22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

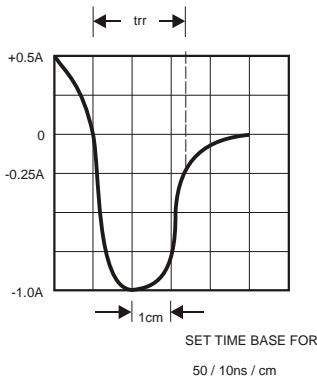


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

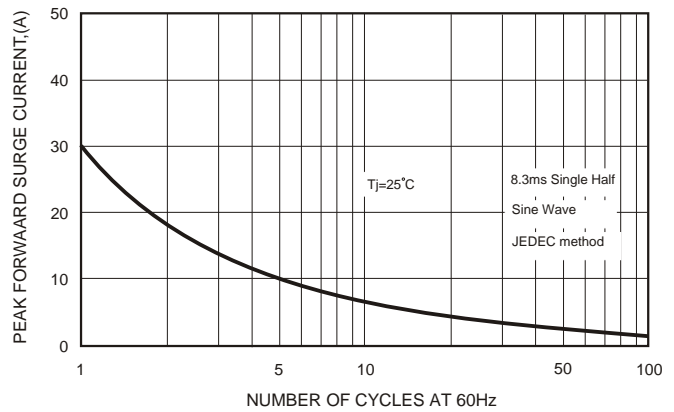
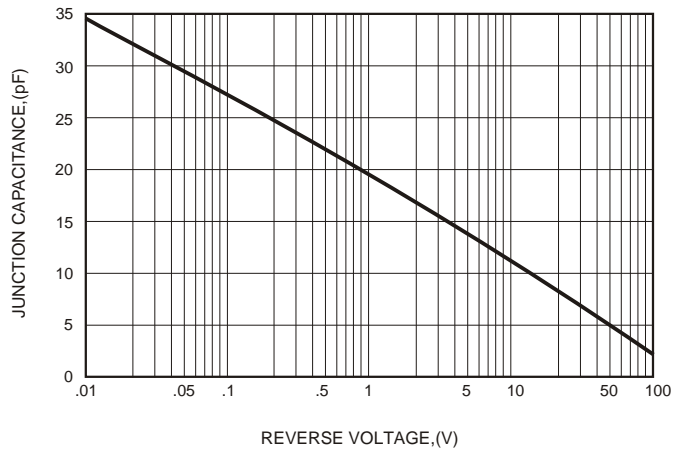
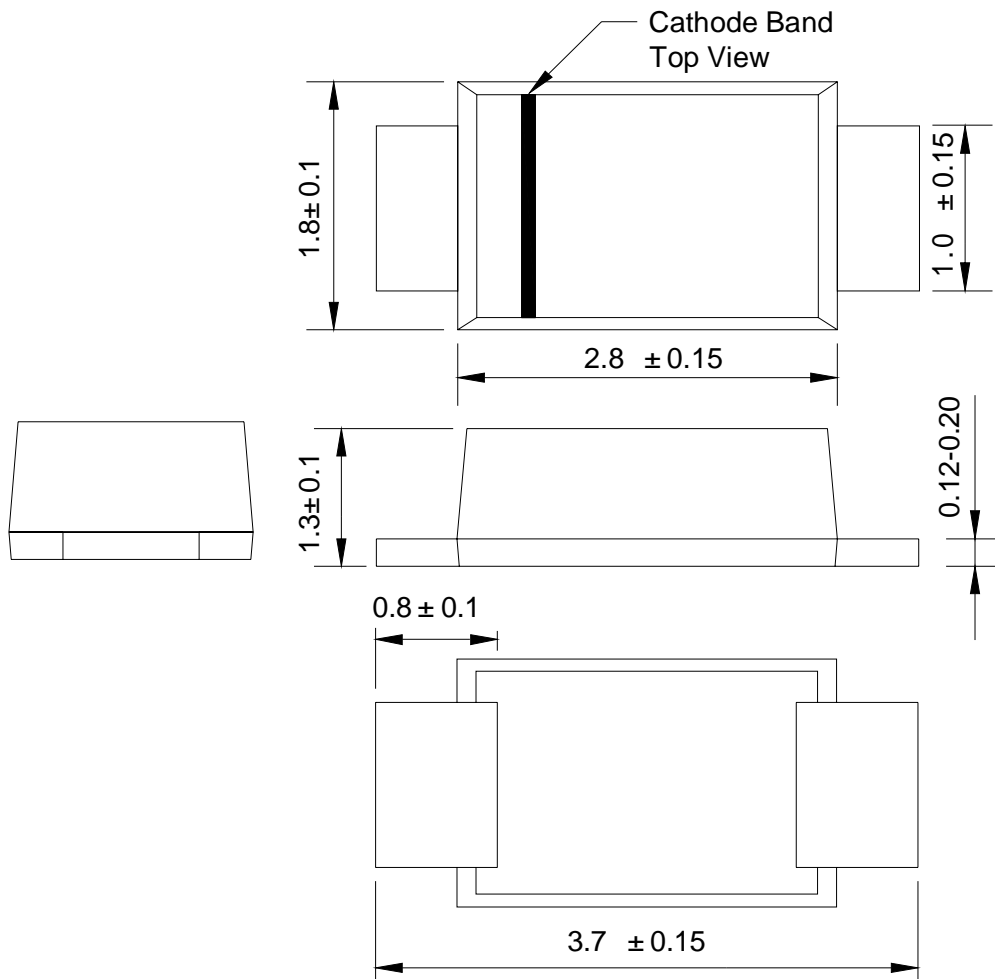


FIG.5-TYPICAL JUNCTION CAPACITANCE





SOD-123FL Package Outline Dimensions





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