



Features

- Average Forward Current: $I_{F(AV)}=1A$
- Polarity: Color band denotes cathode



SOD-123FL



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
US1MFA	SOD-123FL	U1M	3000

Maxmim Ratings (Ta=25 unless otherwise noted)

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

Tpye Number	US1MFA	Units
Maximum Recurrent Peak Reverse Voltage	1000	V
Maximum RMS Voltage	700	V
Maximum DC Blocking Voltage	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	1.7	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)	75	nS
Typical Junction Capacitance (Note 2)	15	pF
Typical Thermal Resistance R JA (Note 3)	80	°C/W
Operating and Storage Temperature Range Tj, Tstg	-65 — +150	°C

Notes:

1. Reverse Recovery Time test condition: $I_F=0.5A$, $I_R=1.0A$, $IRR=0.25A$
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

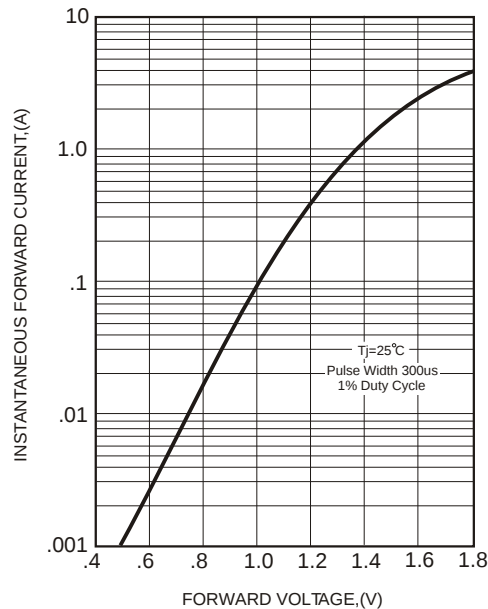


FIG.2-TYPICAL FORWARD CURRENT
DERATING CURVE

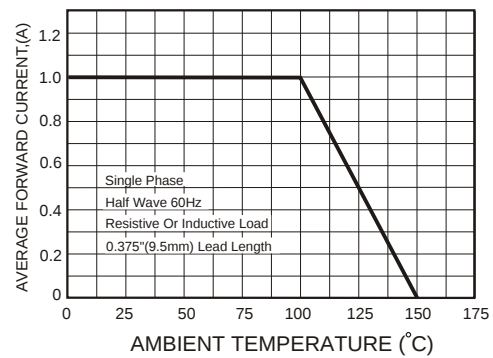
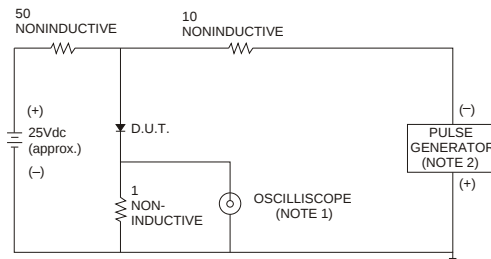


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE
RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

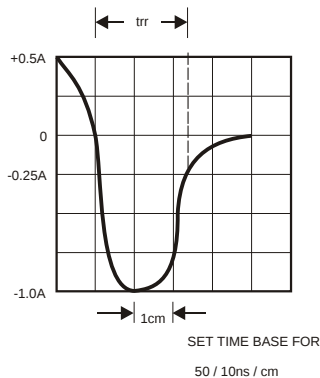


FIG.4-MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

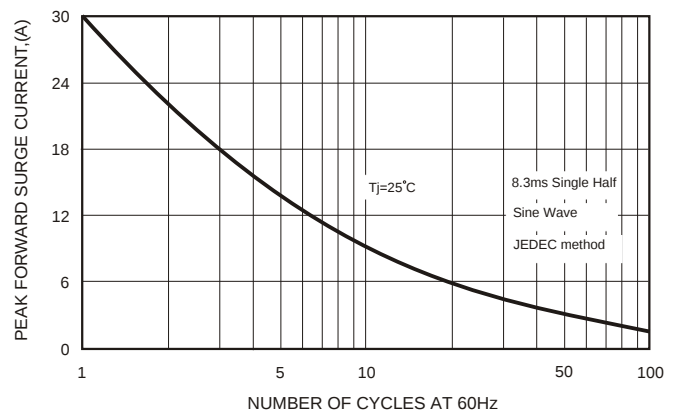
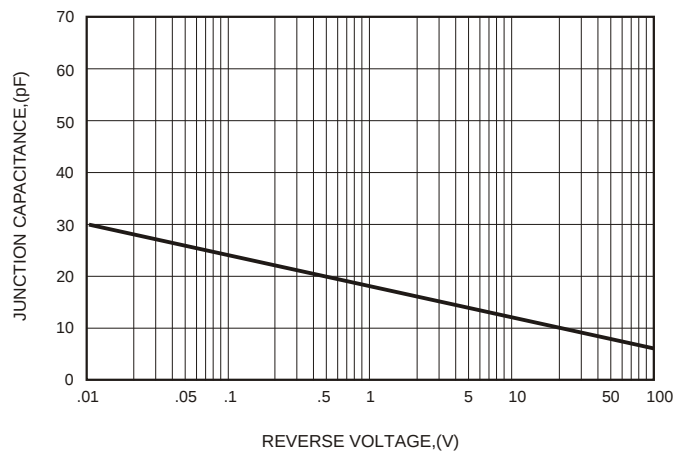
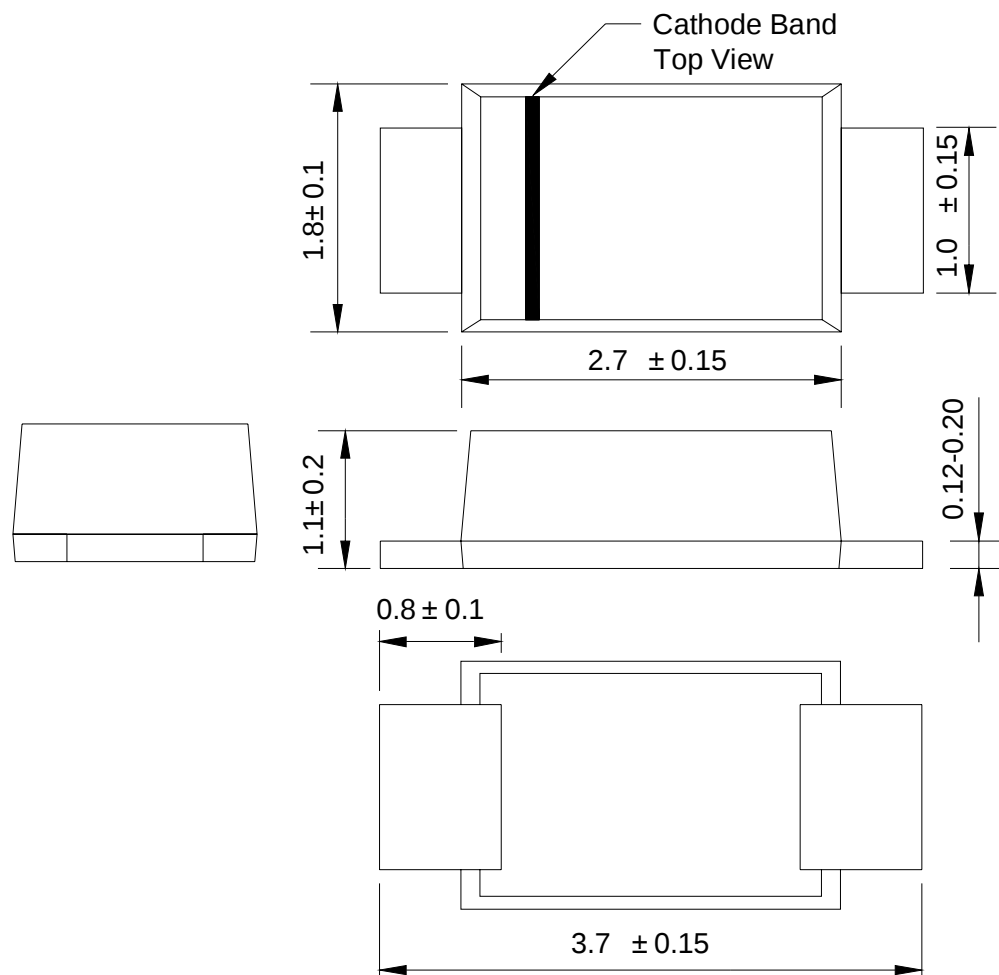


FIG.5-TYPICAL JUNCTION CAPACITANCE





Package Outline Dimensions
SOD-123FL





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