



Features

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



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
SM4001PL- SM4007PL	SOD-123FL	Ax	3000

x: From 1-7

SOD-123FL



Maximum Ratings (Ta=25°C unless otherwise noted)

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Type Number	A1	A2	A3	A4	A5	A6	A7	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=75°C	1.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	25							A
Maximum Instantaneous Forward Voltage at 1.0A	1.1							V
Maximum DC Reverse Current Ta=25°C	5.0							uA
at Rated DC Blocking Voltage Ta=100°C	50							uA
Typical Junction Capacitance (Note 1)	15							pF
Typical Thermal Resistance RqJA (Note 2)	80							°C/W
Operating and Storage Temperature Range Tj, Tstg	-65 — +150							°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance from Junction to Ambient.



Typical Characteristics

FIG.1-TYPICAL FORWARD
CHARACTERISTICS

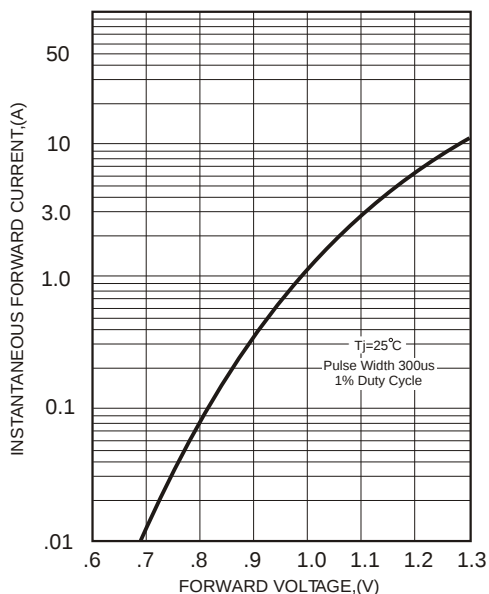


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

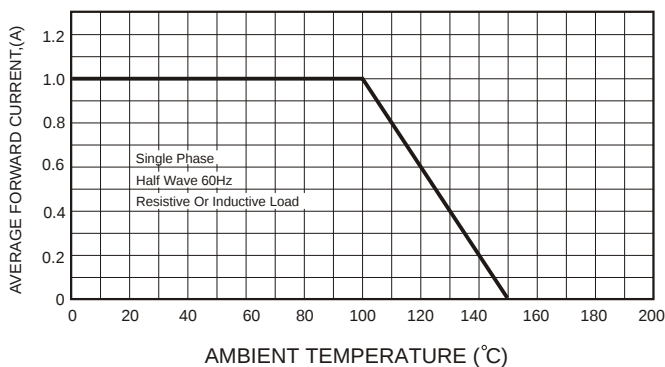


FIG.4-MAXIMUM NON-REPETITIVE FORWARD
SURGE CURRENT

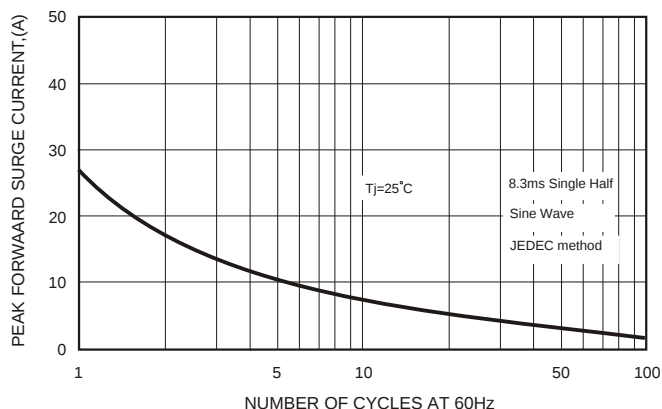


FIG.3 - TYPICAL REVERSE
CHARACTERISTICS

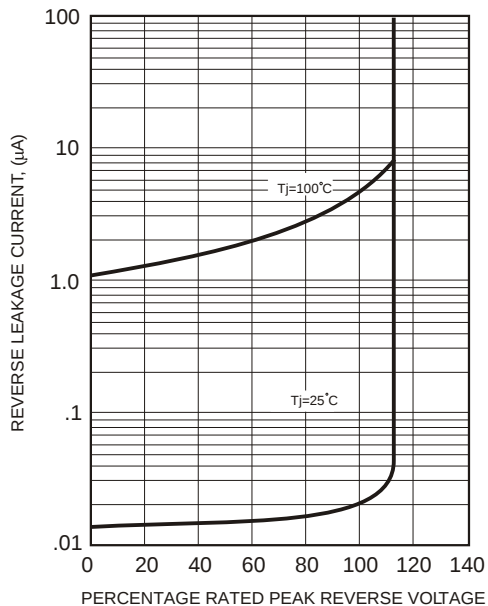
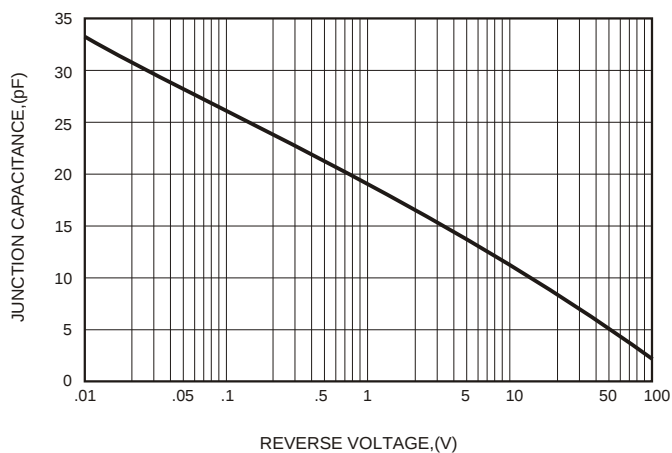
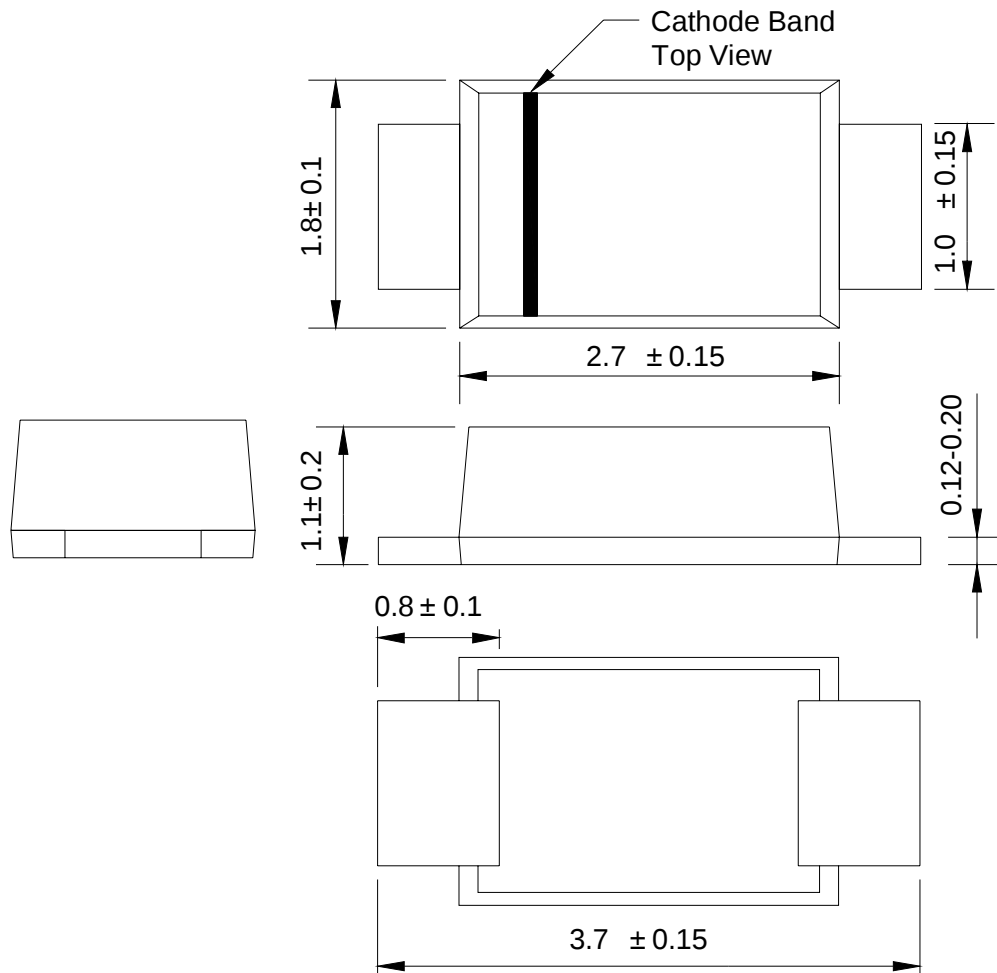


FIG.5-TYPICAL JUNCTION CAPACITANCE





SOD-123FL Package Outline Dimensions





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