



## 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-123F	A*	3000

\* : From 1-7



## MAXIMUM 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	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							μA
at Rated DC Blocking Voltage Ta=100°C	50							μA
Typical Junction Capacitance (Note 1)	15							pF
Typical Thermal Resistance R <sub>JA</sub> (Note 2)	80							°C/W
Operating and Storage Temperature Range T <sub>J</sub> , T <sub>STG</sub>	-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

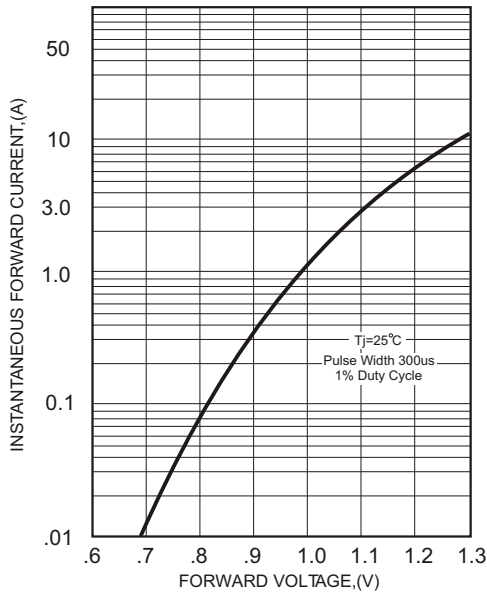


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

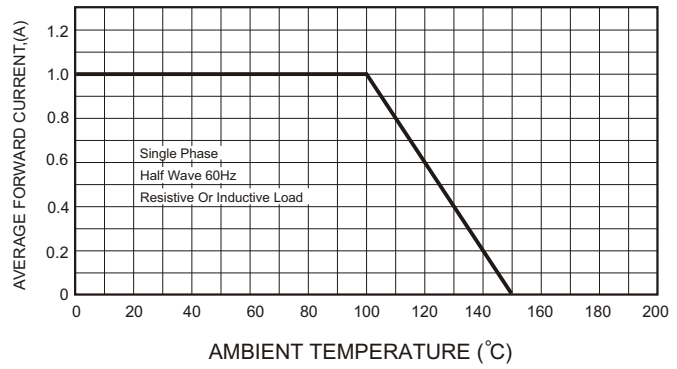


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

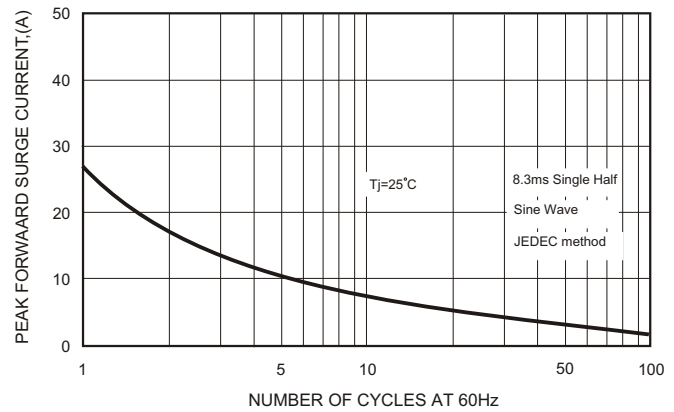


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

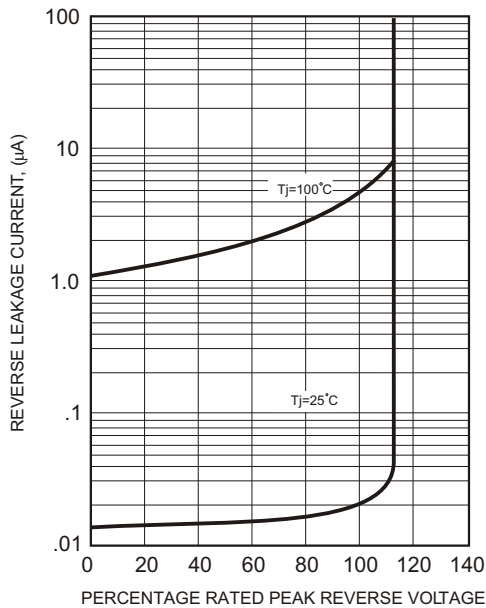
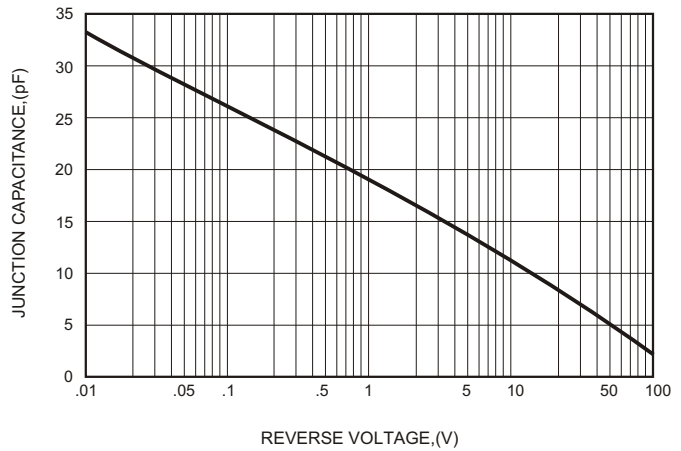
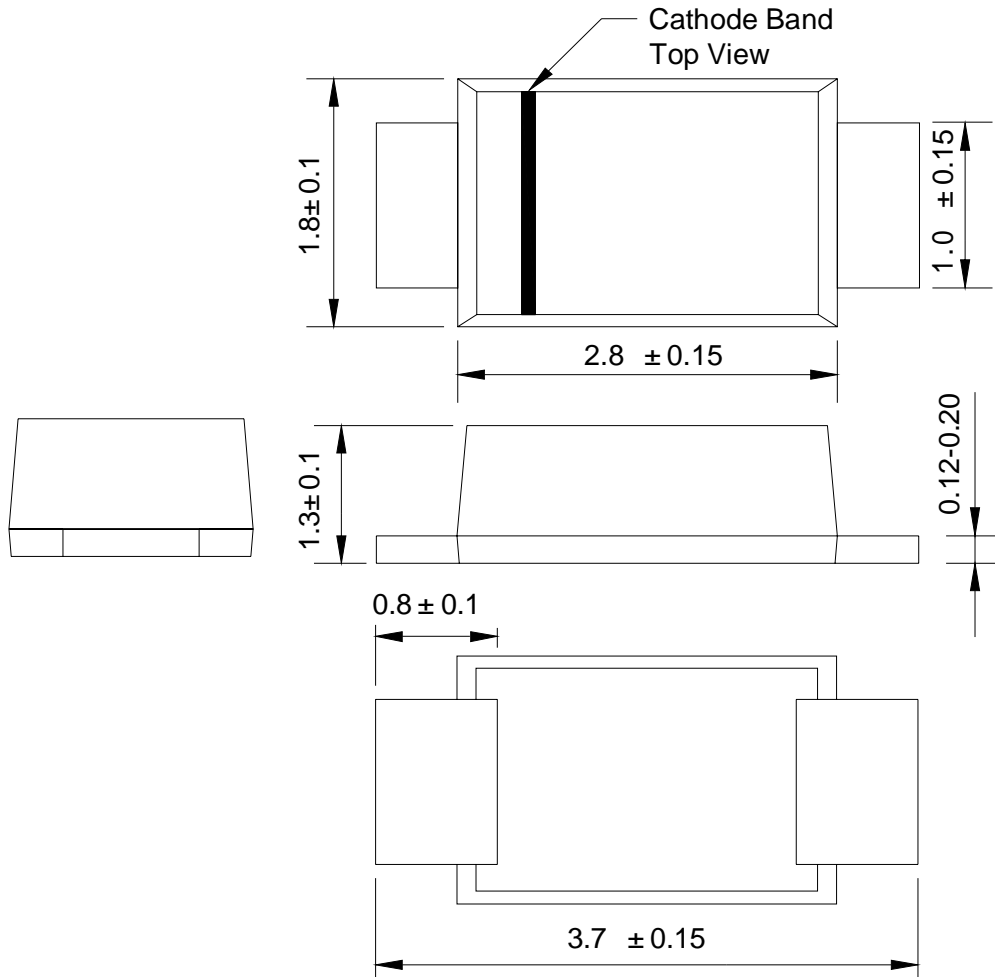


FIG.5-TYPICAL JUNCTION CAPACITANCE





SOD-123F Package Outline Dimensions





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