

Surface Mount Standard Recovery Glass Passivated Rectifiers

(Pb) Lead(Pb)-Free

Features:

- *For Surface Mount Application
- *Glass Passivated Chip
- *Low Reverse Leakage Current
- *Low Forward Voltage Drop And High Current Capability
- *Plastic Material Has UL Flammability Classification 94V-0

Mechanical Data

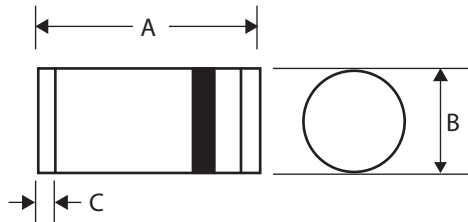
- *Case : Molded Plastic
- *Polarity :Indicated by cathode band
- *Weight : 0.005 Ounce ,0.016 grams

**REVERSE VOLTAGE
50 TO 1000 VOLTS
FORWARD CURRENT
1.0 AMPERE**



MELF Outline Dimensions

Unit:mm



MELF		
Dim	Min	Max
A	4.80	5.20
B	2.40	2.67
C	0.46	0.60

Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.
Single Phase Half Wave, 60Hz , Resistive or Inductive Load.
For Capacitive Load, Derate Current by 20%.

Characteristics	Symbol	SM 4001	SM 4002	SM 4003	SM 4004	SM 4005	SM 4006	SM 4007	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @TC=75°C	IF(AV)	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	30							A
Maximum Instantaneous At 1.0A DC	VF	1.10							V
Maximum DC Reverse Current @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	IR	5.0 50							uA
Typical Junction Capacitance (Note 1)	C _J	15							P _F
Typical Thermal Resistance (Note 2)	R _{θJL}	50							°C/W
Operating Temperature Range	T _J	-55 to+150							°C
Storage Temperature Range	TSTG	-55 to+150							°C

NOTES: 1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.
2.Thermal Resistance Junction to case.

FIG.1 - FORWARD CURRENT DERATING CURVE

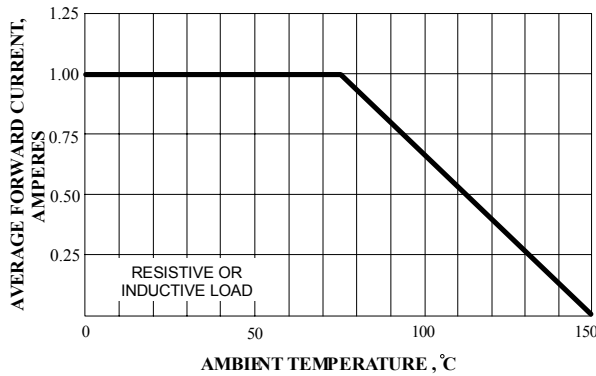


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

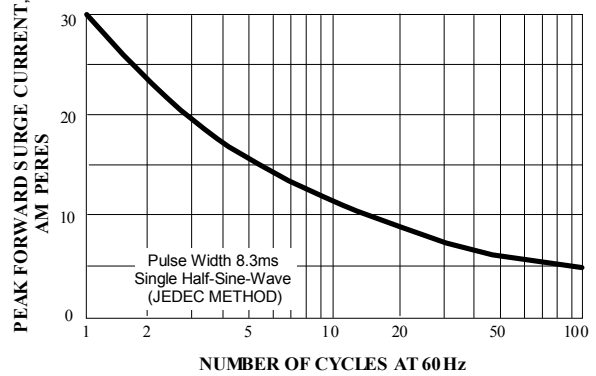


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

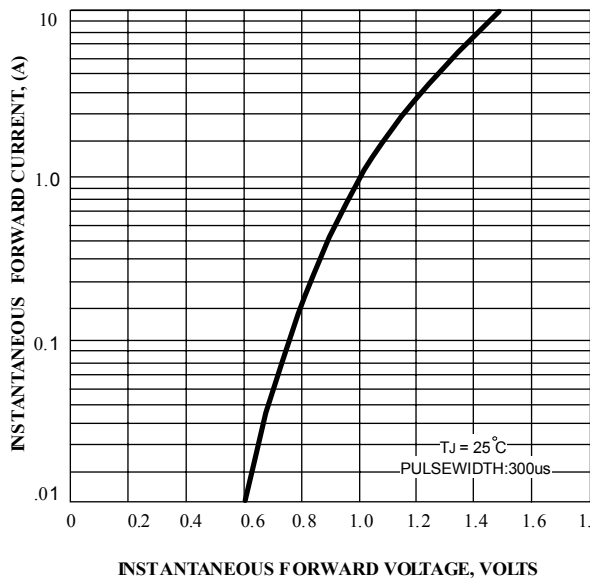


FIG.4 - TYPICAL JUNCTION CAPACITANCE

