

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, MINI-SMA(Similar to SOD-123F)
- * Terminals: Solder Plated, Solderable per ML-STD-750 Method 2026
- * Polarity: Indicated by Cathode Band
- * Weight: 0.040 grams

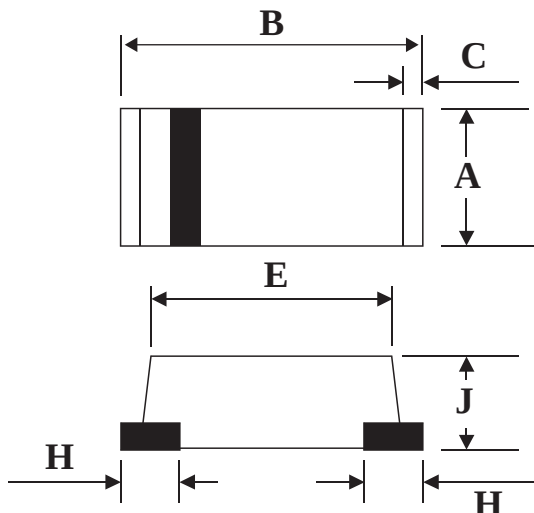
**REVERSE VOLTAGE
50 TO 1000 VOLTS
FORWARD CURRENT
1.0 AMPERE**



**MINI-SMA
(SOD-123F)**

MINI-SMA Outline Dimension

unit:mm



MINI-SMA		
Dim	Min	Max
A	1.40	1.80
B	3.70	4.10
C	-	0.30(TYP)
E	2.80	3.20
H	-	0.90(TYP)
J	1.40	1.60

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	FM 4001M	FM 4002M	FM 4003M	FM 4004M	FM 4005M	FM 4006M	FM 4007M	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 @T _A =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 @T _A =25°C At Rated DC Blocking Voltage @T _A =100°C	IR	5.0 50							uA
Typical Junction Capacitance (Note 1)	C _J	15(TYP)							Pf
Typical Thermal Resistance (Note 2)	R _{θJA}	60(TYP)							°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 Ambient.

Device Marking

Item	Marking	Item	Marking
FM4001M	A1	FM4005M	A5
FM4002M	A2	FM4006M	A6
FM4003M	A3	FM4007M	A7
FM4004M	A4		

FIG.1-TYPICAL FORWARD CHARACTERISTICS

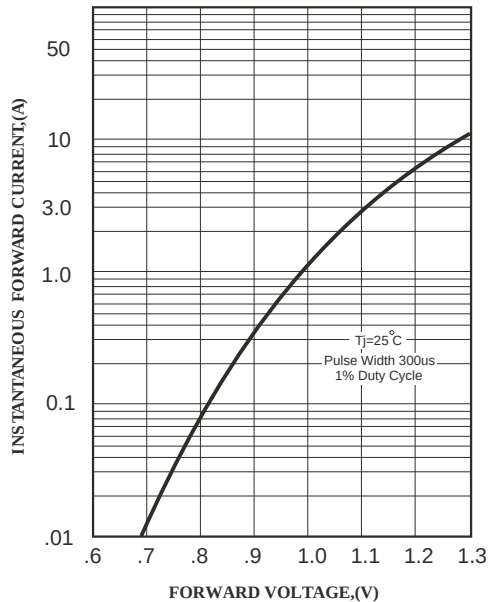


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

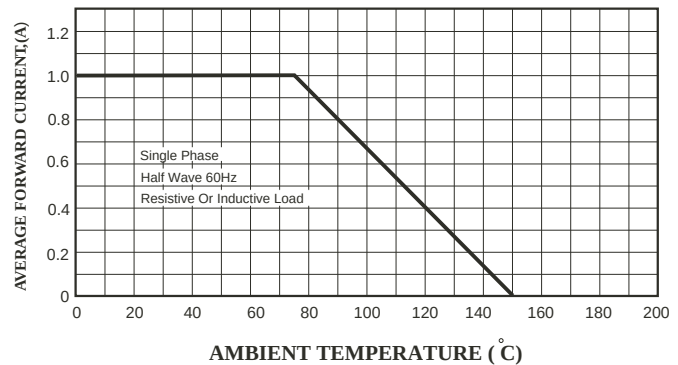


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

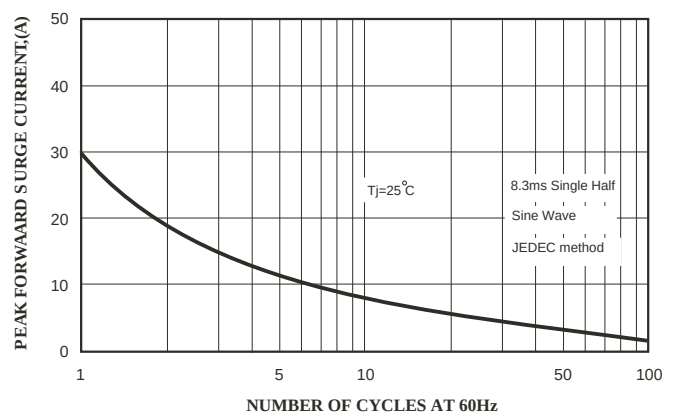


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

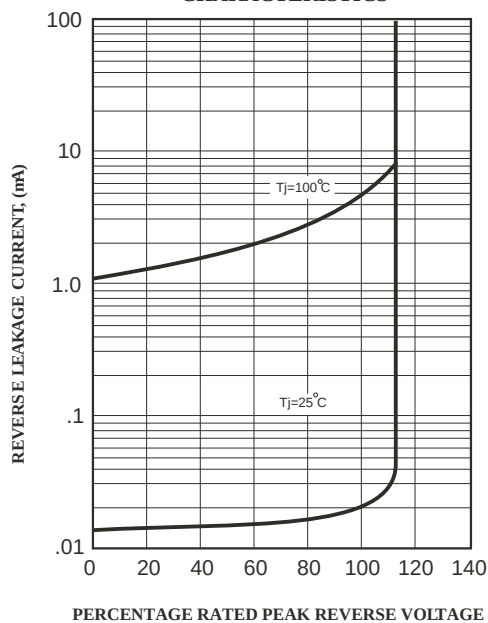


FIG.5-TYPICAL JUNCTION CAPACITANCE

