

# GSSFM4001M Series

## Surface Mount Standard Recovery Glass Passivated Rectifiers

### Product Description

Reverse Voltage 50V TO 1000V Forward Current 1.0A

### 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
- Lead(Pb)-Free

### 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

### Packages

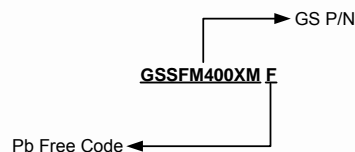


#### MINI-SMA (SOD-123F)

### Marking Information

P/N	Package	Part Marking
GSSFM4001MF	MINI-SMA (SOD-123F)	A1
GSSFM4002MF	MINI-SMA (SOD-123F)	A2
GSSFM4003MF	MINI-SMA (SOD-123F)	A3
GSSFM4004MF	MINI-SMA (SOD-123F)	A4
GSSFM4005MF	MINI-SMA (SOD-123F)	A5
GSSFM4006MF	MINI-SMA (SOD-123F)	A6
GSSFM4007MF	MINI-SMA (SOD-123F)	A7

### Ordering Information



Part Number	Package	Quantity
GSSFM4001MF Series	MINI-SMA (SOD-123F)	5000 PCS

## 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%.)

Symbol	Conditions	FM 4001M	FM 4002M	FM 4003M	FM 4004M	Unit
V <sub>RRM</sub>	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	V
V <sub>RMS</sub>	Maximum RMS Voltage	35	70	140	280	V
V <sub>DC</sub>	Maximum DC Blocking Voltage	50	100	200	400	V
Symbol	Conditions	FM 4005M	FM 4006M	FM 4007M	Unit	
V <sub>RRM</sub>	Maximum Repetitive Peak Reverse Voltage	600	800	1000	V	
V <sub>RMS</sub>	Maximum RMS Voltage	420	560	700	V	
V <sub>DC</sub>	Maximum DC Blocking Voltage	600	800	1000	V	
V <sub>F</sub>	Maximum Instantaneous At 1.0A DC	1.1			V	
I <sub>R</sub>	Maximum DC Reverse Current At Rated DC Blocking Voltage	T <sub>A</sub> =25°C	5.0			uA
		T <sub>A</sub> =100°C	50			
C <sub>J</sub>	Typical Junction Capacitance(Note 1)	15(TYP)			pF	
I <sub>F(AV)</sub>	Maximum Average Forward Rectified Current @T <sub>A</sub> =75°C	1.0			A	
I <sub>FSM</sub>	Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	30			A	
R <sub>θJA</sub>	Thermal Resistance Junction to Ambient(Note 2)	60(TYP)			°C/W	
T <sub>J</sub>	Operating Temperature Range	-55 to +150			°C	
T <sub>STG</sub>	Storage Temperature Range	-55 to +150			°C	

Notes: 1. Measured at 1.0MHz applied reverse voltage of 4.0V DC

2. Thermal Resistance Junction to Ambient

## Typical Characteristics

CHARACTERISTICS

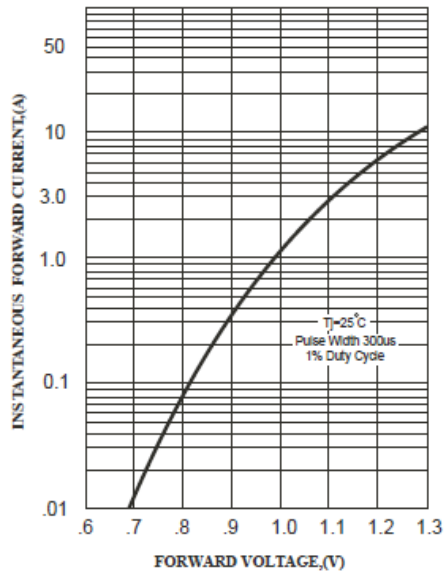


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

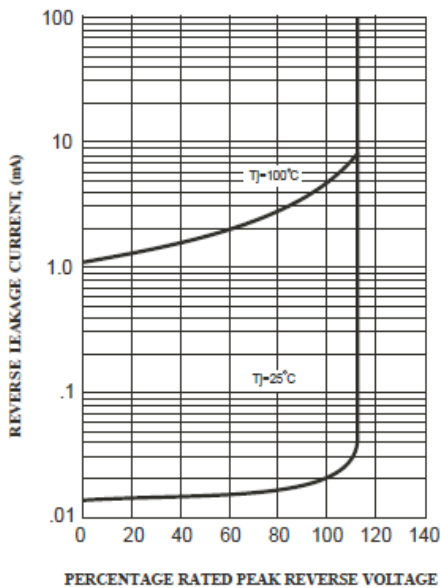


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

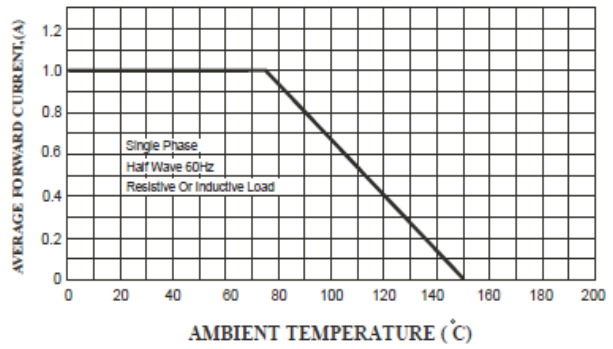


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

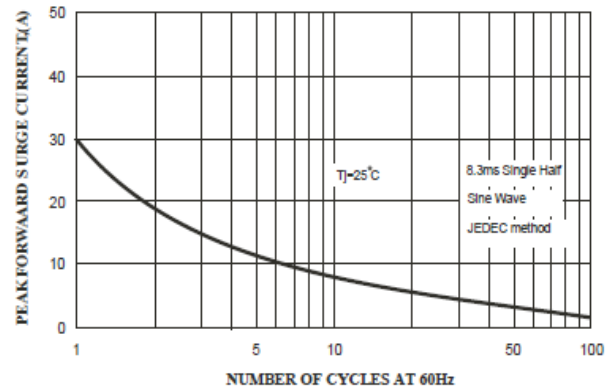
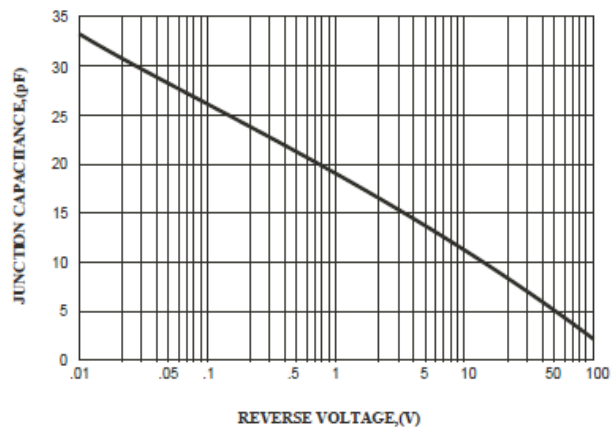
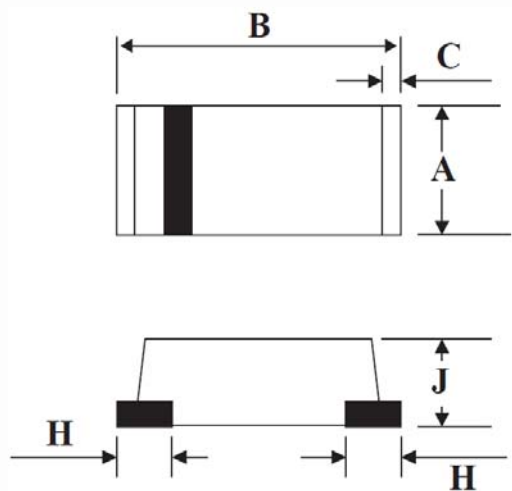


FIG.5-TYPICAL JUNCTION CAPACITANCE



## Package Dimension

### MINI-SMA



Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	1.40	1.80	0.055	0.070
B	3.50	3.90	0.137	0.137
C	-	0.30(TYP)	-	0.011(TYP)
H	-	0.70(TYP)	-	0.027(TYP)
J	1.30	1.70	0.051	0.066

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