

# GSSM4001 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

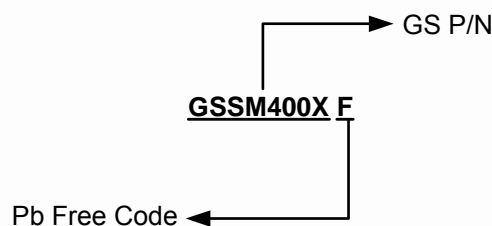
### Mechanical Data

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

### Packages



### Ordering Information



Part Number	Package	Quantity
GSSM4001F	MELF	5000 PCS
GSSM4002F	MELF	5000 PCS
GSSM4003F	MELF	5000 PCS
GSSM4004F	MELF	5000 PCS
GSSM4005F	MELF	5000 PCS
GSSM4006F	MELF	5000 PCS
GSSM4007F	MELF	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	SM 4001	SM 4002	SM 4003	SM 4004	SM 4005	Unit
V <sub>RRM</sub>	Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	V
V <sub>RMS</sub>	Maximum RMS Voltage	35	70	140	280	420	V
V <sub>DC</sub>	Maximum DC Blocking Voltage	50	100	200	400	600	V
Symbol	Conditions	SM 4006		SM 4007		Unit	
V <sub>RRM</sub>	Maximum Recurrent Peak Reverse Voltage	800		1000		V	
V <sub>RMS</sub>	Maximum RMS Voltage	560		700		V	
V <sub>DC</sub>	Maximum DC Blocking Voltage	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>J</sub> =25°C	5.0				uA
		T <sub>J</sub> =125°C	50				
C <sub>J</sub>	Typical Junction Capacitance (Note 1)	15				pF	
I <sub>F(AV)</sub>	Maximum Average Forward Rectified Current @T <sub>C</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>θJL</sub>	Typical Thermal Resistance (Note 2)	50				°C/W	
T <sub>J</sub>	Junction 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 case

## Typical Characteristics

FIG.1 - FORWARD CURRENT DERATING CURVE

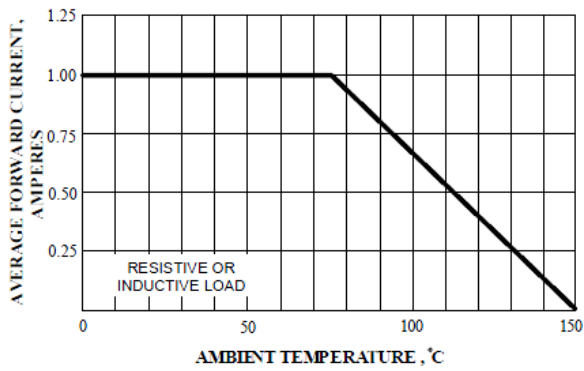


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

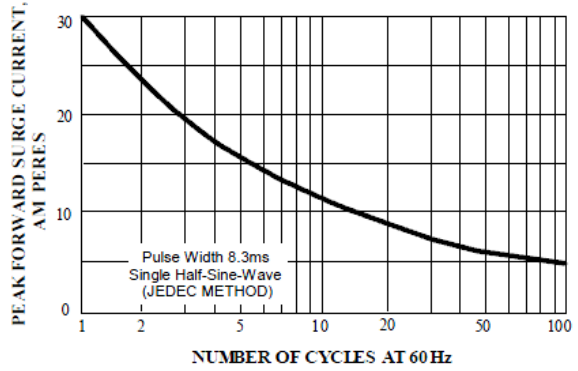


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

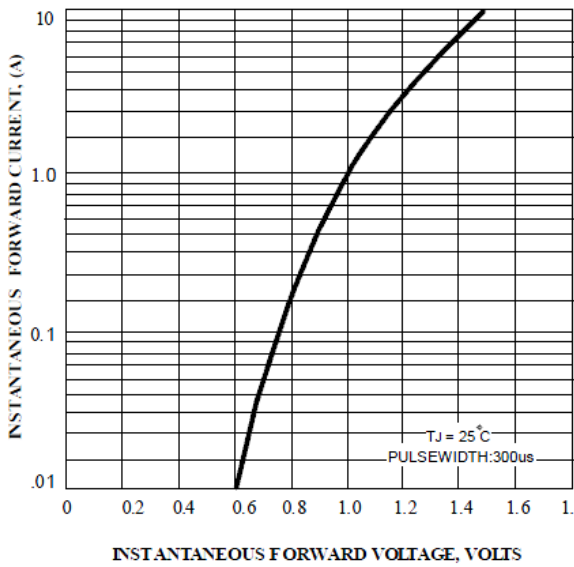
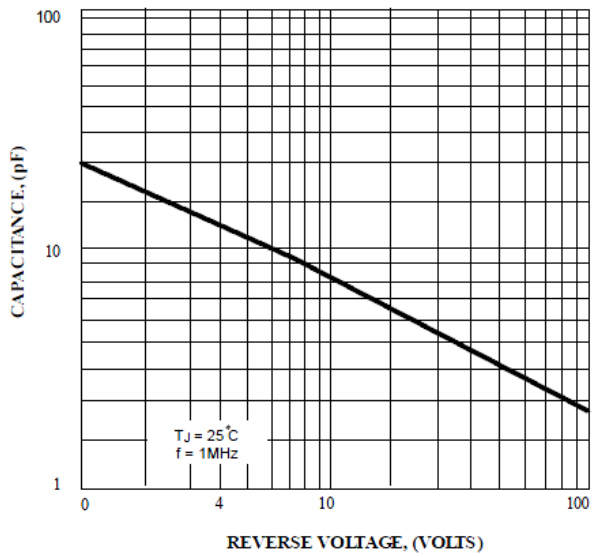
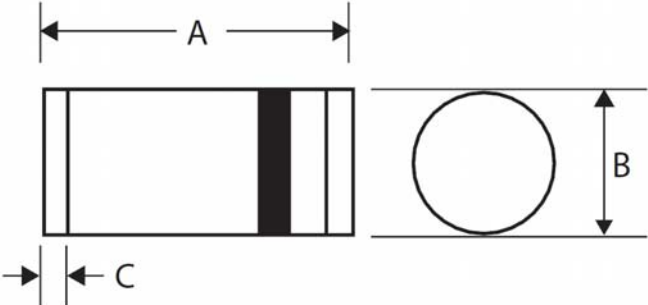


FIG.4 - TYPICAL JUNCTION CAPACITANCE



Package Dimension

**MELF**



Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
<b>A</b>	4.80	5.20	0.188	0.204
<b>B</b>	2.40	2.67	0.094	0.105
<b>C</b>	0.46	0.60	0.018	0.023

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