

## Surface Mount Standard Recovery Glass Passivated Rectifiers

**(Pb)** Lead(Pb)-Free

### Features:

- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound.
- \* For surface mounted applications.
- \* Exceeds environmental standards of MIL-S-19500 / 228
- \* Low leakage current.

### Mechanical Data:

- \* Case : Molded plastic, JEDEC SOD-123H
- \* Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- \* Polarity : Indicated by cathode band
- \* Mounting Position : Any
- \* Weight : 0.0393 gram

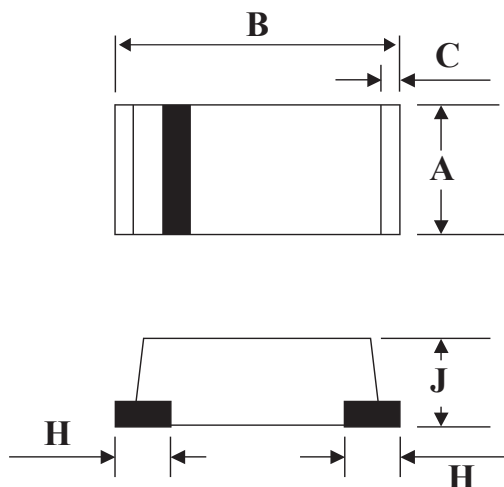
**REVERSE VOLTAGE  
50 TO 1000 VOLTS  
FORWARD CURRENT  
1.0 AMPERE**



**SOD-123H**

## SOD-123H Outline Dimension

unit:mm



<b>SOD-123H</b>		
<b>Dim</b>	<b>Min</b>	<b>Max</b>
<b>A</b>	1.40	1.80
<b>B</b>	3.30	3.70
<b>C</b>	-	0.30(TYP)
<b>H</b>	-	0.80(TYP)
<b>J</b>	0.6	1.00

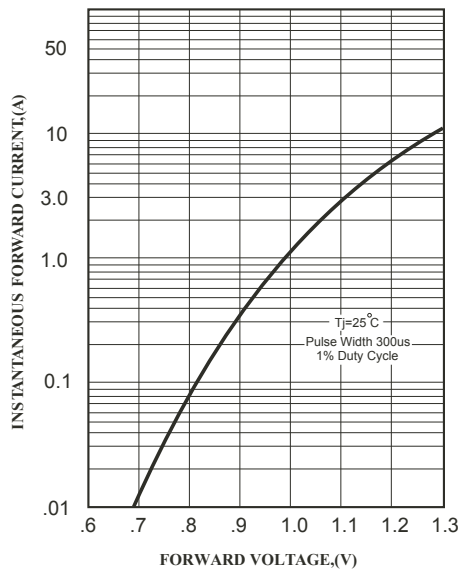
**Maximum Ratings** ( $T_A=25^{\circ}\text{C}$  Unless Otherwise noted)

Characteristics	Symbol	FM4001	FM4002	FM4003	FM4004	FM4005	FM4006	FM4007	Unit
		MH	MH	MH	MH	MH	MH	MH	
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 @ $T_A=75^{\circ}\text{C}$	IF(AV)	1.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	25							A
Maximum Instantaneous At 1.0A DC	VF	1.10							V
Maximum DC Reverse Current @ $T_A=25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A=100^{\circ}\text{C}$	IR	5.0 50							$\mu\text{A}$
Typical Junction Capacitance (Note 1)	$C_J$	15(TYP)							Pf
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	60(TYP)							$^{\circ}\text{C/W}$
Operating Temperature Range	$T_J$	-55 to +150							$^{\circ}\text{C}$
Storage Temperature Range	TSTG	-55 to +150							$^{\circ}\text{C}$

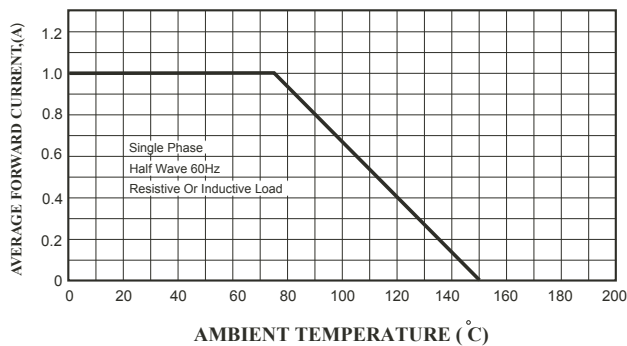
**Device Marking**

Item	Marking	Item	Marking
FM4001MH	A1	FM4005MH	A5
FM4002MH	A2	FM4006MH	A6
FM4003MH	A3	FM4007MH	A7
FM4004MH	A4		

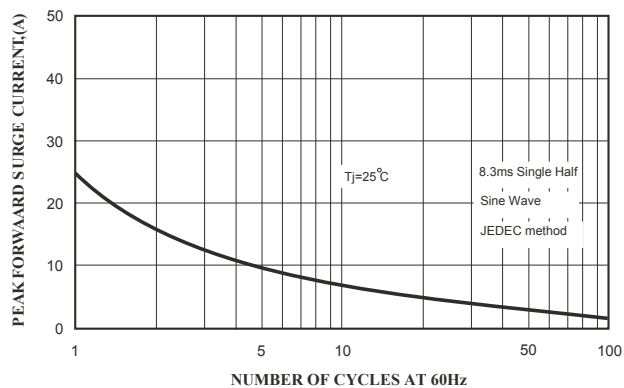
**FIG.1-TYPICAL FORWARD CHARACTERISTICS**



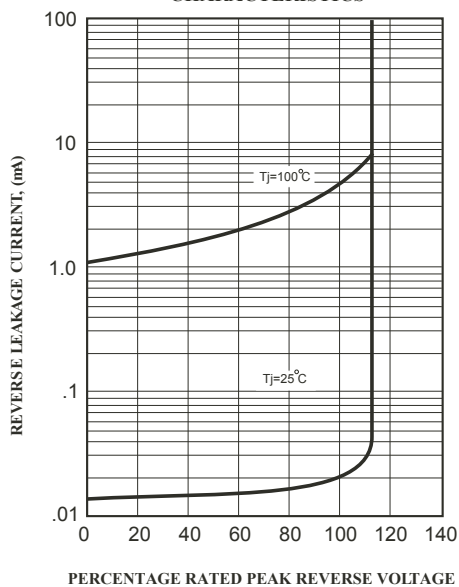
**FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE**



**FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL REVERSE CHARACTERISTICS**



**FIG.5-TYPICAL JUNCTION CAPACITANCE**

