

# SFM11-MH THRU SFM16-MH

Super fast recovery type

## 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

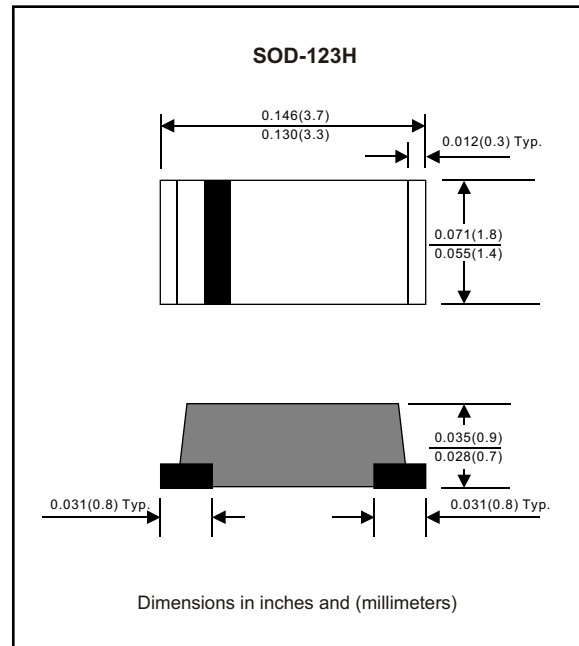
Case : Molded plastic, JEDEC SOD-123H

Terminals : Solder plated, solderable per MIL-STD-750, Method 2026

Polarity : Indicated by cathode band

Mounting Position : Any

Weight : 0.0393 gram



## MAXIMUM RATINGS (AT $T_A=25^{\circ}C$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	Ambient temperature = $50^{\circ}C$	$I_O$			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	$I_{FSM}$			25	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^{\circ}C$	$I_R$			5.0	$\mu A$
	$V_R = V_{RRM}$ $T_A = 100^{\circ}C$				100	$\mu A$
Thermal resistance	Junction to ambient	$R_{JA}$		42		$^{\circ}C / W$
Diode junction capacitance	$f=1MHz$ and applied 4vDC reverse voltage	$C_J$		10		pF
Storage temperature		$T_{STG}$	-55		+150	$^{\circ}C$

SYMBOLS	MARKING CODE	$V_{RRM}^{*1}$ (V)	$V_{RMS}^{*2}$ (V)	$V_R^{*3}$ (V)	$V_F^{*4}$ (V)	$T_{RR}^{*5}$ (nS)	Operating temperature ( $^{\circ}C$ )
SFM11-MH	S1	50	35	50	0.95	35	-55 to +150
SFM12-MH	S2	100	70	100			
SFM13-MH	S3	150	105	150			
SFM14-MH	S4	200	140	200	1.25		
SFM15-MH	S5	300	210	300			
SFM16-MH	S6	400	280	400			

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage

\*5 Reverse recovery time

## RATING AND CHARACTERISTIC CURVES (SFM11-MH THRU SFM16-MH)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

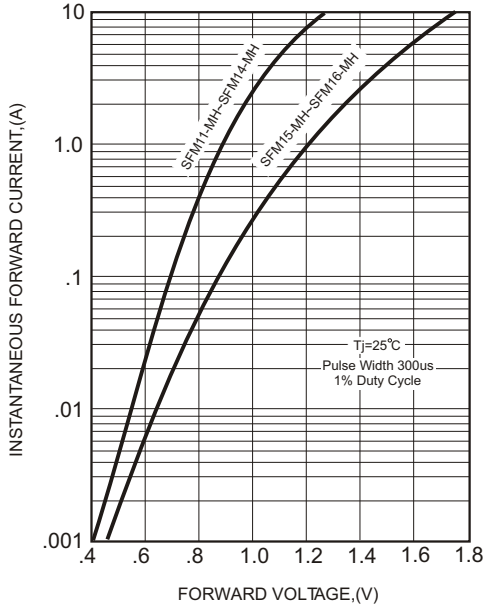


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

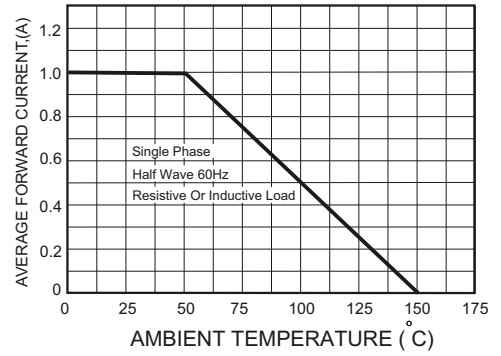
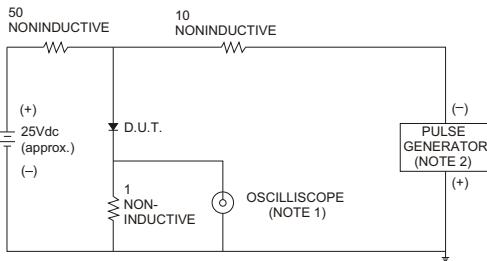


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



- NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.  
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

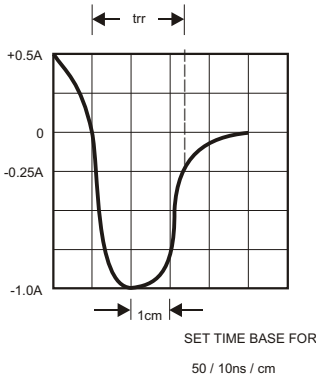


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

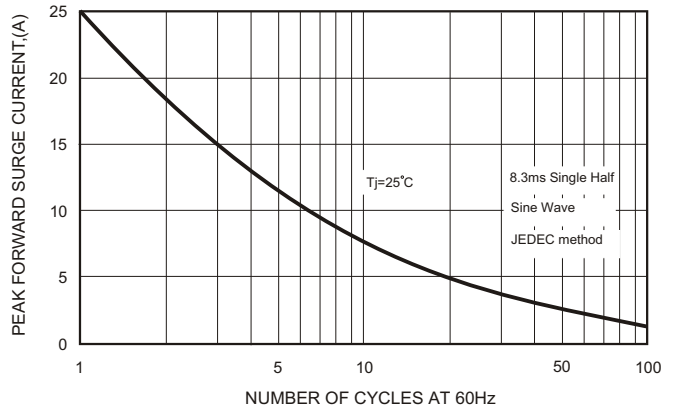


FIG.5-TYPICAL JUNCTION CAPACITANCE

