

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

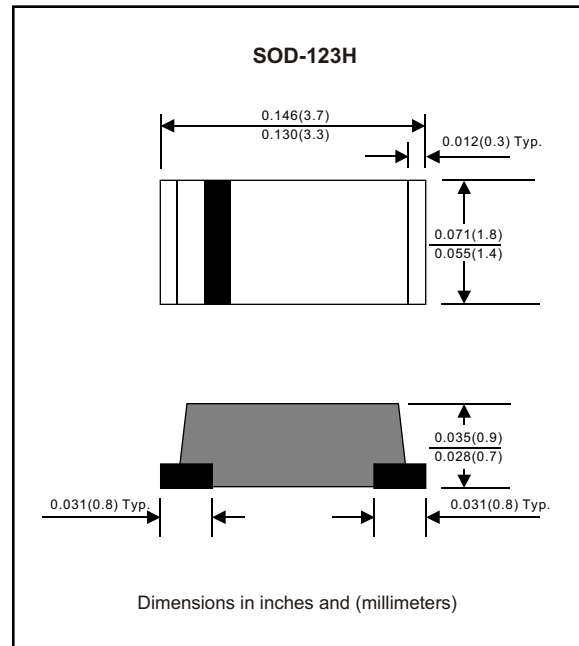
Case : Molded plastic, JEDEC SOD-123H

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	μA
	$V_R = V_{RRM}$ $T_A = 100^{\circ}C$				100	μA
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

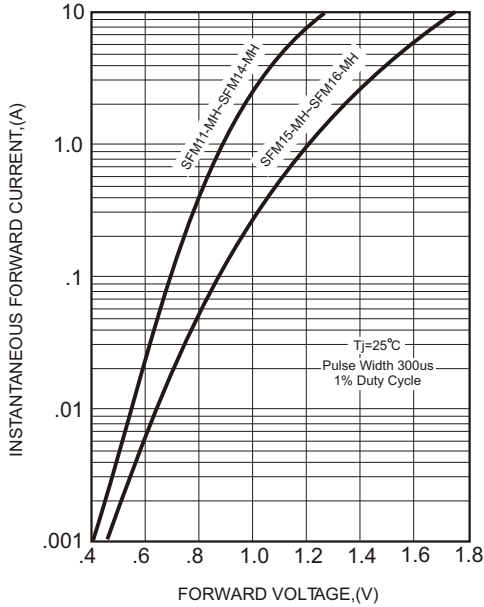


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

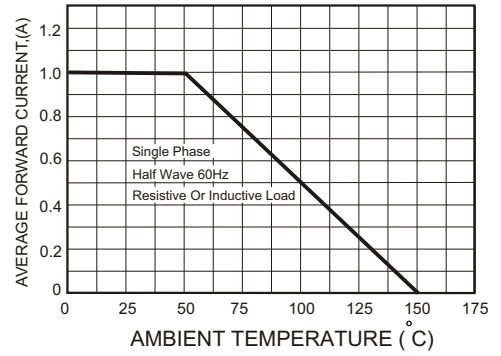
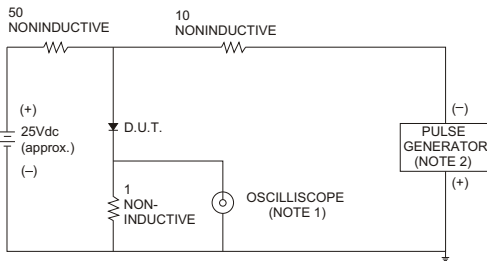


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

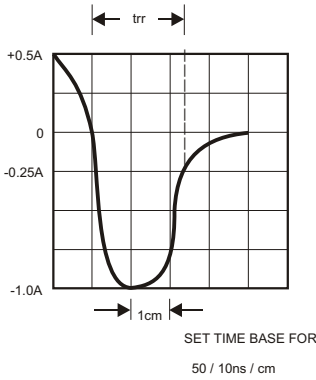


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

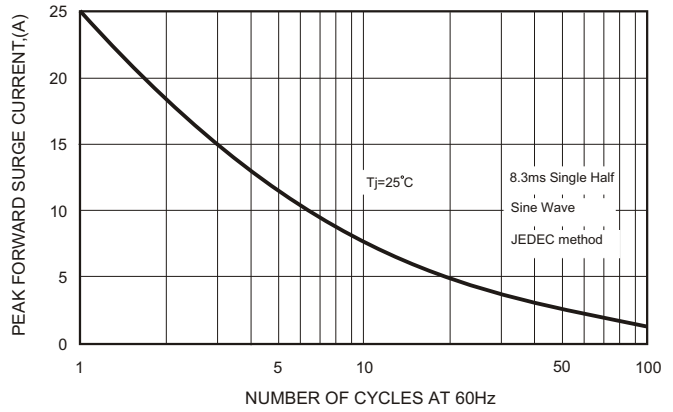


FIG.5-TYPICAL JUNCTION CAPACITANCE

