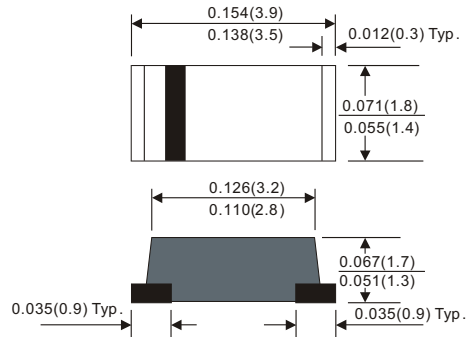


FM120-M thru FM1150-M

SILICON EPITAXIAL PLANCE TYPE



SOD-123



Dimensions in inches and (millimeters)

FEATURES

- Plastic package has Underwriters Laboratory
- Flammability classification 94V-0 Utilizing Flame
- Retardant Epoxy Molding Compound
- For surface mount applications
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage current.

MECHANICAL DATA

Case : Molded plastic, SOD-123/MINI-SMA
 Terminals : Solder plated, solderable per
 MIL-STD-750, Method 2026
 Polarity : Indicated by cathode band
 Mounting Position : Any
 Weight : 0.04grams

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

PARAMETER	CONDITIONS	SYMBOL	Min.	Typ.	Max.	UNITS
Forward rectified current	See Fig. 1	I_o			1.0	A
Forward surge current	8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}			30	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^{\circ}\text{C}$	I_R			0.5	mA
	$V_R = V_{RRM}$ $T_A = 100^{\circ}\text{C}$				10	mA
Thermal resistance	Junction to ambient	R_{JA}		98		$^{\circ}\text{C} / \text{W}$
Diode junction capacitance	$F = 1\text{MHz}$ and applied 4vDC reverse voltage	C_J		120		pF
Storage temperature		T_{STG}	-55		+150	$^{\circ}\text{C}$

SYMBOLS	MARKING CODE	V _{RRM} ^{*1} (V)	V _{RMS} ^{*2} (V)	V _R ^{*3} (V)	V _F ^{*4} (V)	Operating Temperature (°C)
FM120-M	12	20	14	20	0.5	-55 to + 125
FM130-M	13	30	21	30		
FM140-M	14	40	28	40		
FM150-M	15	50	35	50	0.7	-55 to + 150
FM160-M	16	60	42	60		
FM180-M	18	80	56	80	0.85	
FM1100-M	10	100	70	100		
FM1150-M	115	150	105	150	0.92	

*1 Repetitive peak reverse peak reverse

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage

FM120-M thru FM1150-M

SILICON EPITAXIAL PLANCE TYPE

RATING AND CHARACTERISTICS CURVES FM120-M THRU FM1150-M

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

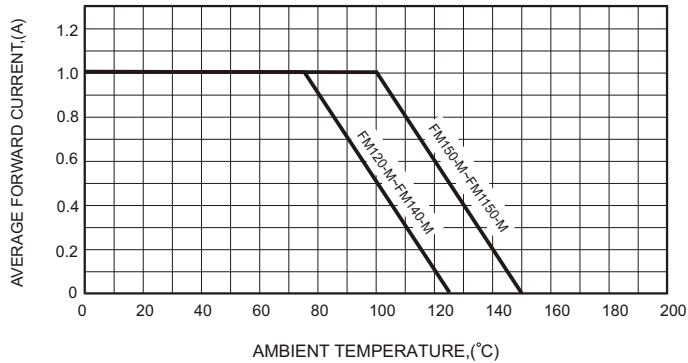


FIG.2-TYPICAL FORWARD CHARACTERISTICS

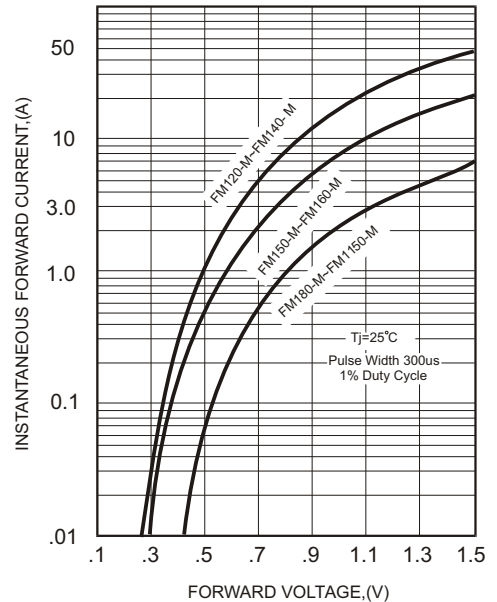


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

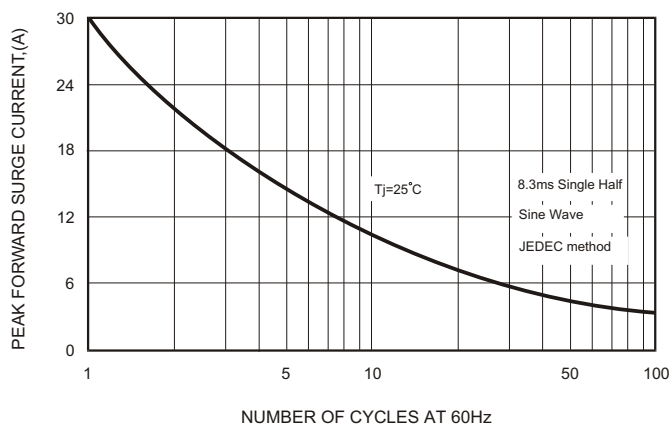


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

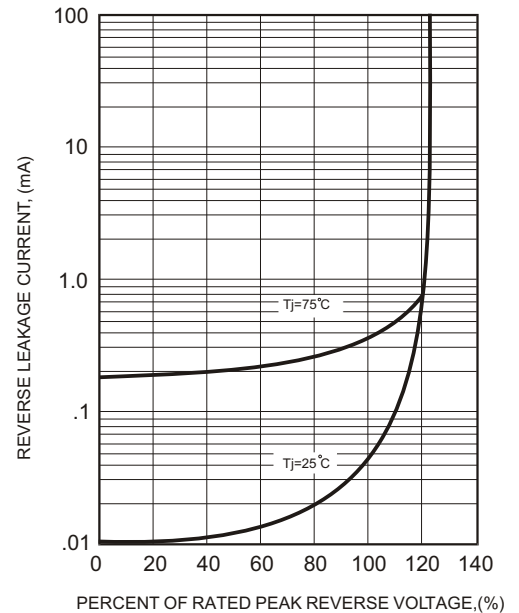


FIG.4-TYPICAL JUNCTION CAPACITANCE

