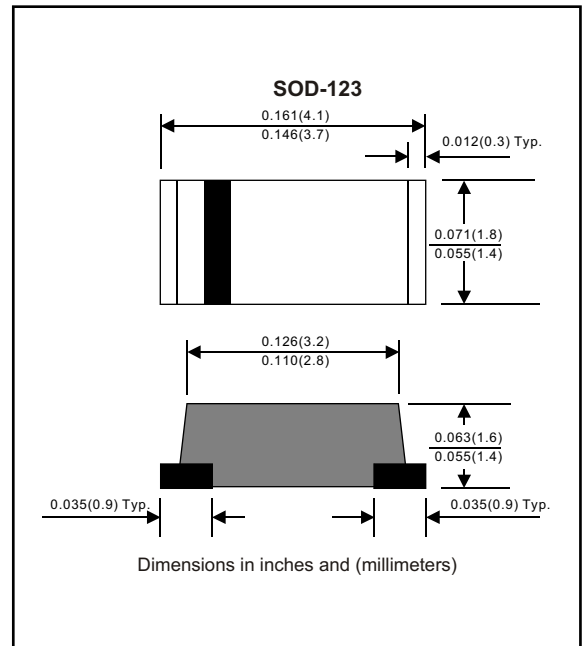


# FM120-M-R THRU FM1100-M-R

Silicon epitaxial planer 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 ML-S-19500 / 228
- Low leakage current



## Mechanical data

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

### MAXIMUM RATINGS (AT T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	I <sub>O</sub>			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I <sub>FSM</sub>			30	A
Reverse current	V <sub>R</sub> = V <sub>RRM</sub> T <sub>A</sub> = 25°C	I <sub>R</sub>			0.1	mA
	V <sub>R</sub> = V <sub>RRM</sub> T <sub>A</sub> = 125°C				2.0	mA
Thermal resistance	Junction to ambient	R <sub>JA</sub>		98		°C / w
Diode junction capacitance	f=1MHz and applied 4vDC reverse voltage	C <sub>J</sub>		120		pF
Storage temperature		T <sub>STG</sub>	-55		+150	°C

SYMBOLS	MARKING CODE	V <sub>RRM</sub> *1 (V)	V <sub>RMS</sub> *2 (V)	V <sub>R</sub> *3 (V)	V <sub>F</sub> *4 (V)	Operating temperature (°C)
FM120-M-R	12	20	14	20	0.50	-55 to +125
FM130-M-R	13	30	21	30		
FM140-M-R	14	40	28	40		
FM150-M-R	15	50	35	50	0.70	-55 to +150
FM160-M-R	16	60	42	60		
FM180-M-R	18	80	56	80	0.85	
FM1100-M-R	10	100	70	100		

- \*1 Repetitive peak reverse voltage
- \*2 RMS voltage
- \*3 Continuous reverse voltage
- \*4 Maximum forward voltage

## RATING AND CHARACTERISTIC CURVES (FM120-M-R THRU FM1100-M-R)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

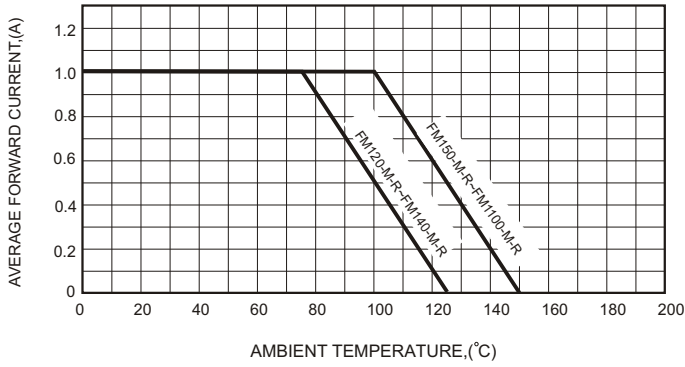


FIG.2-TYPICAL FORWARD CHARACTERISTICS

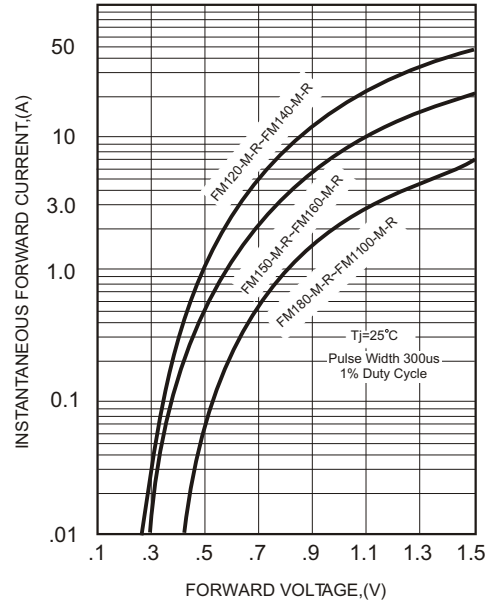


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

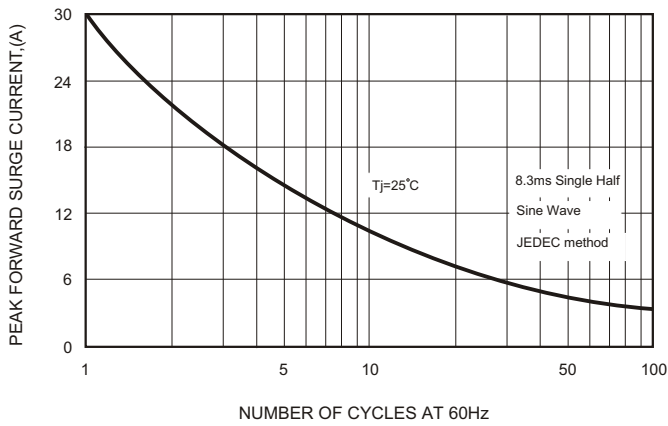


FIG.4-TYPICAL JUNCTION CAPACITANCE

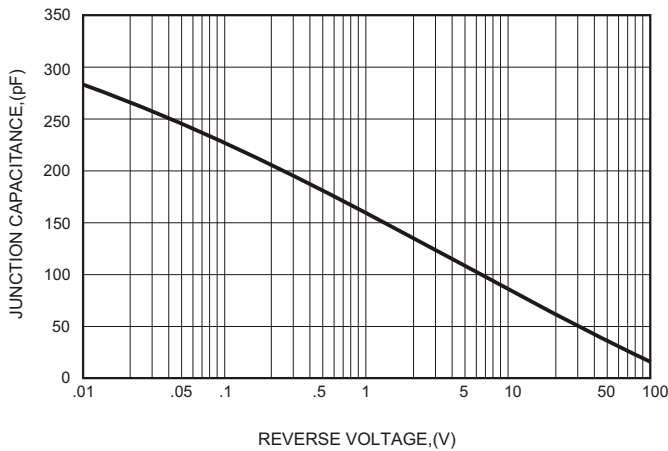


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

