

# FM120-L THRU FM1100-L

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

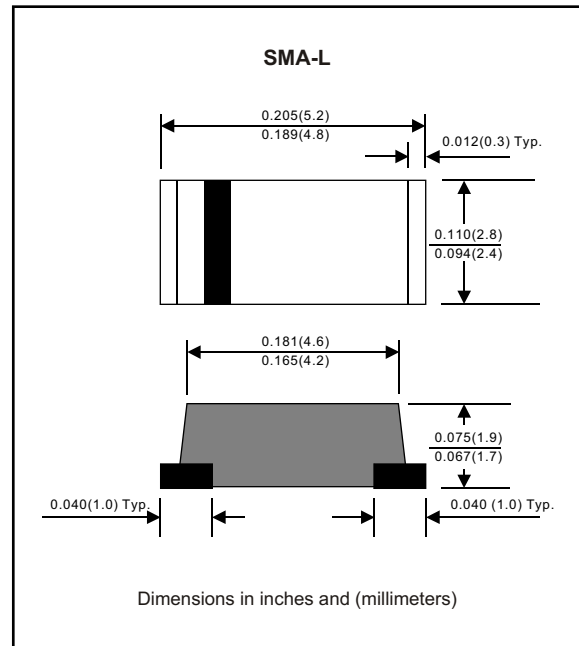
Case : Moulded plastic, JEDEC DO-214AC

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

Polarity : Indicated by cathode band

Mounting Position : Any

Weight : 0.0015 ounce, 0.05 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>			0.5	mA
	V <sub>R</sub> = V <sub>RRM</sub> T <sub>A</sub> = 125°C				10	mA
Thermal resistance	Junction to ambient	R <sub>JA</sub>		88		°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	SS12	20	14	20	0.50	-55 to +125
FM130	SS13	30	21	30		
FM140	SS14	40	28	40		
FM150	SS15	50	35	50	0.70	-55 to +150
FM160	SS16	60	42	60		
FM180	SS18	80	56	80	0.85	
FM1100	S110	100	70	100		

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage

## RATING AND CHARACTERISTIC CURVES (FM120-L THRU FM1100-L)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

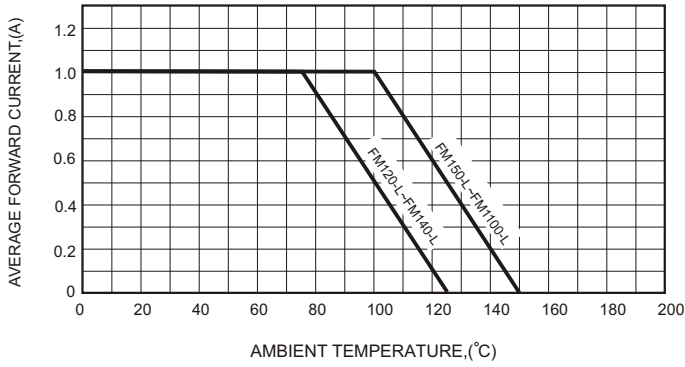


FIG.2-TYPICAL FORWARD CHARACTERISTICS

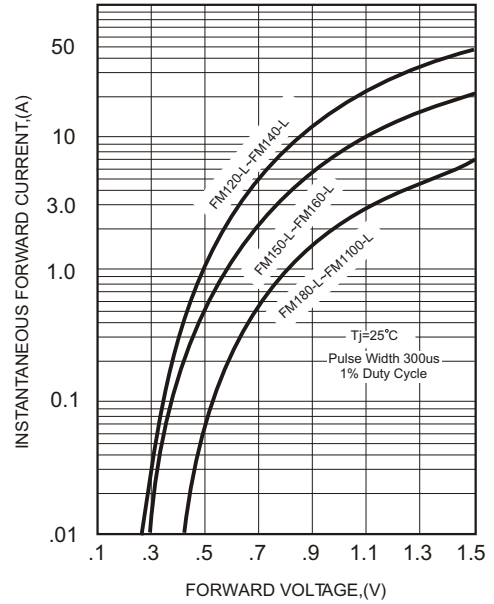


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

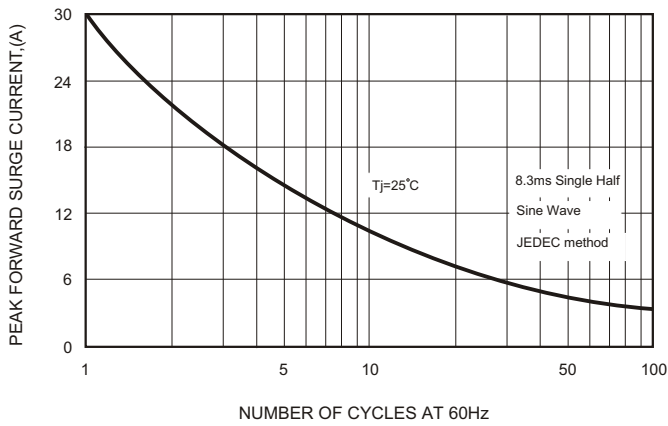


FIG.4-TYPICAL JUNCTION CAPACITANCE

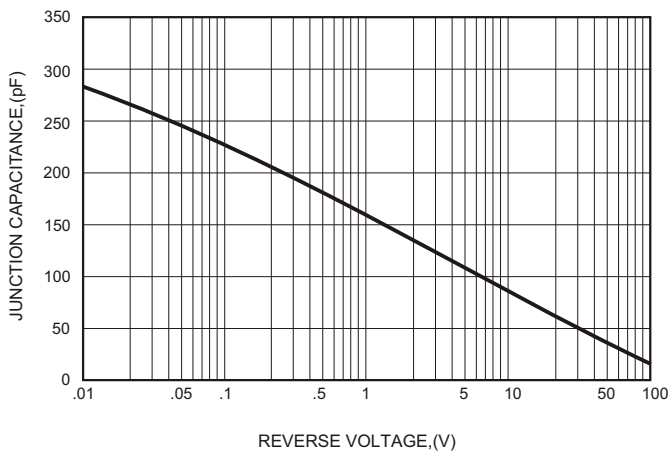


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

