

# FM120-N THRU FM1100-N

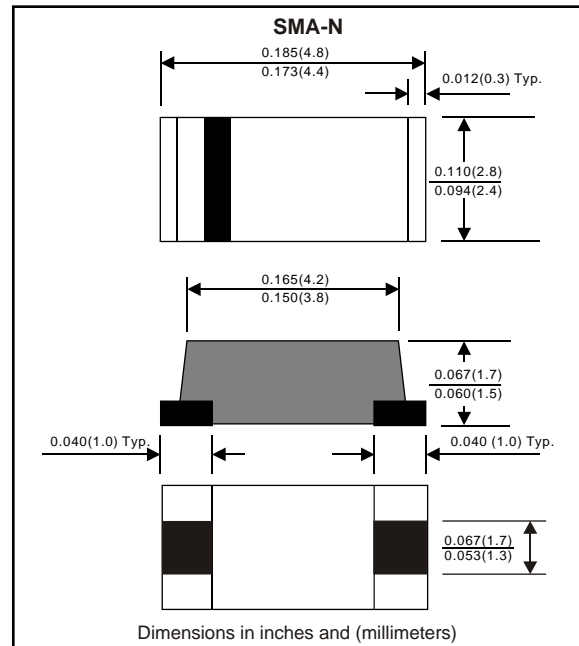
Silicon epitaxial planer type

## 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 $T_A=25^{\circ}\text{C}$ unless otherwise noted)

PARAMETER	CONDI TIONS	Symbol	MIN.	TYP.	MAX.	UNI T
Forward recti fied current	See Fig. 1	$I_O$			1.0	A
Forward surge current	8.3ms si ngle hal f si ne-wave superi mposed on rate load (JEDEC methode)	$I_{FSM}$			30	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^{\circ}\text{C}$	$I_R$			0.5	mA
	$V_R = V_{RRM}$ $T_A = 125^{\circ}\text{C}$				10	mA
Thermal resi stance	Juncti on to ambi ent	$R_{JA}$		88		$^{\circ}\text{C} / \text{w}$
Di ode juncti on capaci tance	$f=1\text{MHz}$ and appli ed 4vDC reverse vol tage	$C_J$		120		pF
Storage temperature		$T_{STG}$	-55		+150	$^{\circ}\text{C}$

SYMBOLS	MARKI NG CODE	$V_{RRM}^{*1}$ (V)	$V_{RMS}^{*2}$ (V)	$V_R^{*3}$ (V)	$V_F^{*4}$ (V)	Operati ng temperature ( $^{\circ}\text{C}$ )
FM120-N	SS12	20	14	20	0.50	-55 to +125
FM130-N	SS13	30	21	30		
FM140-N	SS14	40	28	40		
FM150-N	SS15	50	35	50	0.70	-55 to +150
FM160-N	SS16	60	42	60		
FM180-N	SS18	80	56	80	0.85	
FM1100-N	S110	100	70	100		

\*1 Repeti ti ve peak reverse vol tage  
 \*2 RMS vol tage  
 \*3 Conti nuous reverse vol tage  
 \*4 Maxi mum forward vol tage

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

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

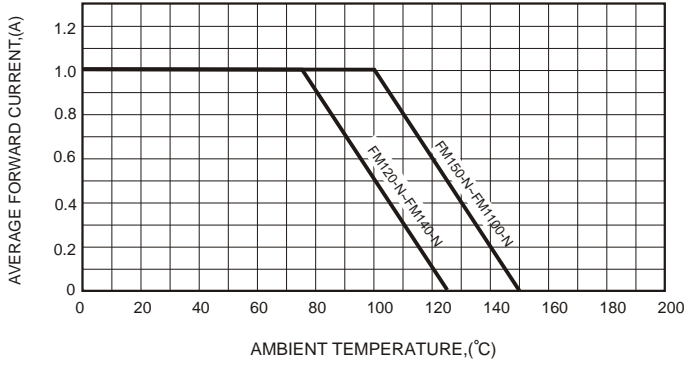


FIG.2-TYPICAL FORWARD CHARACTERISTICS

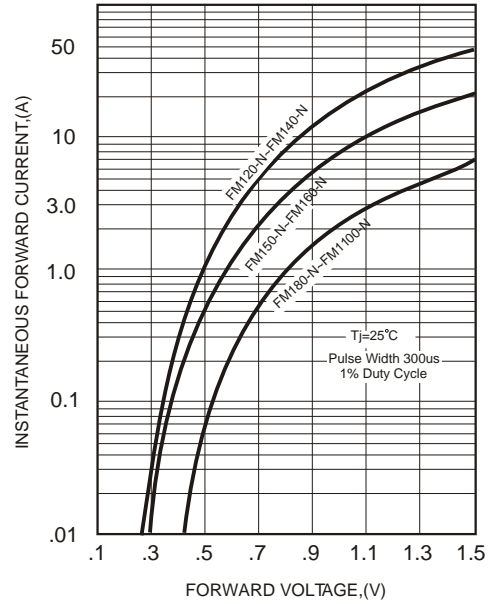


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

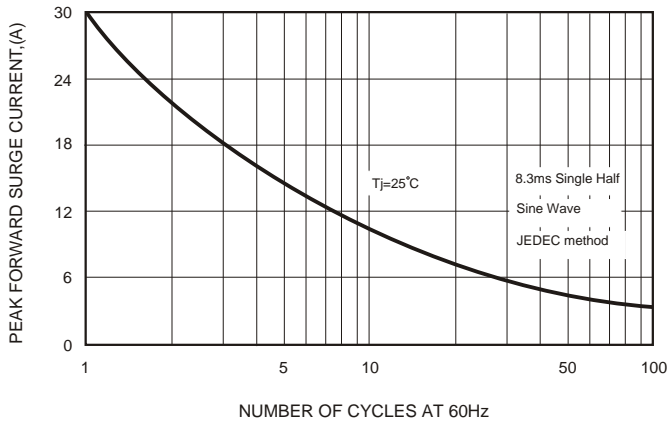


FIG.4-TYPICAL JUNCTION CAPACITANCE

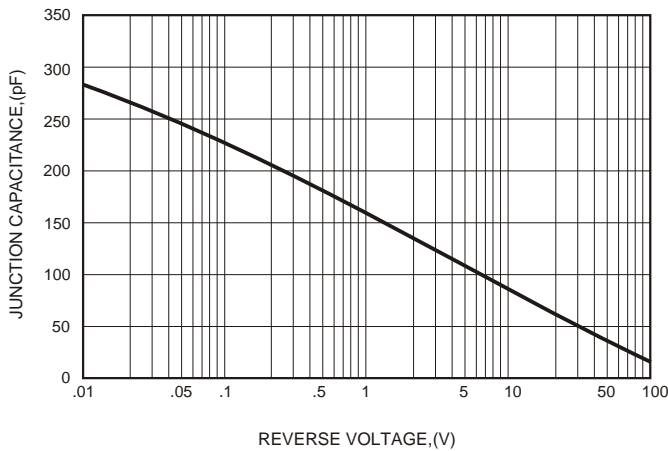


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

