

# FM320-AL THRU FM3100-AL

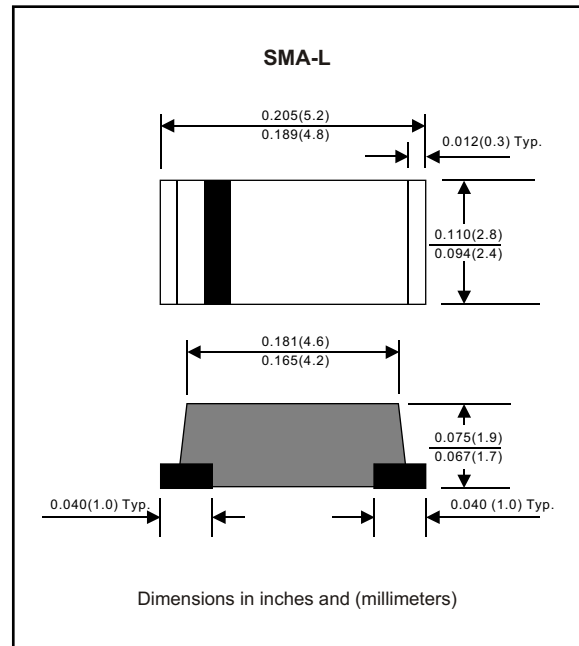
Silicon epitaxial planer type

## 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, JEDECDO-214AC  
 Terminals : Solder plated, solderable per MIL-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	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	$I_0$			3.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	$I_{FSM}$			80	A
Reverse current	$V_R = V_{RRM} T_A = 25^{\circ}\text{C}$	$I_R$			0.5	mA
	$V_R = V_{RRM} T_A = 125^{\circ}\text{C}$				20	mA
Thermal resistance	Junction to ambient	$R_{JA}$		80		$^{\circ}\text{C} / \text{w}$
Diode junction capacitance	f=1MHz and applied 4vDC reverse voltage	$C_J$		250		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 ( $^{\circ}\text{C}$ )
FM320-AL	SS32	20	14	20	0.50	-55 to +125
FM330-AL	SS33	30	21	30		
FM340-AL	SS34	40	28	40		
FM350-AL	SS35	50	35	50	0.75	-55 to +150
FM360-AL	SS36	60	42	60		
FM380-AL	SS38	80	56	80	0.85	
FM3100-AL	S310	100	70	100		

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

## RATING AND CHARACTERISTIC CURVES (FM320-AL THRU FM3100-AL)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

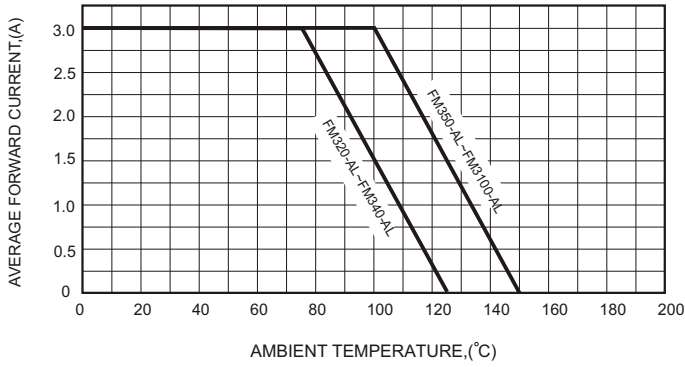


FIG.2-TYPICAL FORWARD CHARACTERISTICS

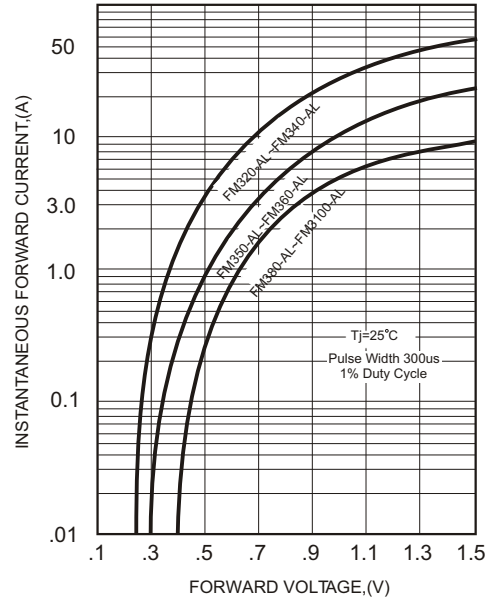


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

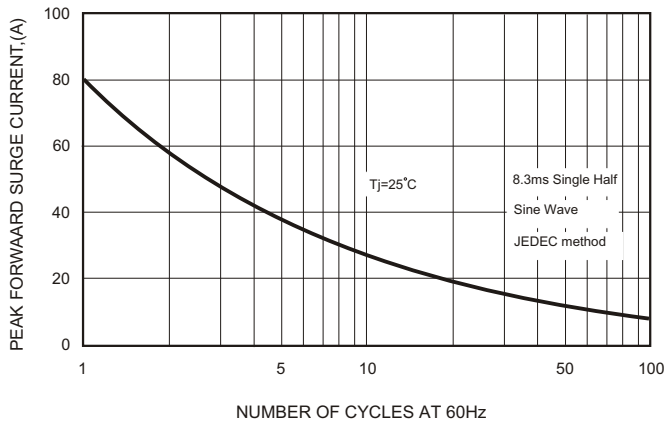


FIG.4-TYPICAL JUNCTION CAPACITANCE

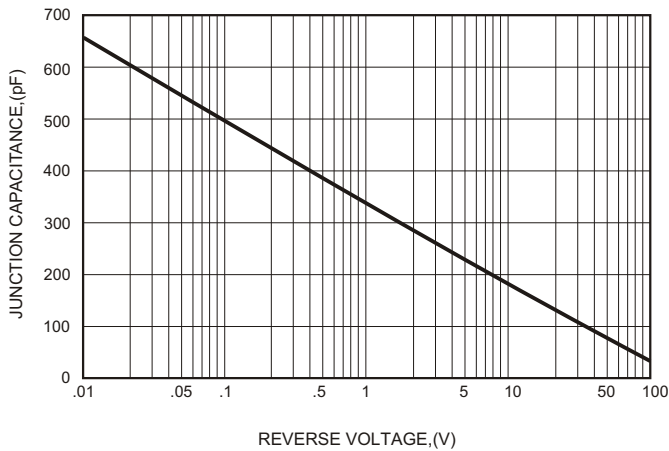


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

