

# FM1020-T THRU FM1040-T

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

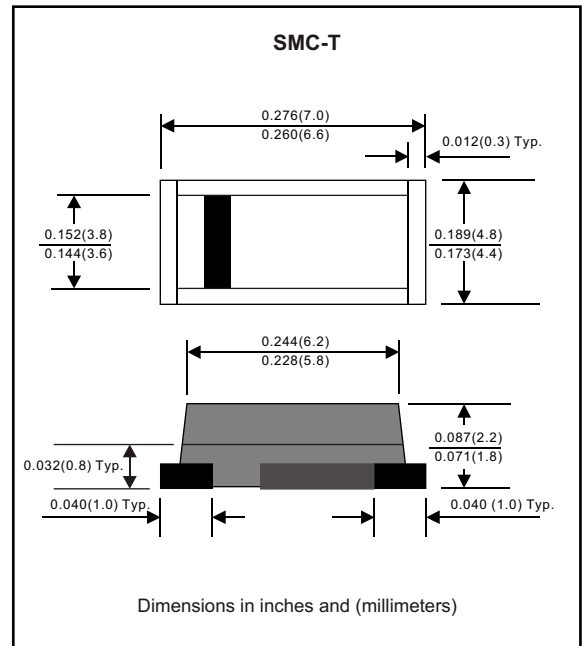
Case : Moulded plastic, JEDEC DO-214AB

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

Polarity : Indicated by cathode band

Mounting Position : Any

Weight : 0.00585 ounce, 0.195 gram



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

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.1	$I_O$			10.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	$I_{FSM}$			150	A
Reverse current	$V_R = V_{RRM} T_A = 25^{\circ}C$	$I_R$			1.0	mA
	$V_R = V_{RRM} T_A = 100^{\circ}C$				50	mA
Thermal resistance	Junction to ambient	$R_{JA}$		55		$^{\circ}C / w$
Diode junction capacitance	$f=1MHz$ and applied 4vDC reverse voltage	$C_J$		700		pF
Storage temperature		$T_{STG}$	-55		+150	$^{\circ}C$

SYMBOLS	MARKING CODE	$V_{RRM}^{*1}$ (V)	$V_{RMS}^{*2}$ (V)	$V_R^{*3}$ (V)	$V_F^{*4}$ (V)	Operating temperature ( $^{\circ}C$ )
FM1020-T	SS102	20	14	20	0.55	-55 to +125
FM1030-T	SS103	30	21	30		
FM1040-T	SS104	40	28	40		

\*1 Repetitive peak reverse voltage

\*2 RMS voltage

\*3 Continuous reverse voltage

\*4 Maximum forward voltage

## RATING AND CHARACTERISTIC CURVES (FM1020-T THRU FM1040-T)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

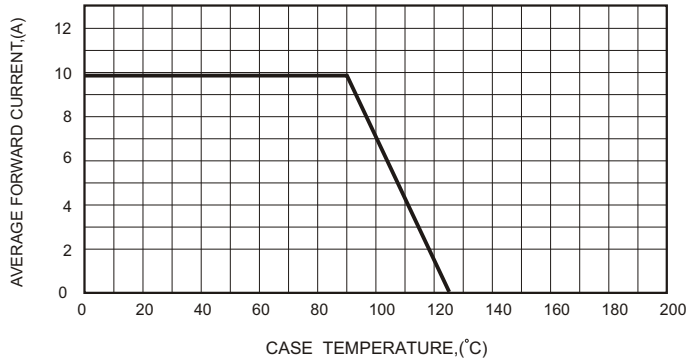


FIG.2-TYPICAL FORWARD CHARACTERISTICS

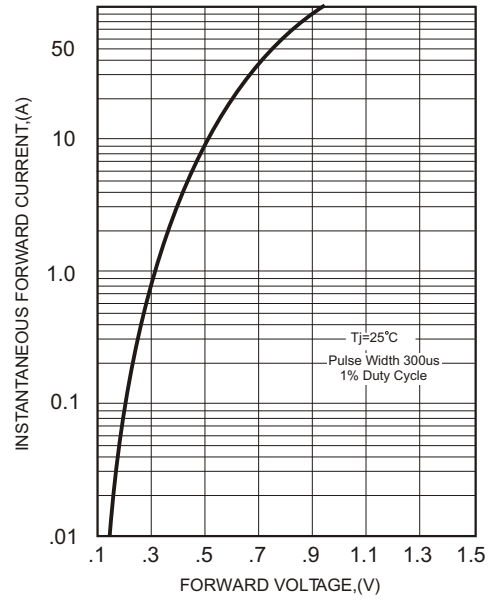


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

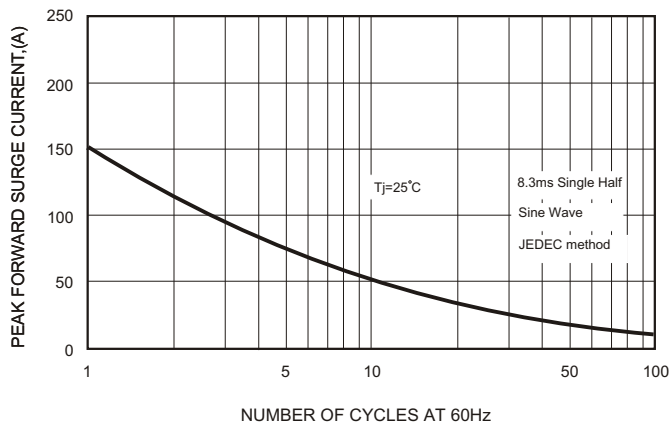


FIG.4-TYPICAL JUNCTION CAPACITANCE

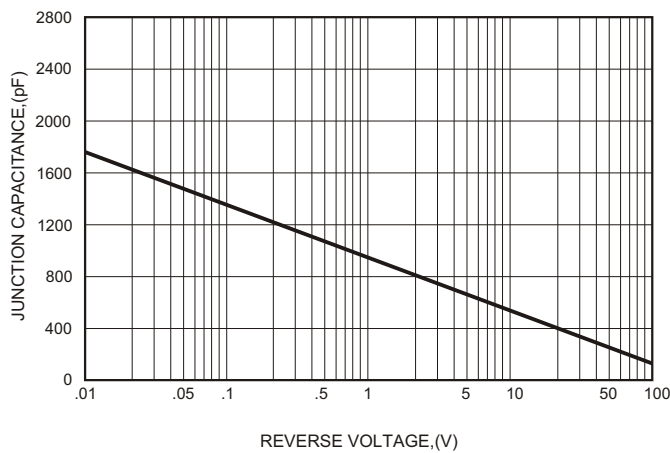


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

