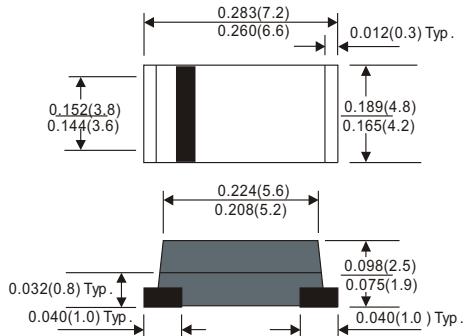


FM1020-T1 thru FM1040-T1

SILICON EPITAXIAL PLANE TYPE



SMC-T1



Dimensions in inches and (millimeters)

FEATURES

- Plastic package has Underwriters Laboratory
- Flammability classification 94V-0 Utilizing Flame
- Retardant Epoxy Molding Compound
- For surface mount applications
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage current.

MECHANICAL DATA

Case : Molded plastic, DO-214AB/SMC-T1
Terminals : Solder plated, solderable per
MIL-STD-750, Method 2026
Polarity : Indicated by cathode band
Mounting Position : Any
Weight : 0.195grams

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

PARAMETER	CONDITIONS	SYMBOL	Min.	Typ.	Max.	UNITS
Forward rectified current	See Fig.1	I_o			10	A
Forward surge current	8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}			150	A
Reverse current	$V_R=V_{RRM} T_A=25^\circ\text{C}$	I_R			0.5	mA
	$V_R=V_{RRM} T_A=100^\circ\text{C}$				50	mA
Thermal resistance	Junction to ambient	R_{JA}		55		$^\circ\text{C} / \text{W}$
Diode junction capacitance	$F=1\text{MHz}$ and applied 4vDC reverse voltage	C_J		700		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 $(^\circ\text{C})$
FM1020-T1	SS102	20	14	20	0.55	-55 to + 125
FM1030-T1	SS103	30	21	30		
FM1040-T1	SS104	40	28	40		

*1 Repetitive peak reverse peak reverse

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage

FM1020-T1 thru FM1040-T1

SILICON EPITAXIAL PLANE TYPE

RATING AND CHARACTERISTICS CURVES FM1020-T1 THRU FM1040-T1

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

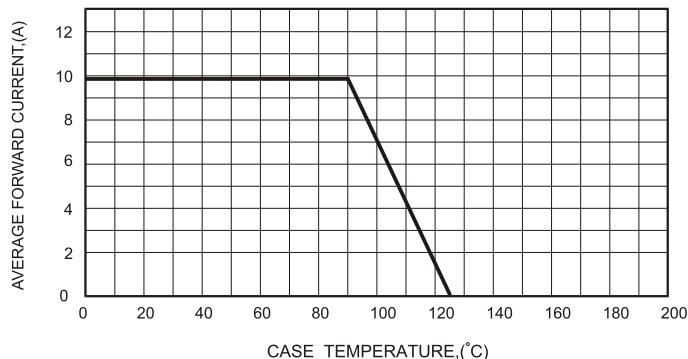


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

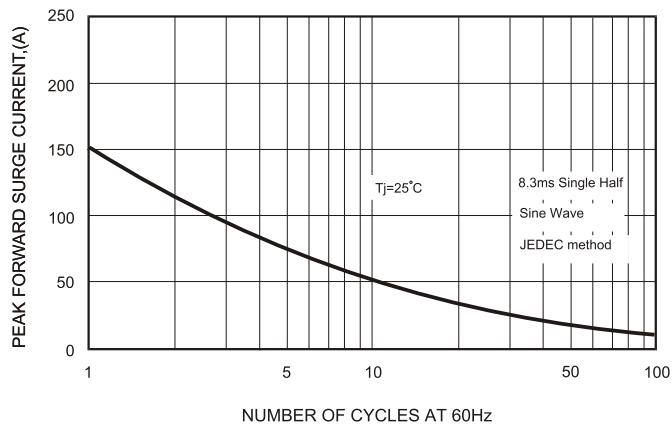


FIG.4-TYPICAL JUNCTION CAPACITANCE

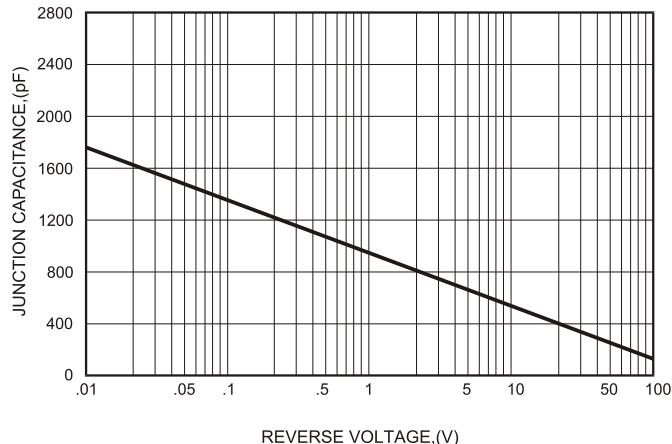


FIG.2-TYPICAL FORWARD CHARACTERISTICS

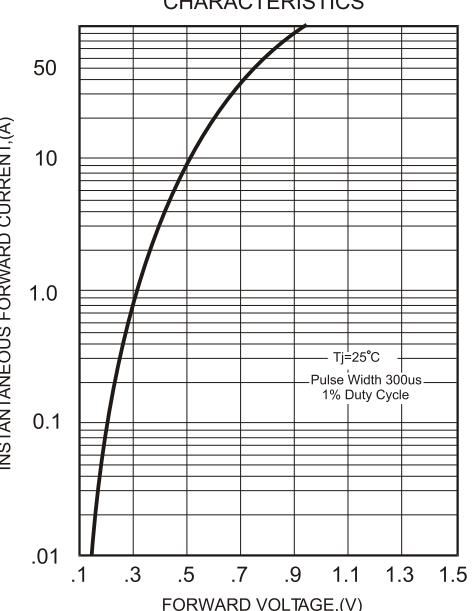


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

