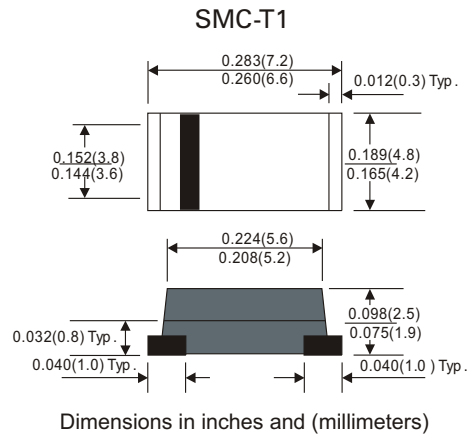
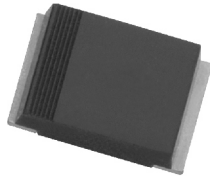


# FM820-T1 thru FM860-T1

## SILICON EPITAXIAL PLANCE TYPE



### 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	$I_o$			8.0	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 ( $^{\circ}\text{C}$ )
FM820-T1	SS82	20	14	20	0.5	-55 to + 125
FM830-T1	SS83	30	21	30		
FM840-T1	SS84	40	28	40		
FM850-T1	SS85	50	35	50	0.7	
FM860-T1	SS86	60	42	60		

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

# FM820-T1 thru FM860-T1

## SILICON EPITAXIAL PLANCE TYPE

### RATING AND CHARACTERISTICS CURVES FM820-T1 THRU FM860-T1

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

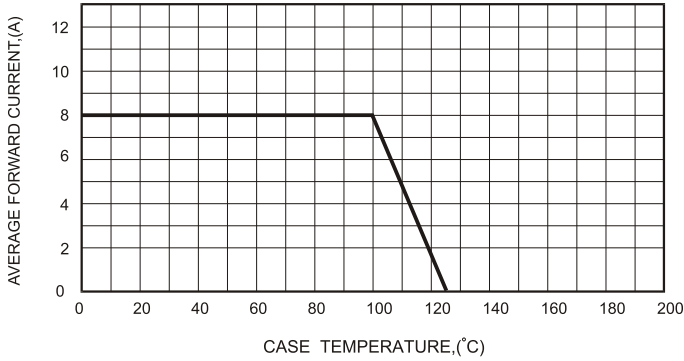


FIG.2-TYPICAL FORWARD CHARACTERISTICS

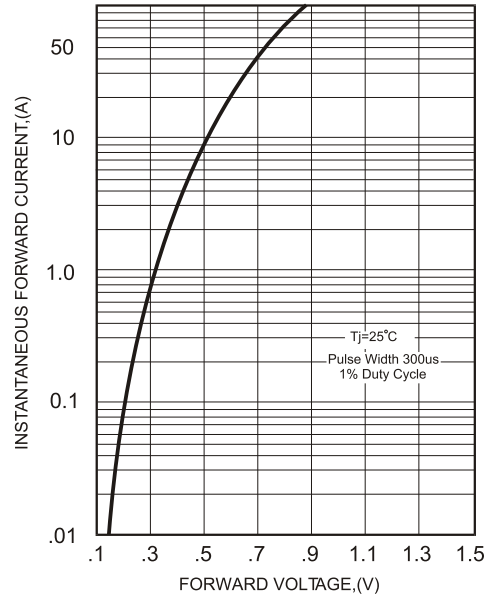


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

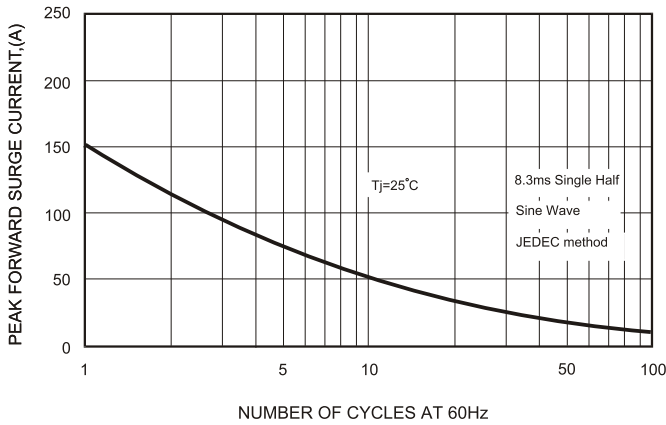


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

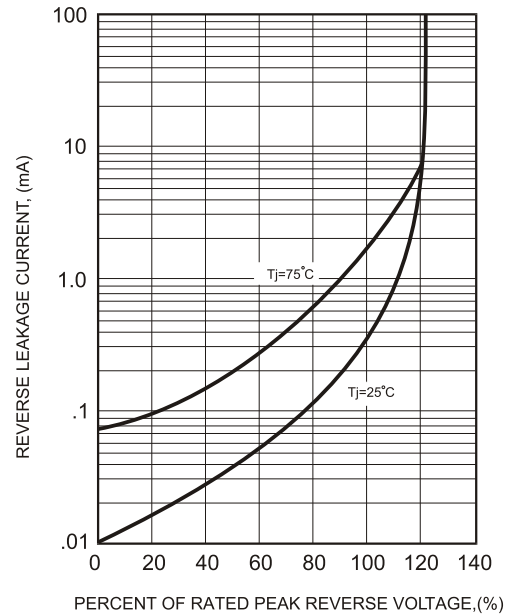


FIG.4-TYPICAL JUNCTION CAPACITANCE

