

FM5820 THRU FM5822

Silicon epitaxial planer type

Features

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

Mechanical data

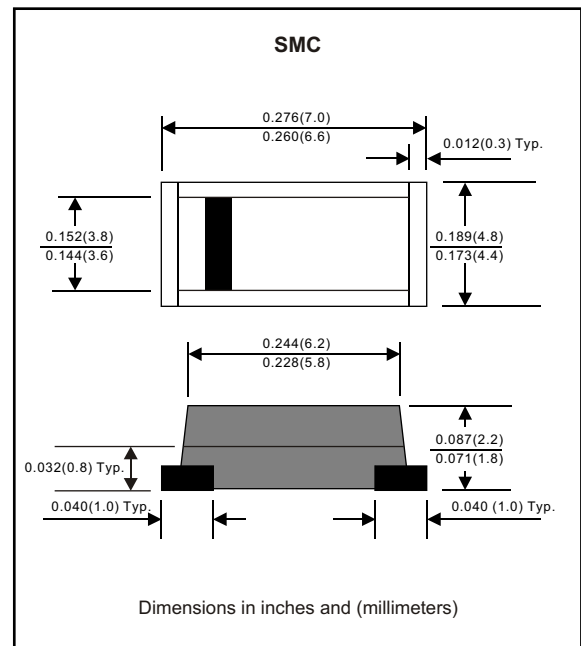
Case : Molded plastic, JEDEC DO-214AB

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 $T_A=25^\circ\text{C}$ 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	$V_R = V_{RRM} \quad T_A = 25^\circ\text{C}$	I_R			2.0	mA
	$V_R = V_{RRM} \quad T_A = 100^\circ\text{C}$				20	mA
Thermal resistance	Junction to ambient	R_{QJA}		55		$^\circ\text{C} / \text{W}$
Diode junction capacitance	$f=1\text{MHz}$ and applied 4VDC reverse voltage	C_J		300		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 ($^\circ\text{C}$)
FM5820	SK32	20	14	20	0.475	-55 to +125
FM5821	SK33	30	21	30	0.500	
FM5822	SK34	40	28	40	0.525	

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage

RATING AND CHARACTERISTIC CURVES (FM5820 THRU FM5822)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

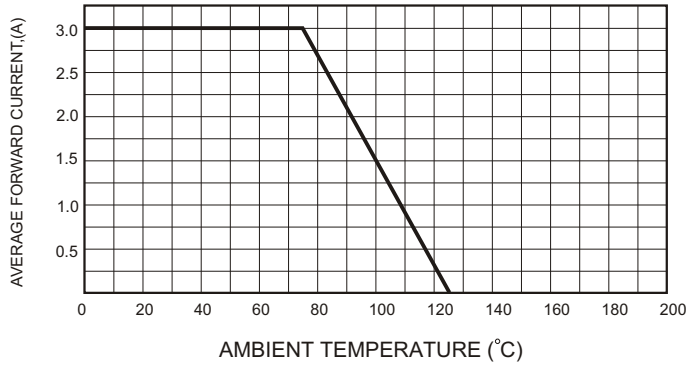


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

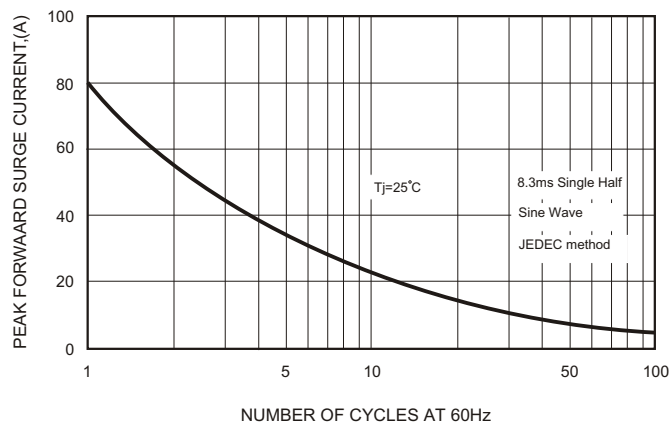


FIG.4-TYPICAL JUNCTION CAPACITANCE

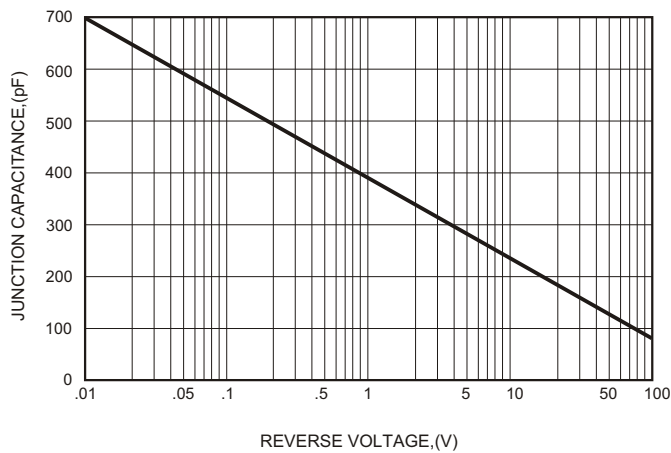


FIG.2-TYPICAL FORWARD CHARACTERISTICS

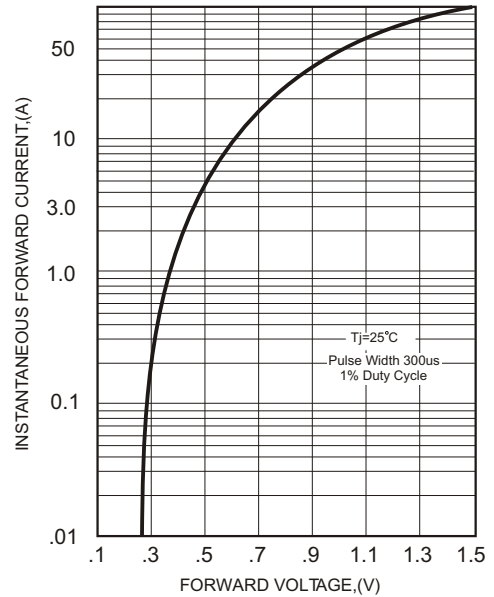


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

