

FM520 THRU FM5100

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

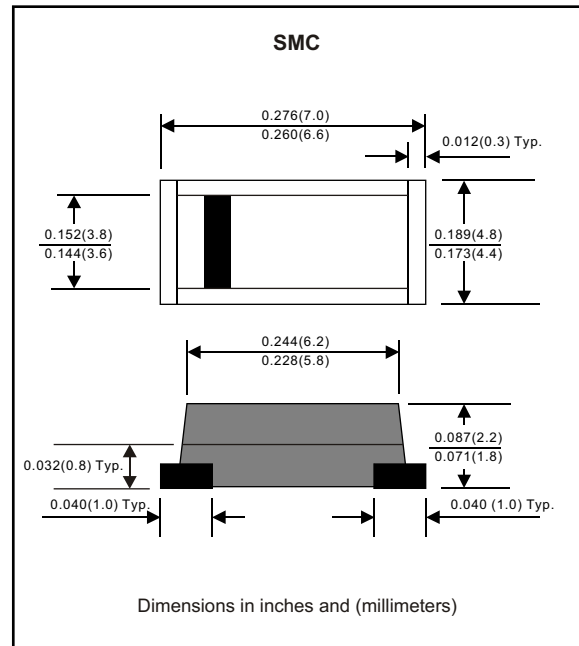
Case : Molded plastic, JEDEC DO-214AB

Terminals : Solder plated, solderable per MIL-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			5.0	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			0.5	mA
	$V_R = V_{RRM} T_A = 125^{\circ}C$				50	mA
Thermal resistance	Junction to ambient	R_{JA}		15		$^{\circ}C / w$
Diode junction capacitance	$f=1MHz$ and applied 4vDC reverse voltage	C_J		380		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 ($^{\circ}C$)
FM520	SS52	20	14	20	0.55	-55 to +125
FM530	SS53	30	21	30		
FM540	SS54	40	28	40		
FM550	SS55	50	35	50	0.70	-55 to +150
FM560	SS56	60	42	60		
FM580	SS58	80	56	80	0.85	
FM5100	S510	100	70	100		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage

RATING AND CHARACTERISTIC CURVES (FM520 THRU FM5100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

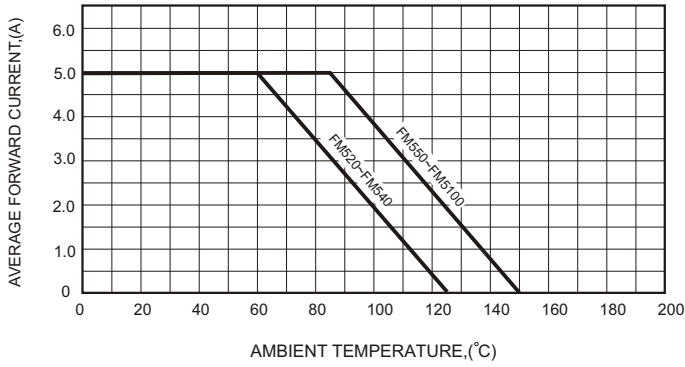


FIG.2-TYPICAL FORWARD CHARACTERISTICS

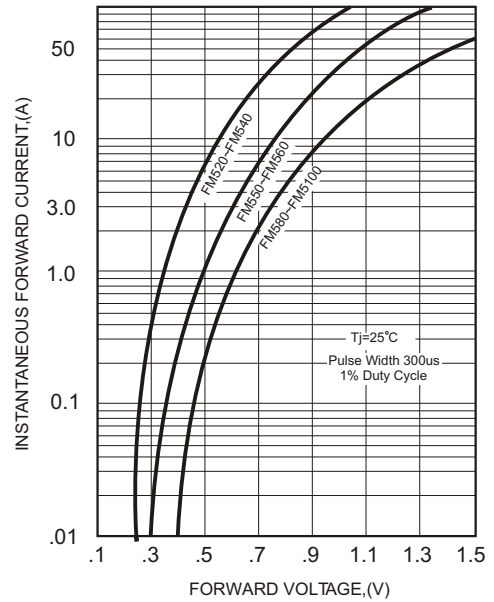


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

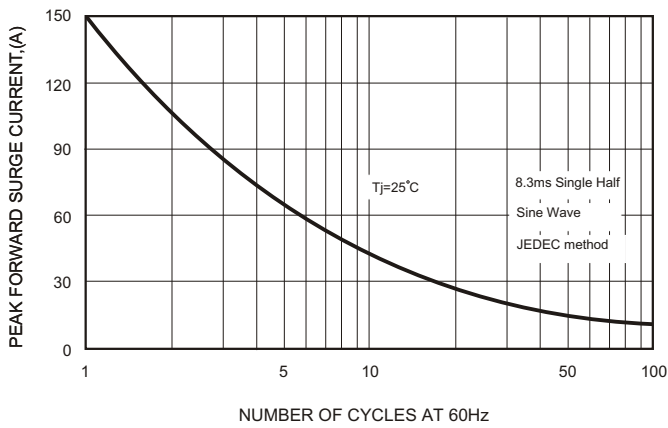


FIG.4-TYPICAL JUNCTION CAPACITANCE

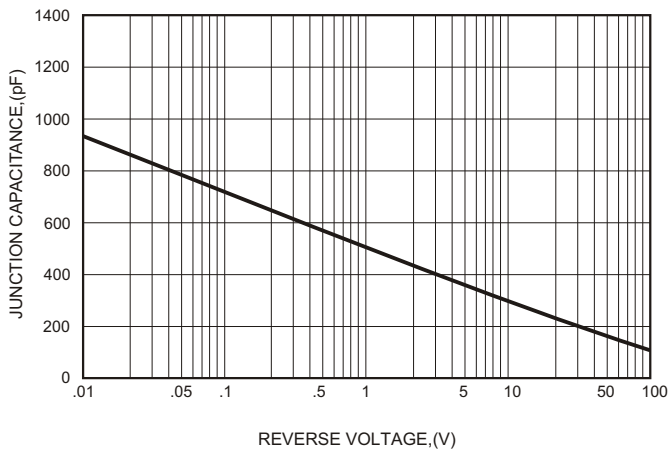


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

