

Chip Silicon Rectifier

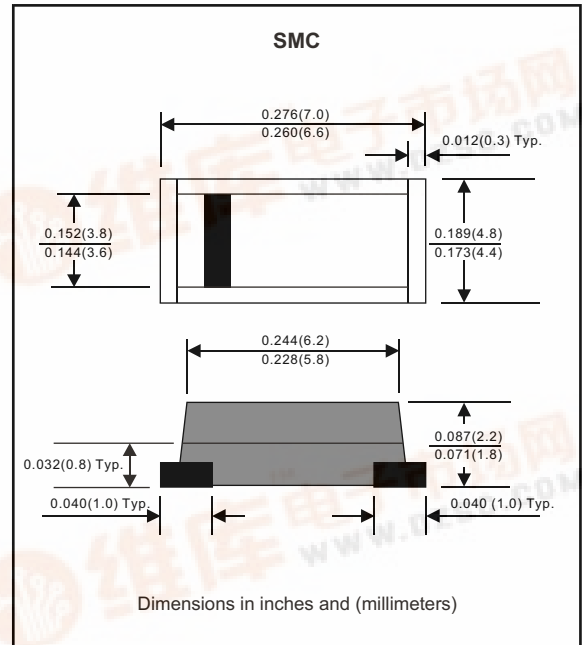
Formosa MS

FM301 THRU FM307

Glass passivated 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
- Glass passivated junction



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 $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	See Fig.2	I_O			3	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			100	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^\circ\text{C}$	I_R			5.0	μA
	$V_R = V_{RRM}$ $T_A = 125^\circ\text{C}$				250	μA
Thermal resistance	Junction to ambient	R_{QJA}		47		$^\circ\text{C} / \text{w}$
Diode junction capacitance	f=1MHz and applied 4vDC reverse voltage	C_J		40		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 ($^\circ\text{C}$)
FM301	A31	50	35	50	1.1	-55 to +150
FM302	A32	100	70	100		
FM303	A33	200	140	200		
FM304	A34	400	280	400		
FM305	A35	600	420	600		
FM306	A36	800	560	800		
FM307	A37	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage



RATING AND CHARACTERISTIC CURVES (FM301 THRU FM307)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

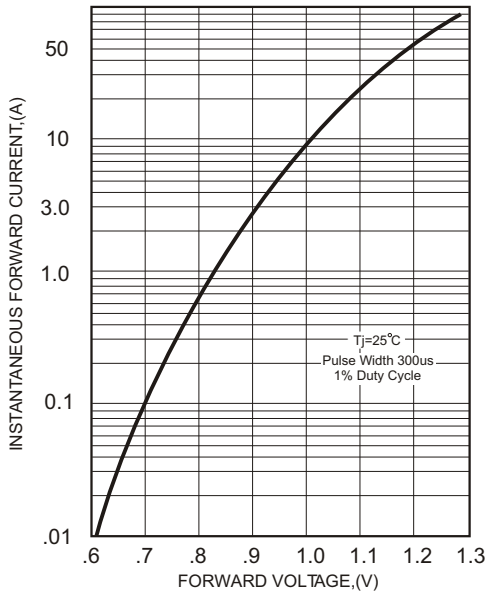


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

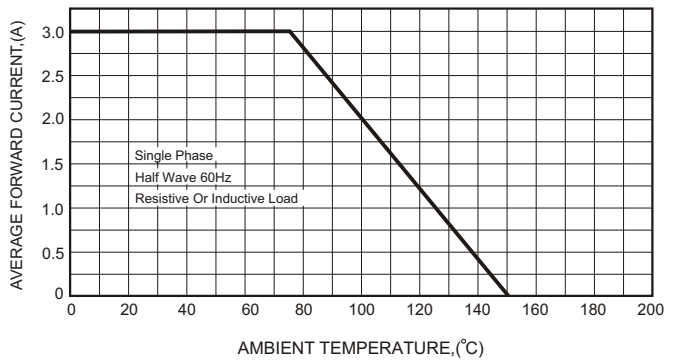


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

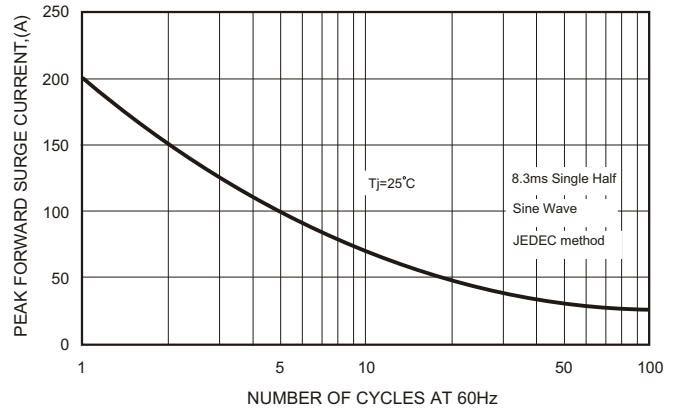


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

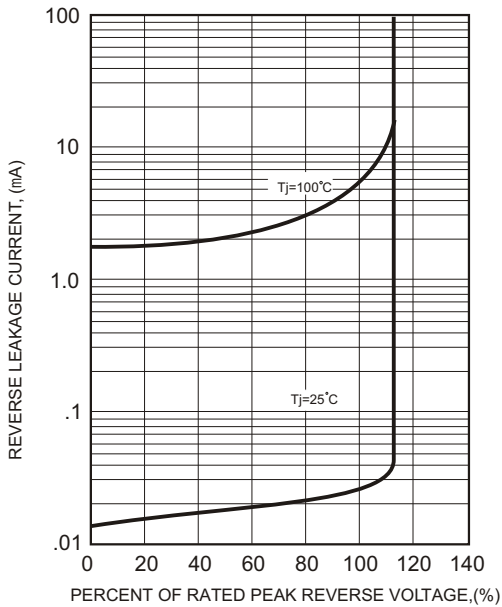


FIG.5-TYPICAL JUNCTION CAPACITANCE

