

Chip Silicon Rectifier

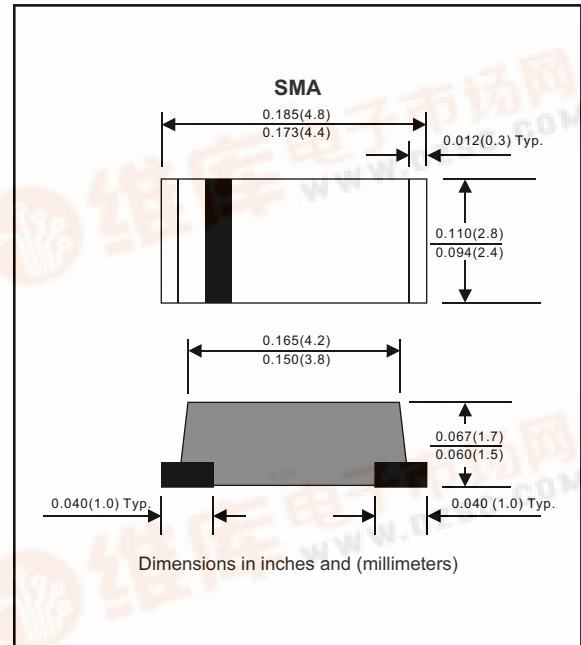
Formosa MS

FM4001 THRU FM4007

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
- Low leakage current



Mechanical data

Case : Molded plastic, JEDECDO-214AC

Terminals : Solder plated, solderable per ML-STD-750, Method 2026

Polarity : Indicated by cathode band

Mounting Position : Any

Weight : 0.0015 ounce, 0.05 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			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			30	A
Reverse current	$V_R = V_{RRM} \quad T_A = 25^{\circ}\text{C}$	I_R			5.0	μA
	$V_R = V_{RRM} \quad T_A = 100^{\circ}\text{C}$				50	μA
Thermal resistance	Junction to ambient	R_{thJA}		50		$^{\circ}\text{C} / \text{W}$
	Junction to case	R_{thJC}		28		
Diode junction capacitance	$f=1\text{MHz}$ and applied 4vDC reverse voltage	C_J		15		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 ($^{\circ}\text{C}$)
FM4001	A1	50	35	50	1.1	-55 to +150
FM4002	A2	100	70	100		
FM4003	A3	200	140	200		
FM4004	A4	400	280	400		
FM4005	A5	600	420	600		
FM4006	A6	800	560	800		
FM4007	A7	1000	700	1000		

*1 Repetitive peak reverse voltage

*2 RMS voltage

*3 Continuous reverse voltage

*4 Maximum forward voltage



RATING AND CHARACTERISTIC CURVES (FM4001 THRU FM4007)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

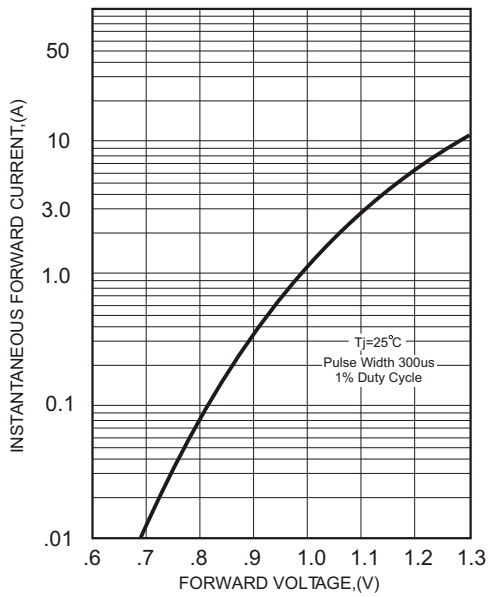


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

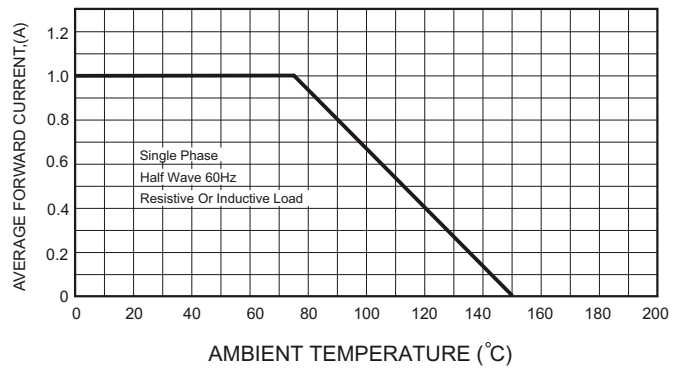


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

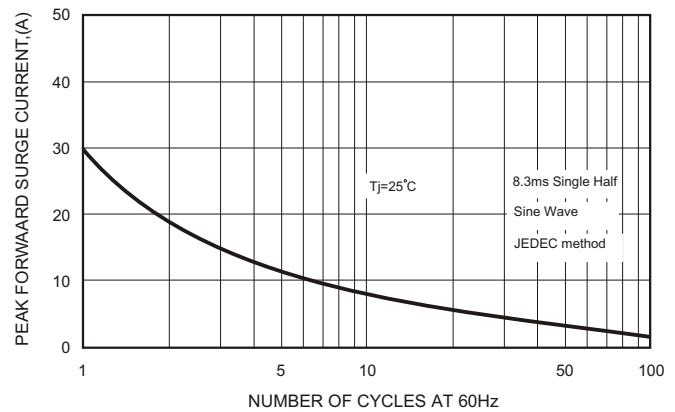


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

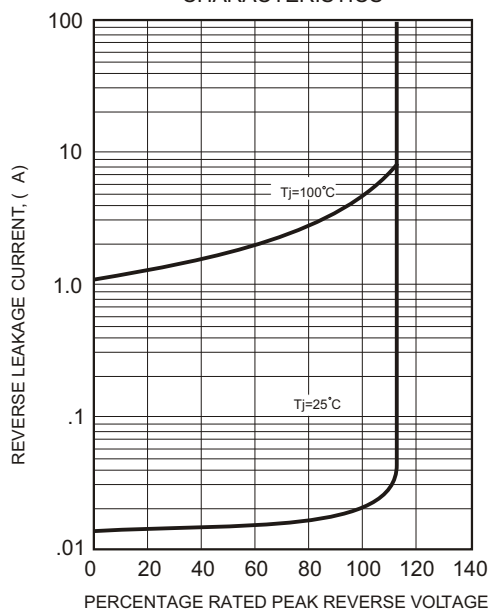


FIG.5-TYPICAL JUNCTION CAPACITANCE

