Chip Silicon Rectifier

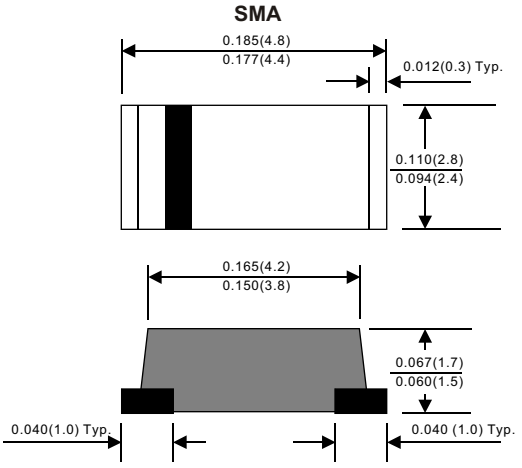
Formosa MS

FFM201 THRU FFM207

Fast recovery 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 MIL-S-19500 / 228
- Low leakage current.



Dimensions in inches and (millimeters)

Mechanical data

Case : Molded plastic, JEDEC DO-214AC
Terminals : Solder plated, solderable per MIL-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°C unless otherwise noted)

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	Ambient temperature = 55°C	I_O			2.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			50	A
Reverse current	$V_R = V_{RRM}$ T_A = 25°C	I_R			5.0	uA
	$V_R = V_{RRM}$ T_A = 100°C				100	uA
Thermal resistance	Junction to ambient	Rq_{JA}		35		°C / w
Diode junction capacitance	f=1MHz and applied 4vDC reverse voltage	C_J		40		pF
Storage temperature		T_{STG}	-55		+150	°C

SYMBOLS	MARKING CODE	V_{RRM} *1 (V)	V_{RMS} *2 (V)	V_R *3 (V)	V_F *4 (V)	T_{RR} *5 (nS)	Operating temperature (°C)
FFM201	F21	50	35	50	1.3	150	-55 to +150
FFM202	F22	100	70	100			
FFM203	F23	200	140	200			
FFM204	F24	400	280	400			
FFM205	F25	600	420	600		250	
FFM206	F26	800	560	800		500	
FFM207	F27	1000	700	1000			

*1 Repetitive peak reverse voltage
*2 RMS voltage
*3 Continuous reverse voltage
*4 Maximum forward voltage
*5 Reverse recovery time

RATING AND CHARACTERISTIC CURVES (FFM201 THRU FFM207)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

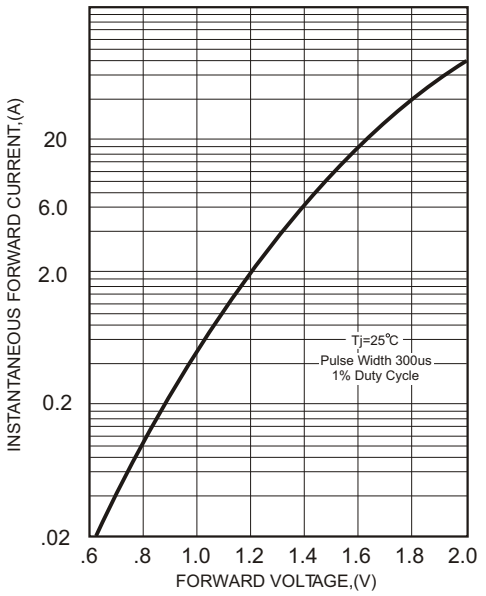


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

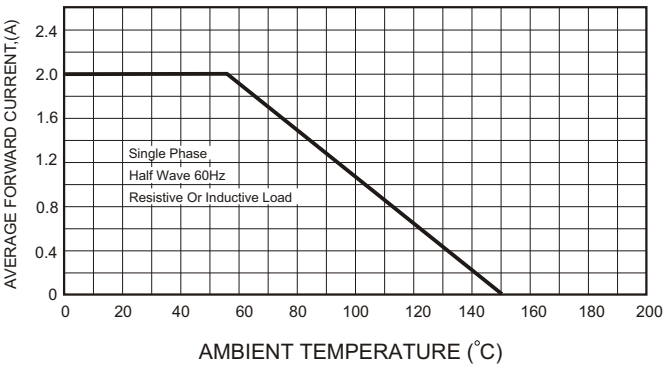
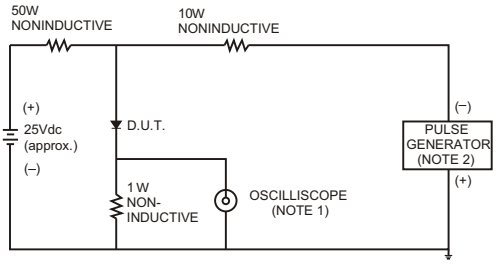


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm.22pF.

2. Rise Time= 10ns max., Source Impedance= 50 ohms.

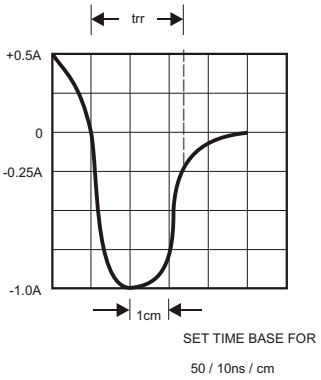


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

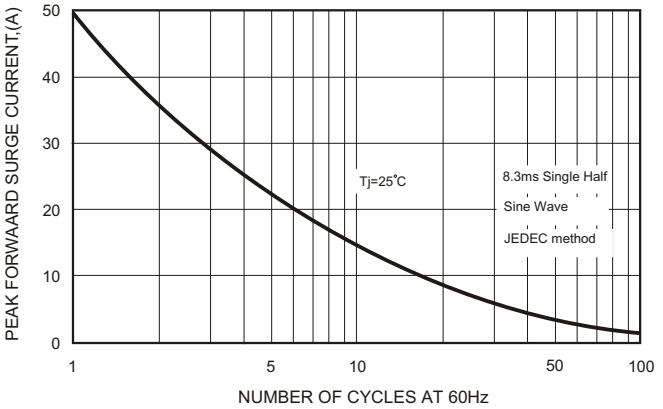
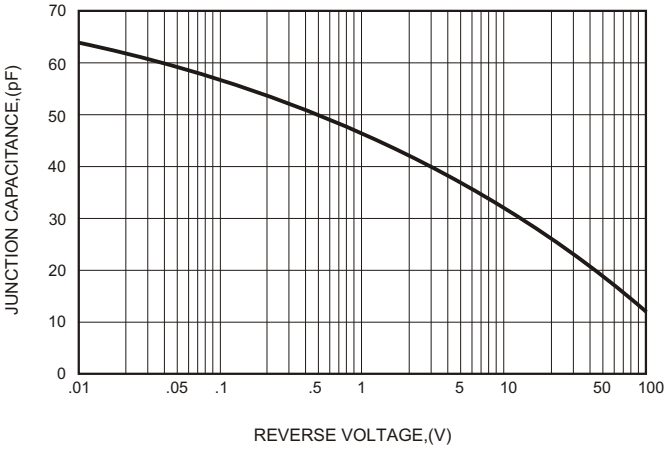



FIG.5-TYPICAL JUNCTION CAPACITANCE