

Chip Silicon Rectifier

Formosa MS

SFM21-L THRU SFM26-L

Super 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.

Mechanical data

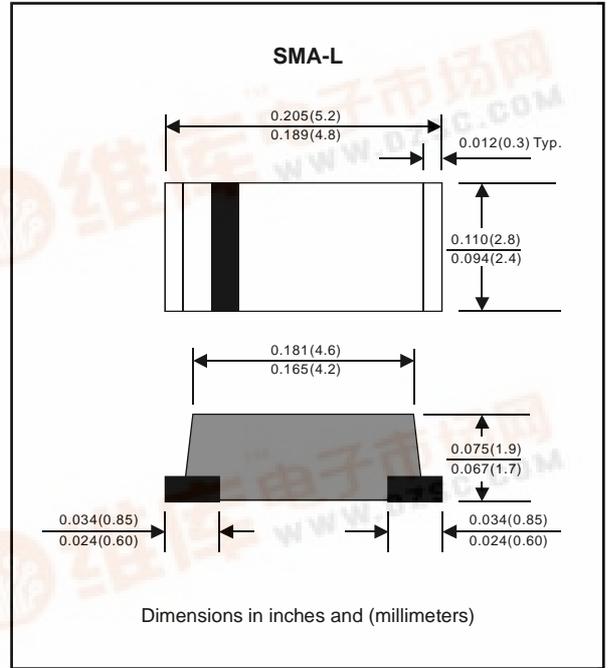
Case : Molded plastic, JEDEC DO-214AC

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

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	Ambient temperature = $50^{\circ}C$	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	$V_R = V_{RRM}$ $T_A = 25^{\circ}C$	I_R			5.0	μA
	$V_R = V_{RRM}$ $T_A = 100^{\circ}C$				100	μA
Thermal resistance	Junction to ambient	$R\theta_{JA}$		75		$^{\circ}C / w$
Diode junction capacitance	$f=1MHz$ and applied 4vDC reverse voltage	C_J		10		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)	T_{RR} *5 (nS)	Operating temperature ($^{\circ}C$)
SFM21-L	S21	50	35	50	0.95	35	-55 to +150
SFM22-L	S22	100	70	100			
SFM23-L	S23	150	105	150			
SFM24-L	S24	200	140	200	1.25		
SFM25-L	S25	300	210	300			
SFM26-L	S26	400	280	400			

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



RATING AND CHARACTERISTIC CURVES (SFM21-L THRU SFM26-L)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

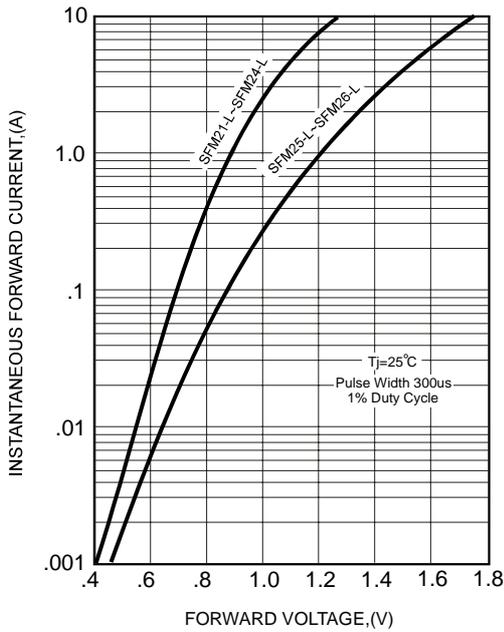


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

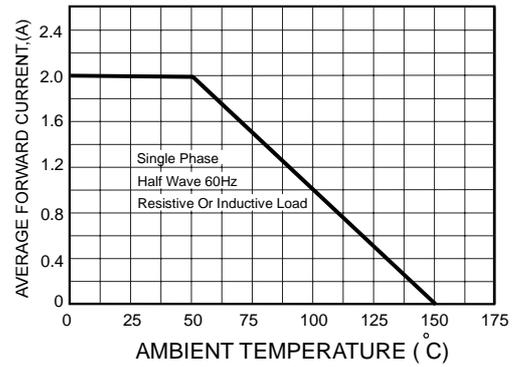
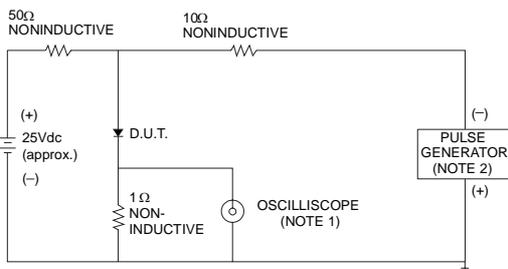


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



- NOTES: 1. Rise Time= 7ns max., Input Impedance= 1 megohm, 22pF.
2. Rise Time= 10ns max., Source Impedance= 50 ohms.

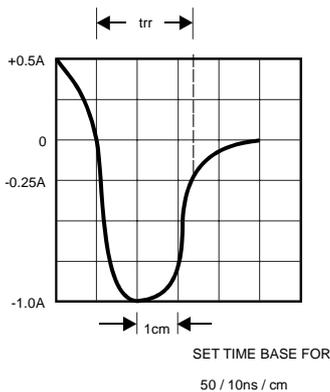


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

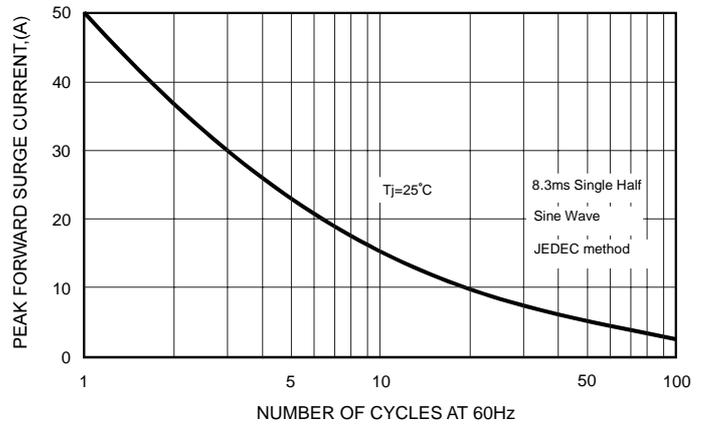


FIG.5-TYPICAL JUNCTION CAPACITANCE

