

Chip Silicon Rectifier

Formosa MS

HFM201-L THRU HFM207-L

Ultra 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 ML-S-19500 / 228
- Low leakage current

Mechanical data

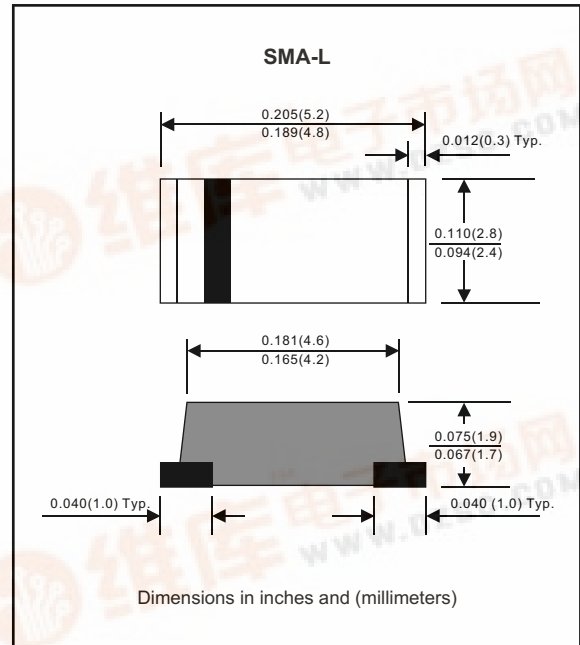
Case : Molded plastic, JEDEC DO-214AC

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

PARAMETER	CONDITIONS	Symbol	MIN.	TYP.	MAX.	UNIT
Forward rectified current	Ambient temperature = 50°C	I_O			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC methode)	I_{FSM}			50	A
Reverse current	$V_R = V_{RRM}$ $T_A = 25^{\circ}\text{C}$	I_R			5.0	μA
	$V_R = V_{RRM}$ $T_A = 100^{\circ}\text{C}$				150	μA
Thermal resistance	Junction to ambient	R_{JA}		20		$^{\circ}\text{C} / \text{w}$
Diode junction capacitance	$f=1\text{MHz}$ and applied 4vDC reverse voltage	C_J		25		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)	T _{RR} ^{*5} (nS)	Operating temperature (°C)
HFM201-L	H21	50	35	50	1.0	50	-55 to +150
HFM202-L	H22	100	70	100			
HFM203-L	H23	200	140	200			
HFM204-L	H24	400	280	400	1.3	75	
HFM205-L	H25	600	420	600			
HFM206-L	H26	800	560	800			
HFM207-L	H27	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 (HFM201-L THRU HFM207-L)

FIG.1-TYPICAL FORWARD CHARACTERISTICS

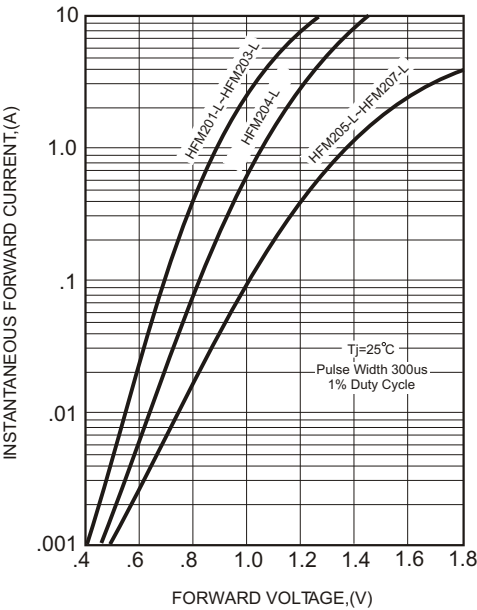


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

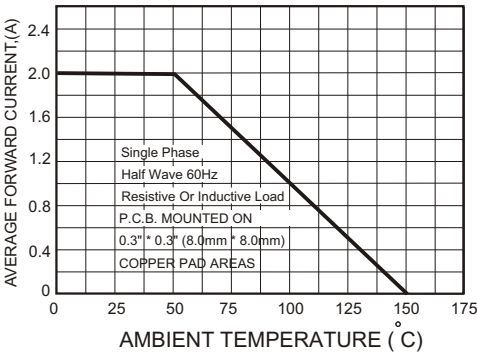
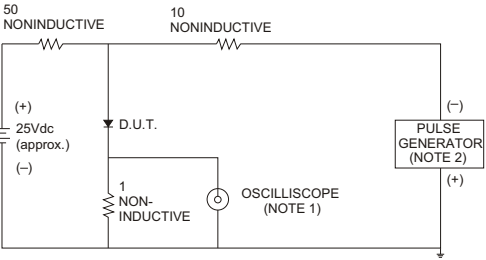


FIG.3- TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTICS



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

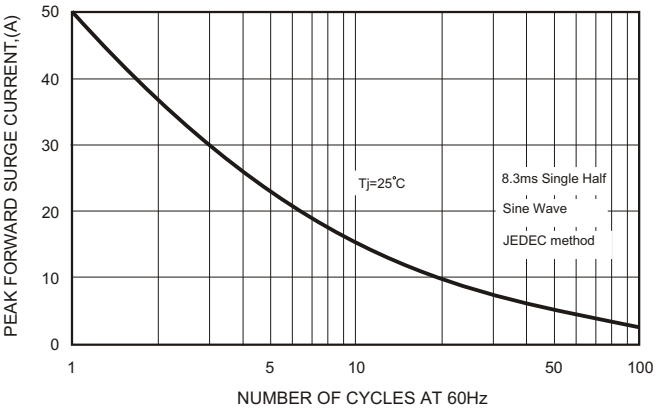


FIG.5-TYPICAL JUNCTION CAPACITANCE

