

1. Scope

The present specifications shall apply to an FML-G12S.

2. Outline

Type	Silicon Diode
Structure	Resin Molded
Applications	High Frequency Rectification

3. Flammability

UL94V-0(Equivalent)

4. Absolute maximum ratings

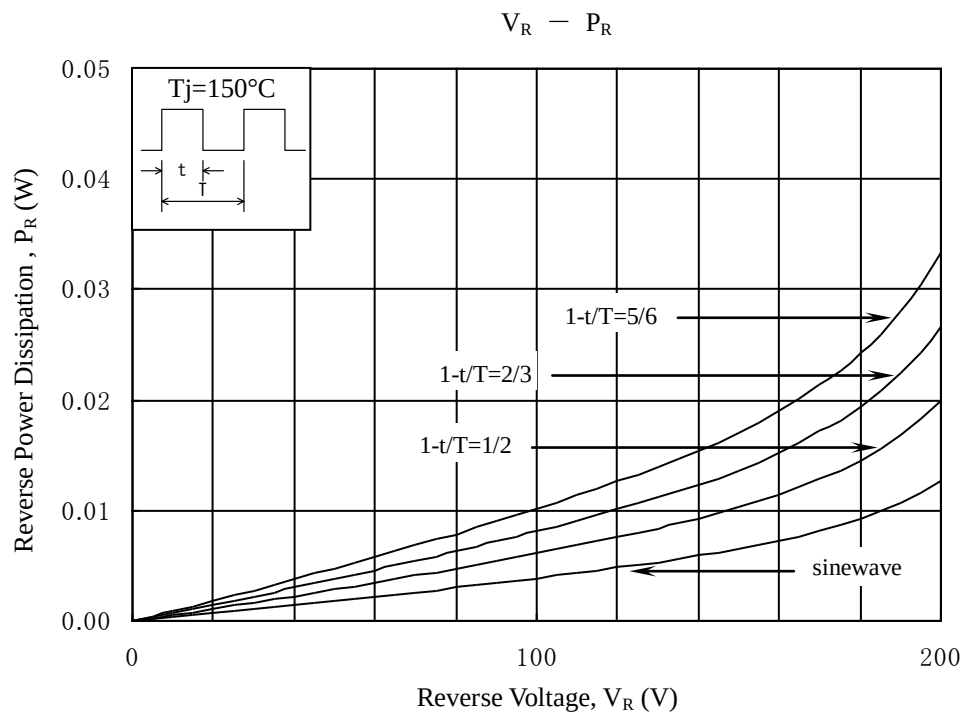
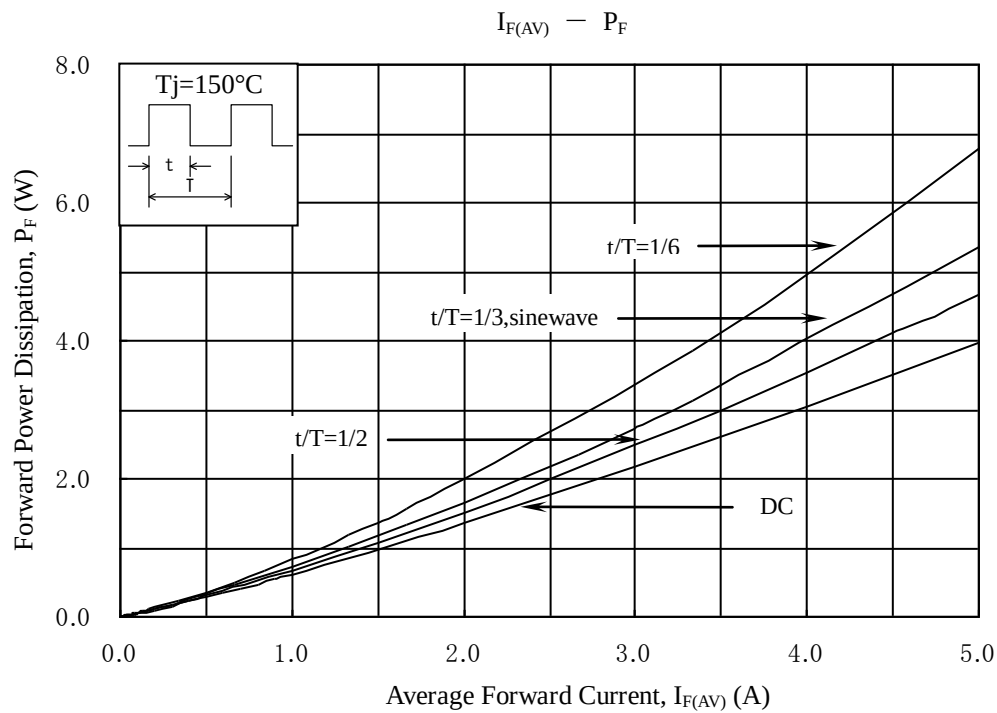
No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	200	
2	Peak Reverse Voltage	V_{RM}	V	200	
3	Average Forward Current	$I_{F(AV)}$	A	5.0	Refer to derating curve in Section 7
4	Peak Surge Forward Current	I_{FSM}	A	65	10 ms. Half sine wave, one shot
5	I^2t Limiting Value	I^2t	A^2s	21	$1\text{ ms} \leq t \leq 10\text{ ms}$
6	Junction Temperature	T_j	°C	-40 to +150	
7	Storage Temperature	T_{stg}	°C	-40 to +150	

No.1,2,4&5 show ratings per one chip.

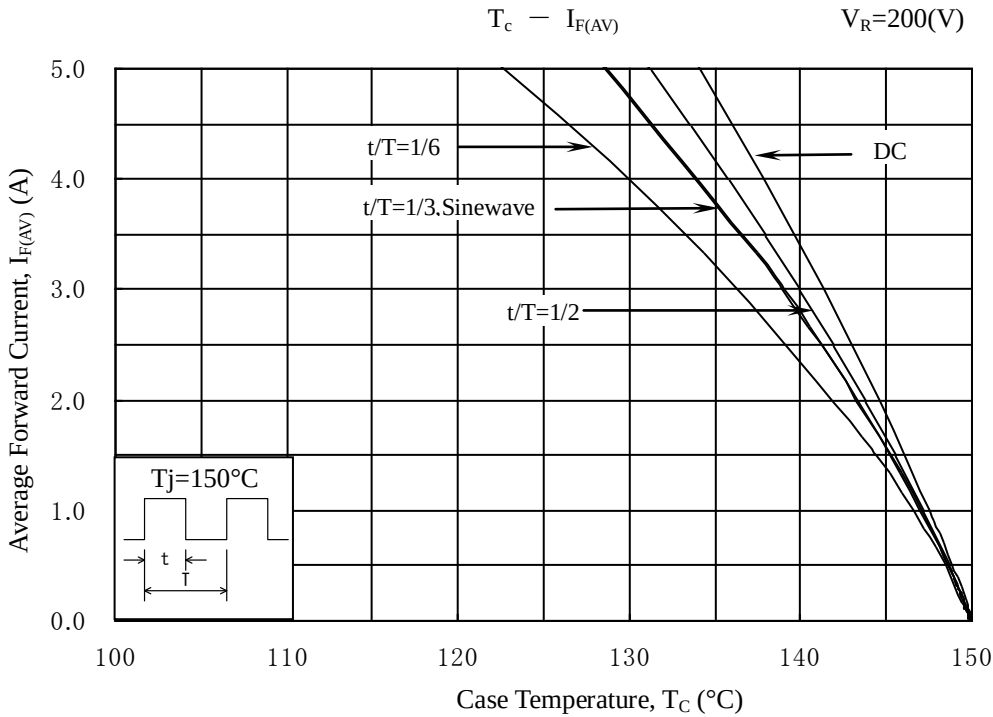
5. Electrical characteristics (Ta=25°C , unless otherwise specified)

No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	0.98 max.	$I_F=5.0A$
2	Reverse Leakage Current	I_R	μA	100 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μA	200 max.	$V_R=V_{RM}$, $T_j=150^\circ C$
4	Reverse Recovery Time	trr1	ns	40 max.	$I_F=I_{RP}=100mA$ 90% Recovery point, $T_j=25^\circ C$
		trr2	ns	30 max.	$I_F=100mA$, $I_{RP}=200mA$ 75% Recovery point, $T_j=25^\circ C$
5	Thermal Resistance	$R_{th(j-c)}$	°C/W	4.0 max.	Between Junction and case

6. Characteristics

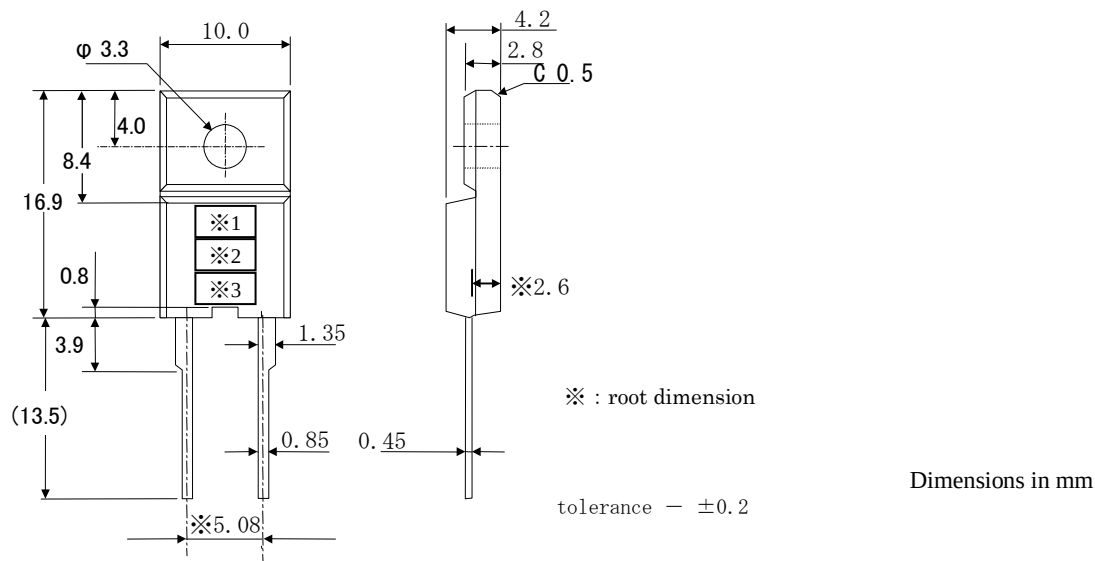


7. Derating



8. Package information

8-1. Package type, physical dimensions and material



8-2. Appearance

The body shall be clean and shall not bear any stain, rust or flaw.

8-3. Marking

Type Name	Marking		
	*1 is type name	*2 is polarity	*3 is lot number
FML-G12S	FMLG12	S	1st letter: Last digit of year 2nd letter: Month From 1 to 9 for Jan. to Sep., O for Oct., N for Nov., D for Dec. 3rd & 4th letter: Day ex. 2117 (Jan. 17, 2002)