1. Scope

The present specifications shall apply to Sanken silicon diode, FML-G13S.

2. Outline

Type	Silicon Rectifier Diode	
Structure	Resin Molded	Flammability : UL94V-0 (Equivalent)
Applications	High Frequency Rectification	

3. Absolute maximum ratings

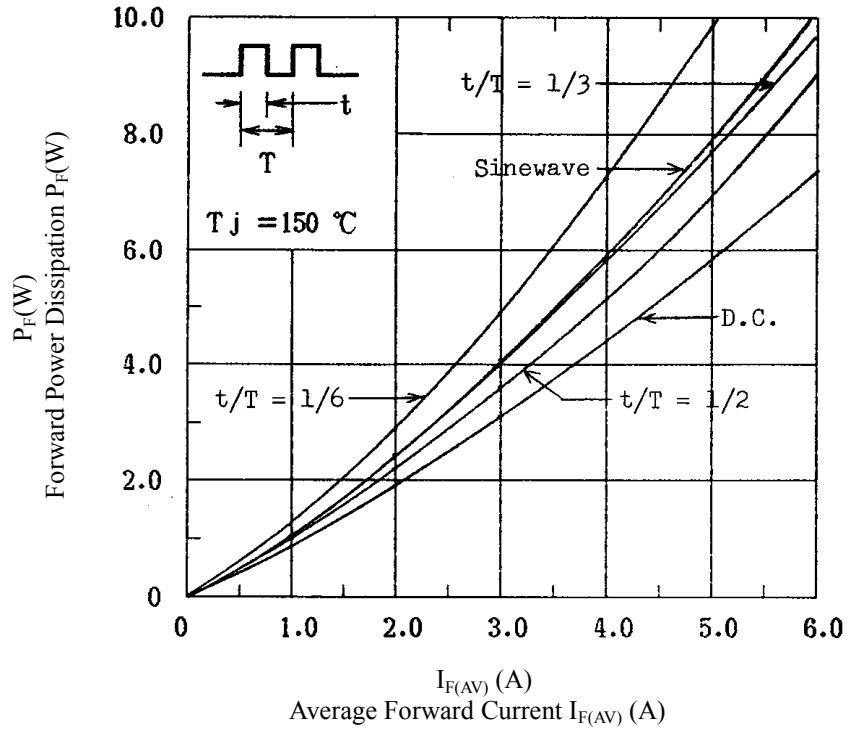
No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	300	
2	Peak Reverse Voltage	V_{RM}	V	300	
3	Average Forward Current	$I_{F(AV)}$	A	5.0	Tc=119°C Sinewave
4	Peak Surge Forward Current	I_{FSM}	A	70	10msec. Half sinewave, one shot
5	I^2t Limiting Value	I^2t	A^2s	24.5	
6	Junction Temperature	T_j	°C	-40～+150	
7	Storage Temperature	T_{stg}	°C	-40～+150	

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

No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	1.3 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.	$V_R=V_{RM}$, Ta=100°C
4	Reverse Recovery Time	trr1	ns	50 max.	$I_F=I_{RP}$=100mA 90% Recovery point, Ta=25°C
		trr2	ns	35 max.	I_F=100mA, I_{RP}=200mA 75% Recovery point ,Ta=25°C
5	Thermal Resistance	$R_{th(j-c)}$	°C /W	4.0 max.	Between Junction and case

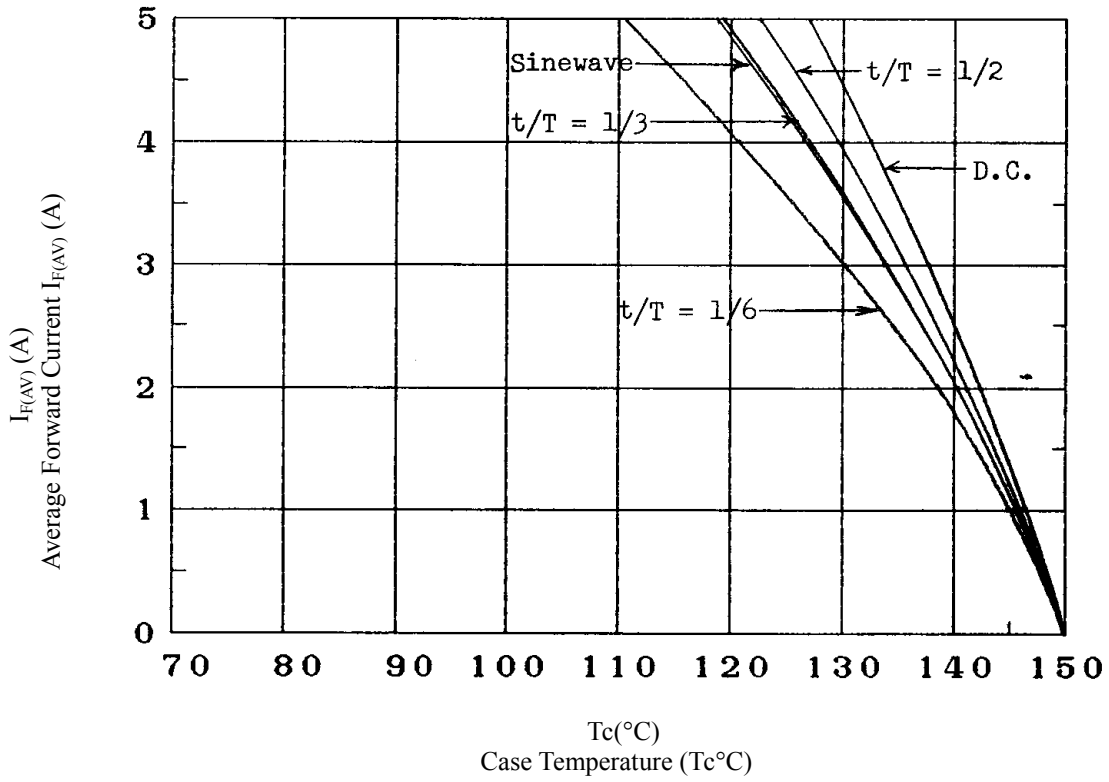
5. Characteristics

$I_{F(AV)}$ - P_F



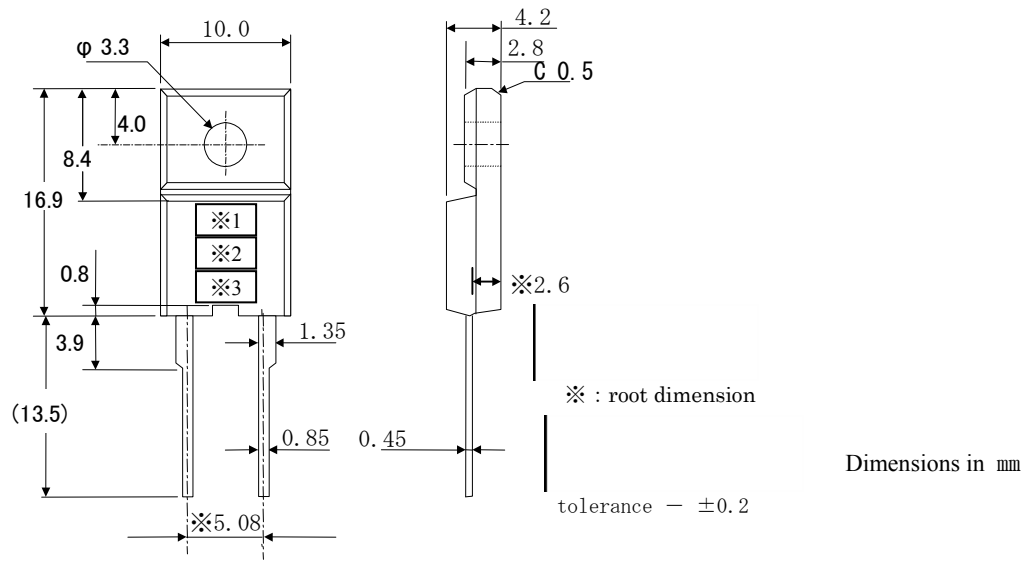
6. Derating

Tc – $I_{F(AV)}$



7. Package information

7-1 Package type, physical dimensions and material



7-2 Appearance

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

7-3 Marking

Type Name	Marking		
	*1 Type Name	*2 Polarity	*3 Lot number
FML-G13S	FMLG13	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. 4831 (Aug. 31, 2004)