

1. Scope

The present specifications shall apply to Sanken silicon diode, FMN-G12S.

2. Outline

Type	Silicon Diode
Structure	Resin Molded Flammability: UL94V-0 (Equivalent)
Applications	Pulse Rectification, etc.

Not Recommended for New Designs

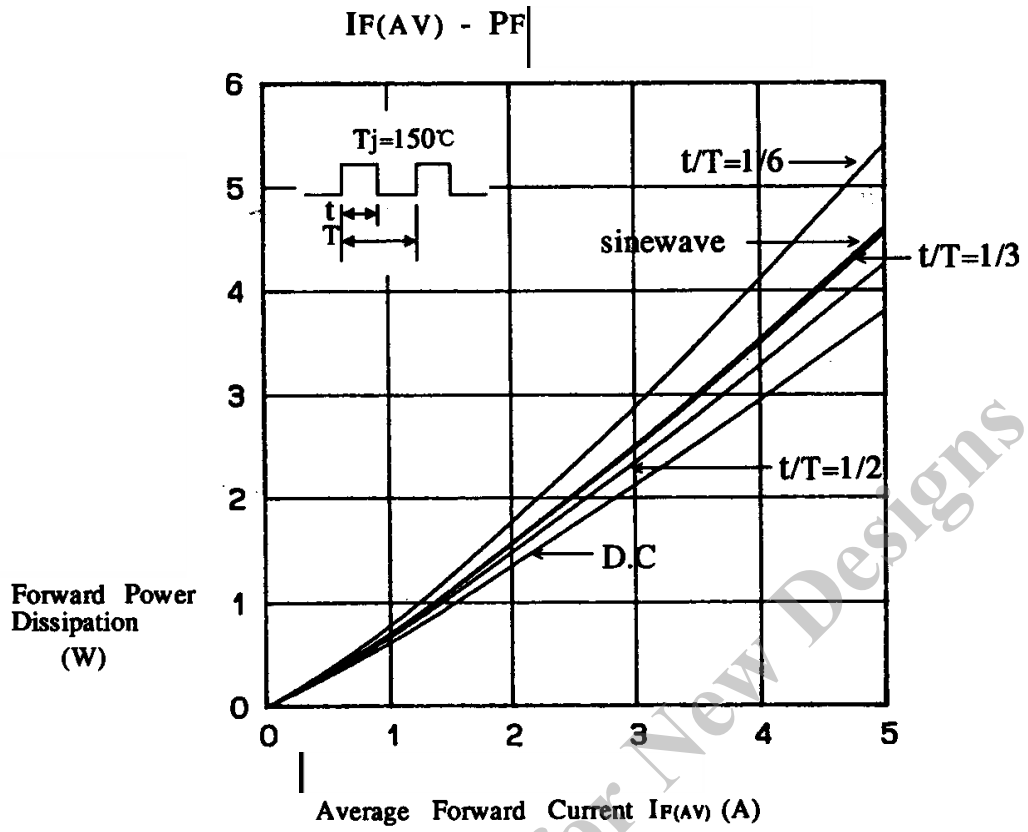
3. Absolute maximum ratings

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	
4	Peak Surge Forward Current	I_{FSM}	A	100	10msec. 10msec. half sinewave, one shot
5	I^2t Limiting Value	I^2t	A^2s	50	
6	Junction Temperature	T_j	$^{\circ}C$	-40~+150	
7	Storage Temperature	T_{stg}	$^{\circ}C$	-40~+150	
8	Screwing Torque		N·m	0.59	
9	Dielectric Strength		kV	A.C. 1.0	Junction and case (1min.)

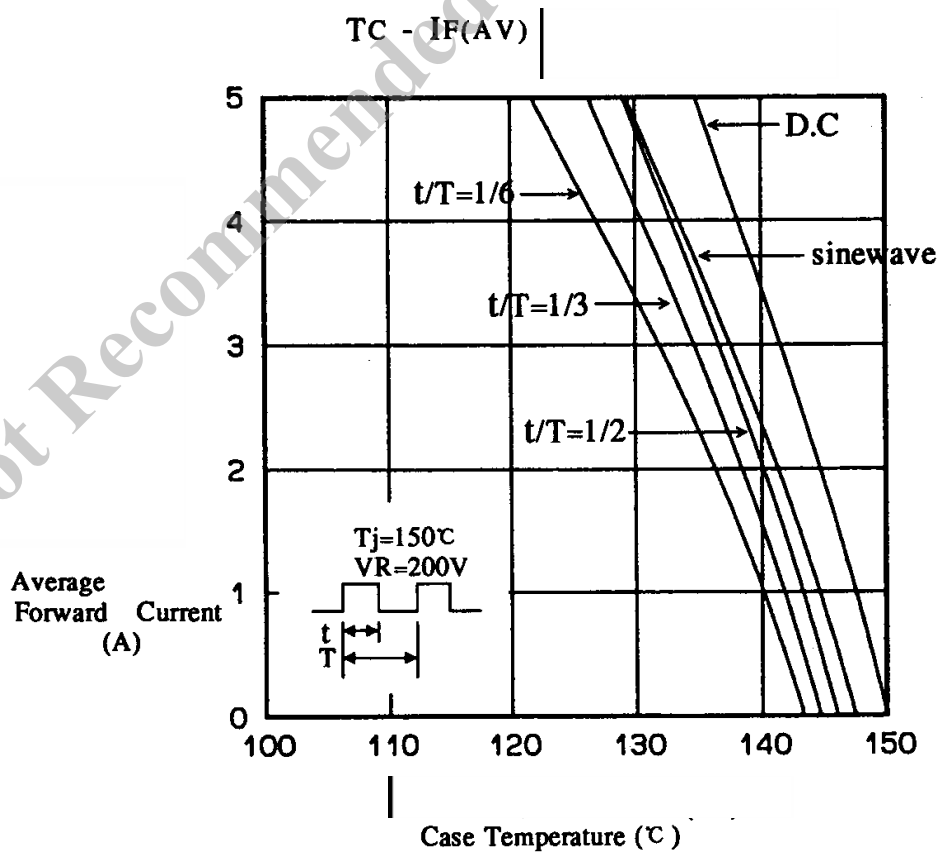
4. Electrical characteristics (Ta=25°C, unless otherwise specified)

No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	0.92 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	$H \cdot I_R$	mA	10 max.	$V_R=V_{RM}$, $T_a=150^{\circ}C$
4	Reverse Recovery Time	trr1	ns	100 max.	$I_F=I_{RP}=100mA$ 90% Recovery point
		trr2	ns	50 max.	$I_F=100mA$, $I_{RP}=200mA$ 75% Recovery point
5	Thermal Resistance	$R_{th(j-c)}$	$^{\circ}C/W$	4.0 max.	Between Junction and case.

5. Characteristics

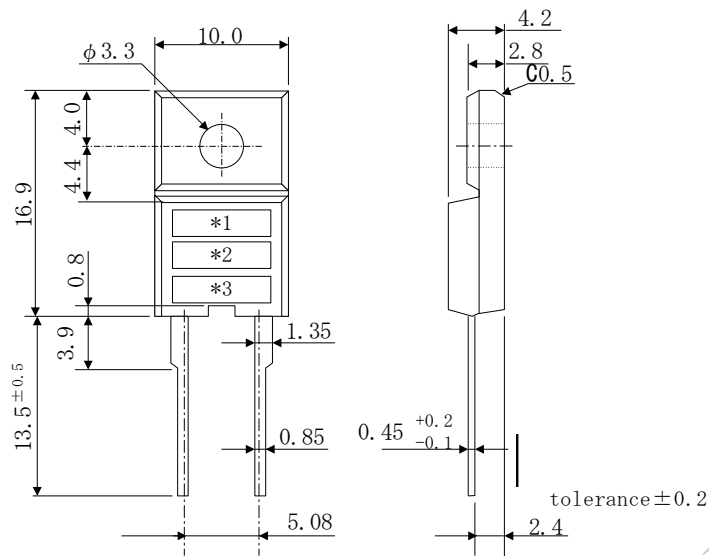


6. Derating



7. Dimensions, Inner Structure and Marking

7-1 Dimensions Refer




Dimensions in mm

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
FMN-G12S	FMNG12	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. : 3225 (Feb.25.2003)