

1 Scope

The present specifications shall apply to Sanken silicon diode FMG-24S/R.

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	400	
2	Peak Reverse Voltage	V_{RM}	V	400	
3	Average Forward Current	$I_{F(AV)}$	A	8	$T_c \leq 80^\circ\text{C}$ Sinewave
4	Peak Surge Forward Current	I_{FSM}	A	65	10 ms. Half sine wave, one
5	I^2t Limiting Value	I^2t	A^2s	21.1	$1 \text{ ms} \leq t \leq 10 \text{ ms}$
6	Junction Temperature	T_j	$^\circ\text{C}$	-40 to +150	
7	Storage Temperature	T_{stg}	$^\circ\text{C}$	-40 to +150	

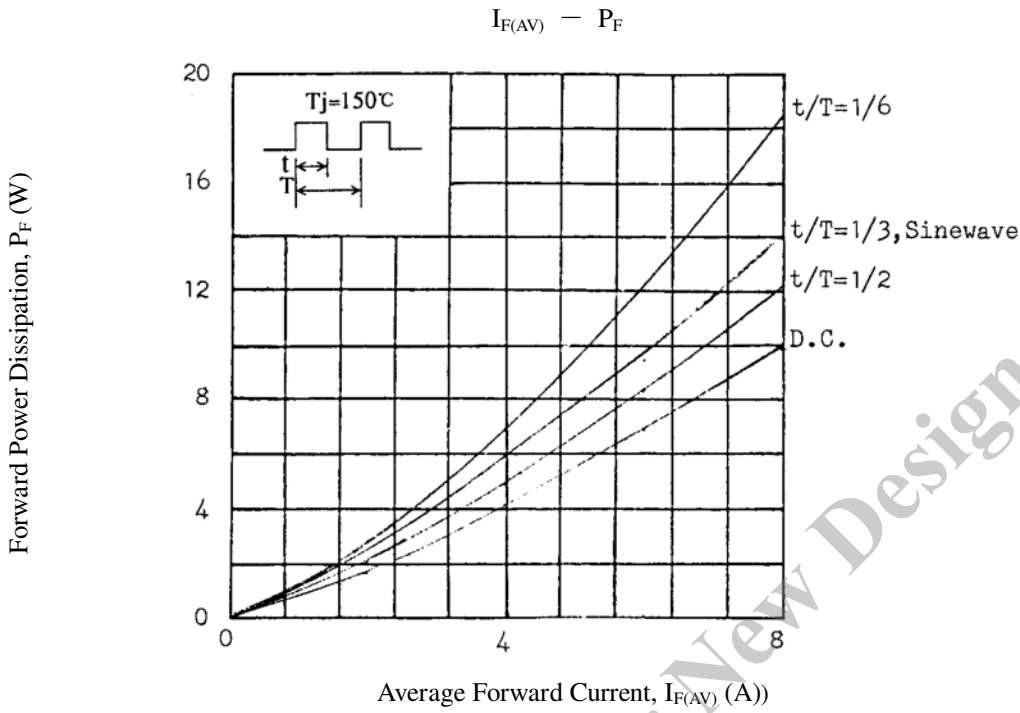
No.1, 2, 4 and 5 show ratings per one chip.

5 Electrical characteristics ($T_a=25^\circ\text{C}$, unless otherwise specified)

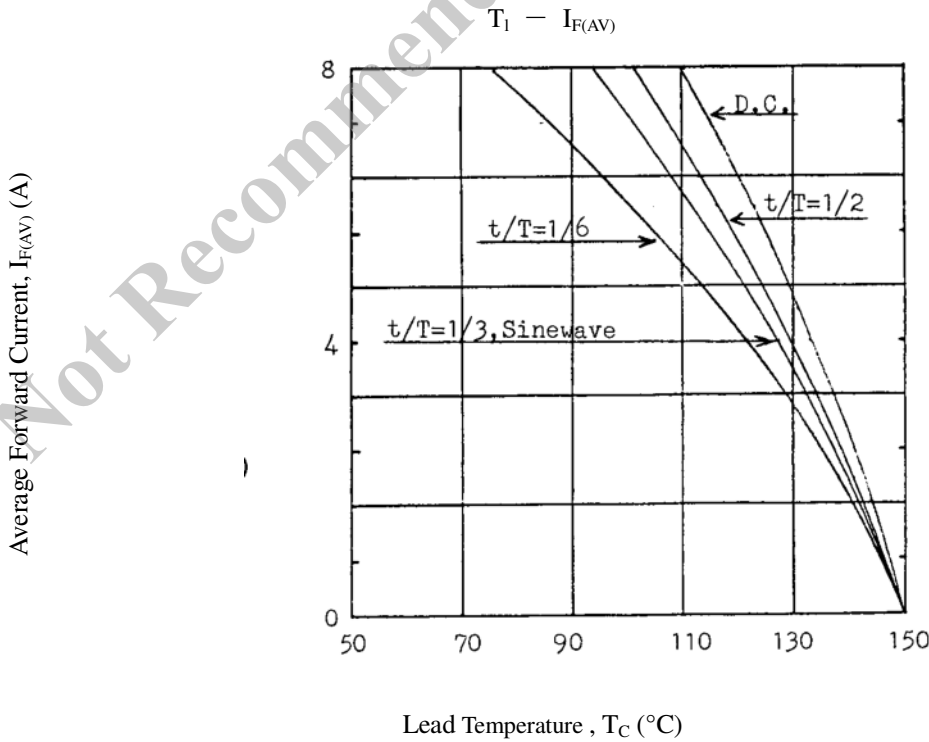
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	2.0 max.	$I_F=5.0\text{A}$
2	Reverse Leakage Current	I_R	mA	0.5 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	2.5 max.	$V_R=V_{RM}$, $T_j=150^\circ\text{C}$
4	Reverse Recovery Time	trr1	ns	100 max.	$I_F=I_{RP}=100\text{mA}$ 90% Recovery point, $T_j=25^\circ\text{C}$
		trr2	ns	50 max.	$I_F=100\text{mA}$, $I_{RP}=200\text{mA}$ 75% Recovery point, $T_j=25^\circ\text{C}$
5	Thermal Resistance	$R_{th(j-c)}$	$^\circ\text{C/W}$	4.0 max.	Between Junction and case

No.1, 2, 3 and 4 show characteristics per one chip.

6 Characteristics

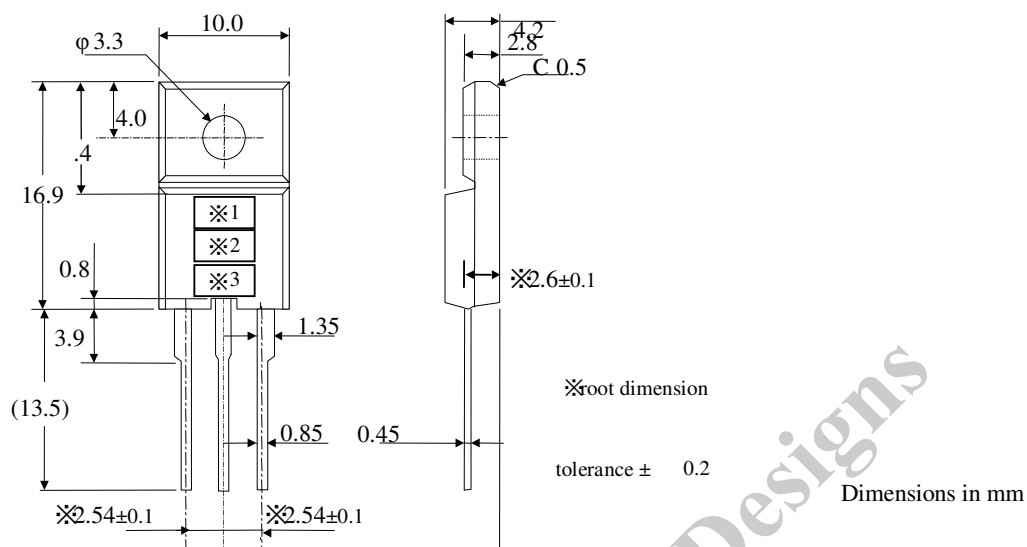


7 Derating



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
FMG-24S	FMG24S		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)
FMG-24R	FMG24R		