

1. Scope

The present specifications shall apply to Sanken silicon diode, FMX-4202S.

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	20	$T_c=95^{\circ}\text{C}$, Sinewave
4	Peak Surge Forward Current	I_{FSM}	A	150	10msec. Half sinewave, one shot
5	I^2t Limiting Value	I^2t	A^2s	112.5	
6	Junction Temperature	T_j	$^{\circ}\text{C}$	-40~+150	
7	Storage Temperature	T_{stg}	$^{\circ}\text{C}$	-40~+150	
8	Screwing Torque		N·m	0.59	
9	Dielectric Strength		kV	A.C 1.0	Between lead and case(1 min.)

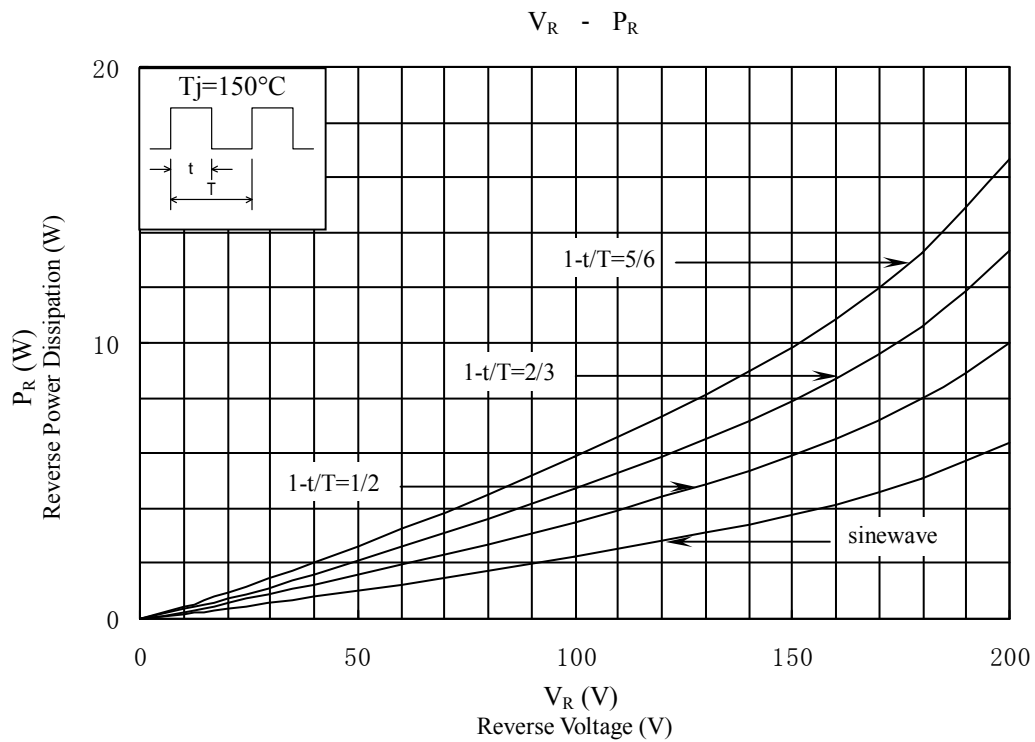
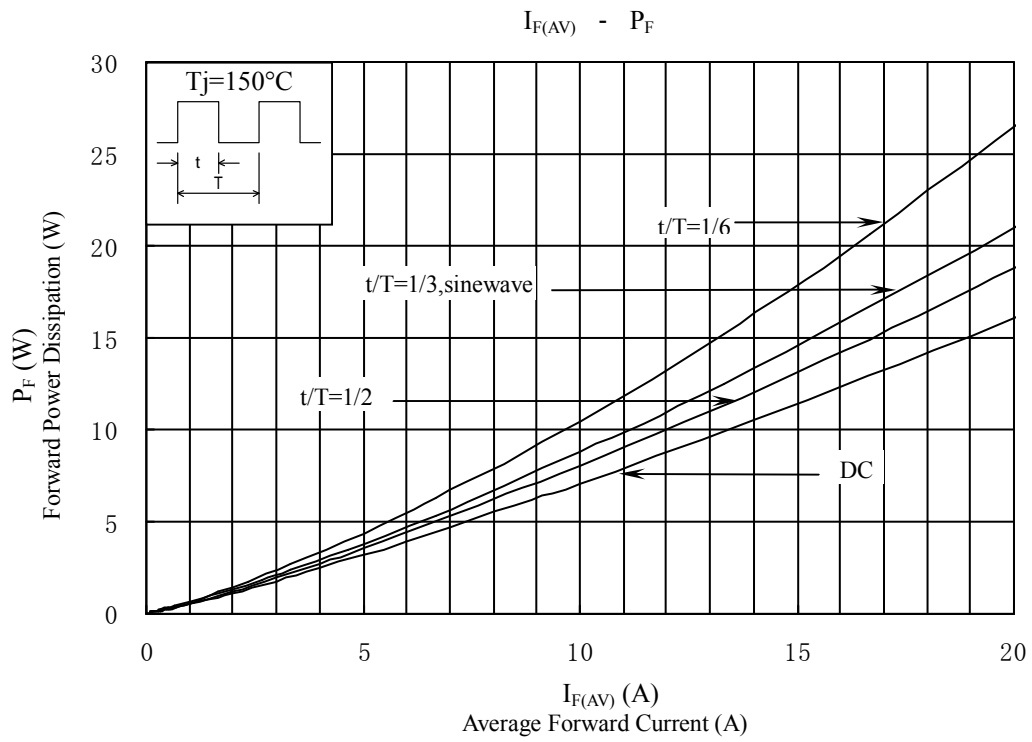
No.1,2,4&5 show ratings per one chip.

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

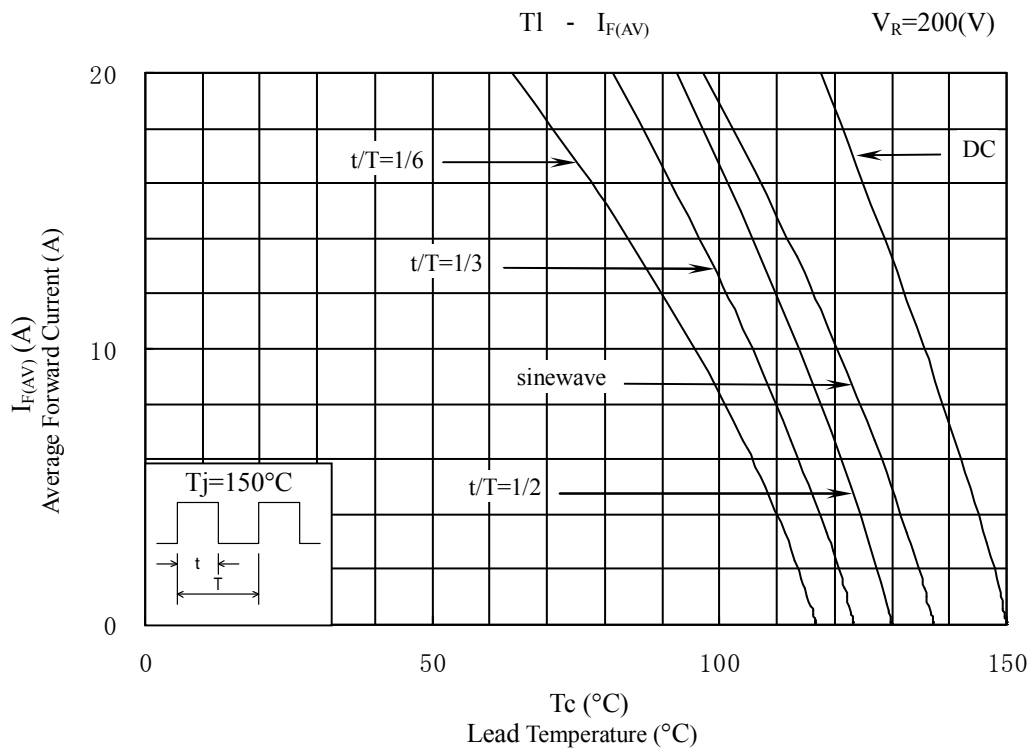
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	0.98 max.	$I_F=10\text{A}$
2	Reverse Leakage Current	I_R	μA	200 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	50 max.	$V_R=V_{RM}$, $T_j=150^{\circ}\text{C}$
4	Reverse Recovery Time	trr1	ns	30 max.	$I_F=I_{RP}=500\text{mA}$, $T_j=25^{\circ}\text{C}$ 90% Recovery point
		trr2	ns	25 max.	$I_F=500\text{mA}$, $I_{RP}=1\text{A}$, $T_j=25^{\circ}\text{C}$, 75% Recovery point
5	Thermal Resistance	$R_{th(j-c)}$	$^{\circ}\text{C}/\text{W}$	2.0 max.	Between Junction and case

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

6. Characteristics

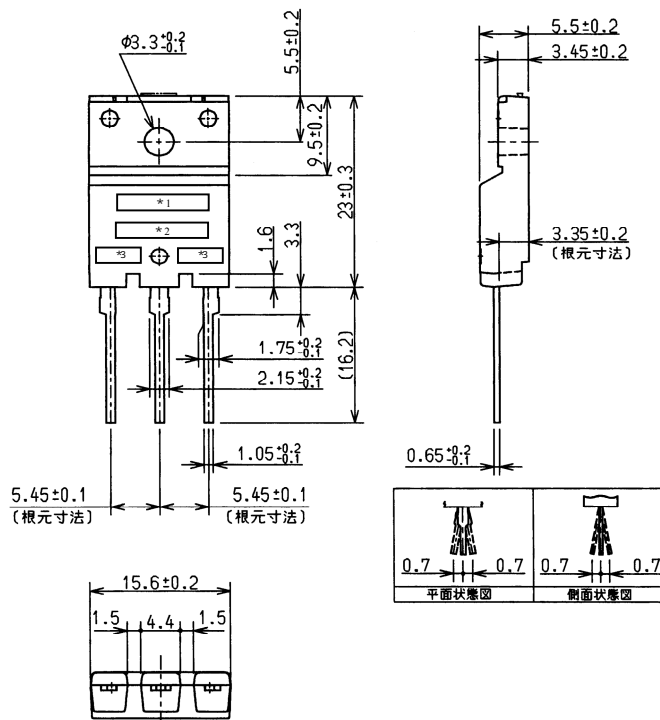


7. Derating



8. Package information

8-1 Package type, physical dimensions and material



Dimensions in mm

8-2 Appearance

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

8-3 Marking

Type Name	Marking		
	*1 Type Name	*2 Polarity	*3 Lot number
FMX-4202S	X4202S		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.6N14 (Nov. 14, 2006)