

1. Scope

The present specifications shall apply to Sanken silicon diode, FMX-2203.

2. Outline

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

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	20	Rrfer to Derating curve
4	Peak Surge Forward Current	I_{FSM}	A	100	10msec. Half sinewave, one shot
5	I^2t Limiting Value	I^2t	A^2s	50	$1ms \leq t \leq 10ms$
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 (1 min.)

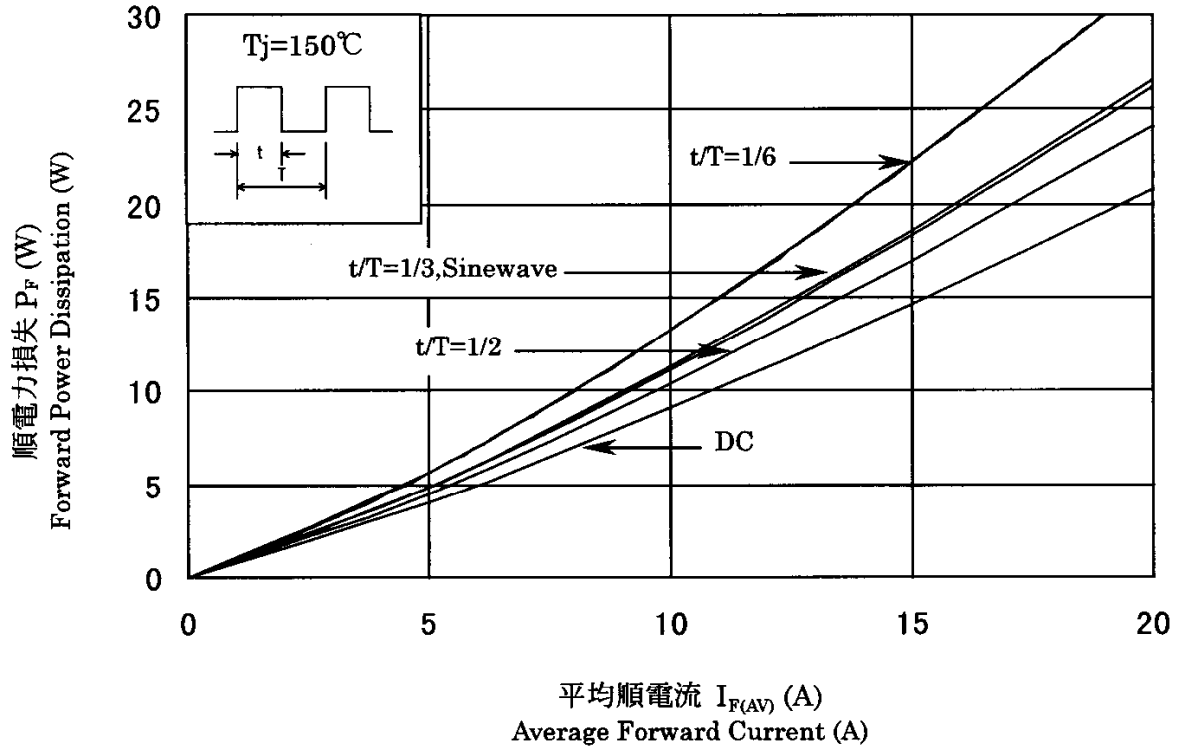
4. Electrical characteristics ($T_a=25$, unless otherwise specified)

No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	1.30 max.	$I_F=10A$
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	30 max.	$V_R=V_{RM}, T_j=150^{\circ}C$
4	Thermal Resistance	trr1	ns	30 max.	$I_F=I_{RP}=500mA,$ 90% Recovery point, $T_j=25^{\circ}C$
		trr2	ns	25 max.	$I_F=0.5A, I_{RP}=1A,$ 75% Recovery point, $T_j=25^{\circ}C$
5	Thermal Resistance	$R_{th(j-c)}$	$^{\circ}C/W$	4.0 max.	Between junction and case

5. Characteristics

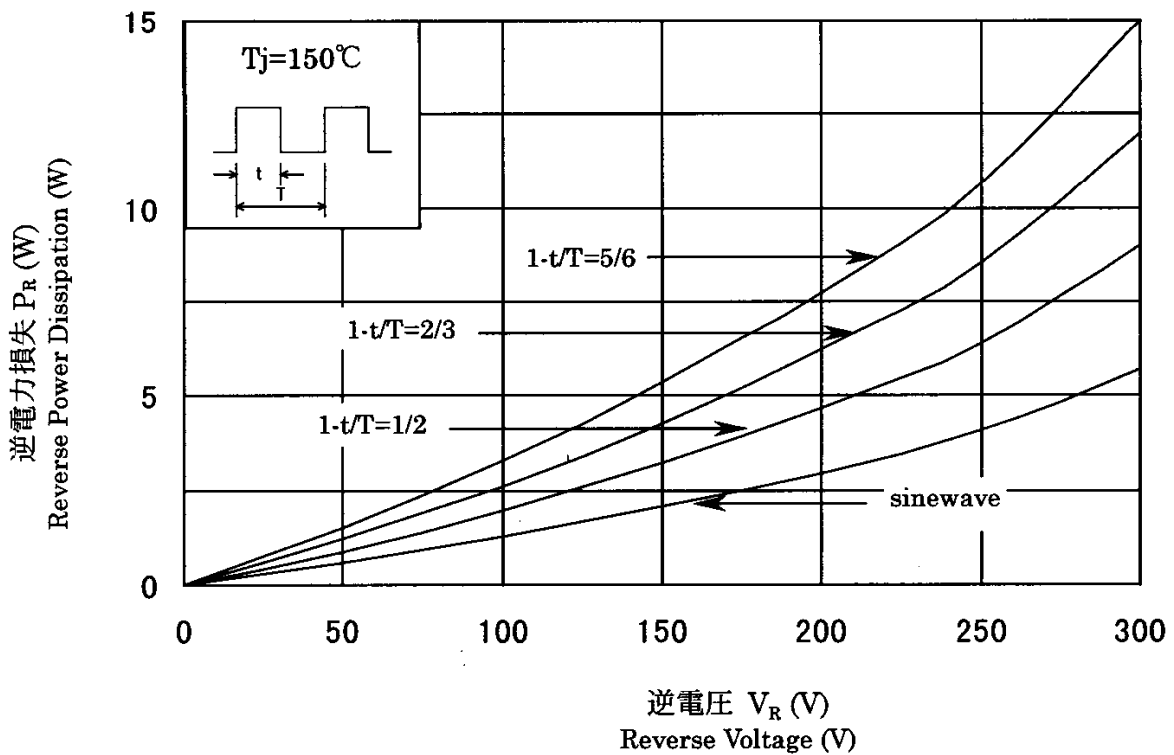
平均順電流—順電力損失

$$I_{F(AV)} - P_F$$

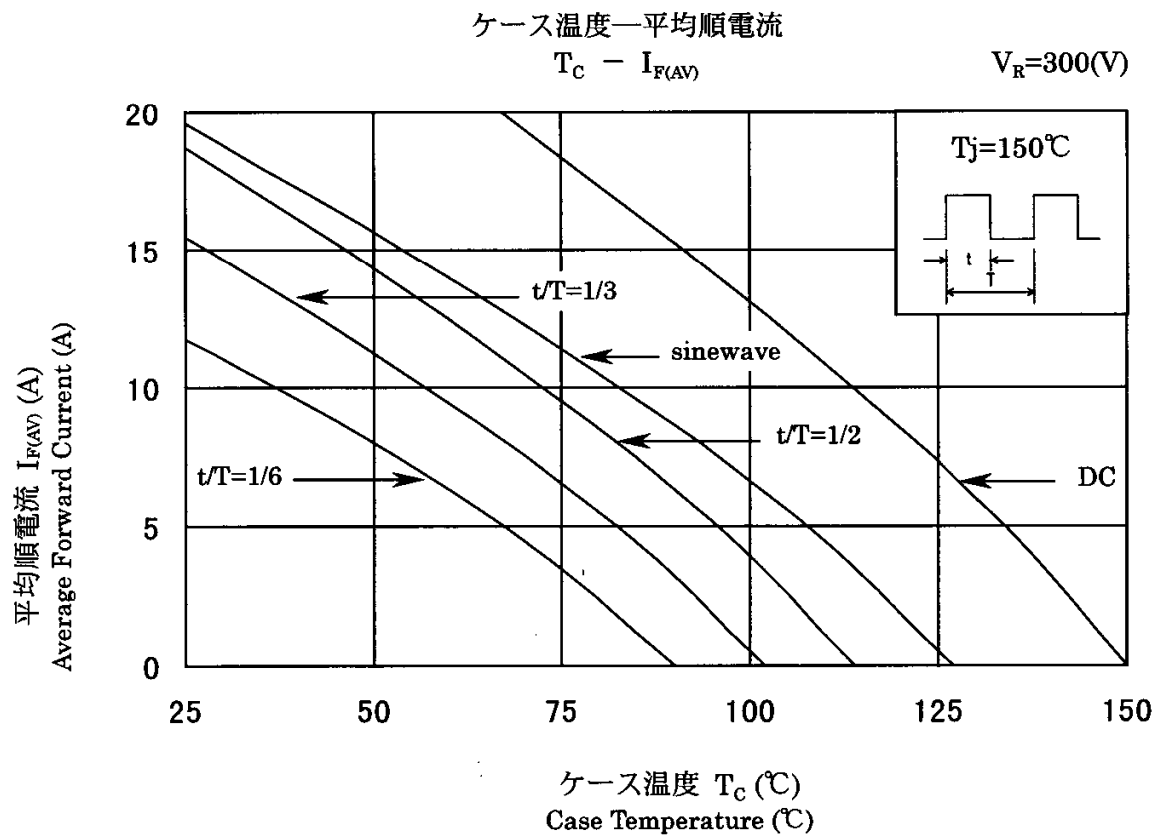
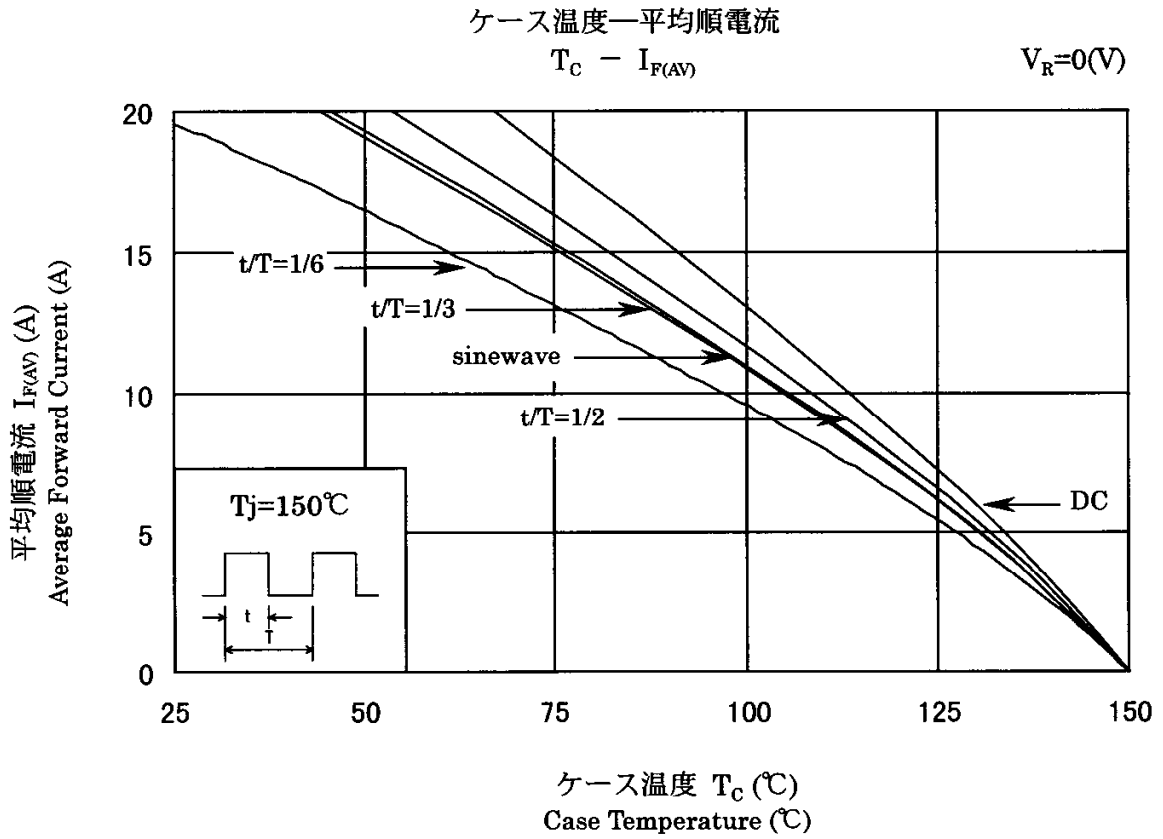


逆電圧—逆電力損失

$$V_R - P_R$$

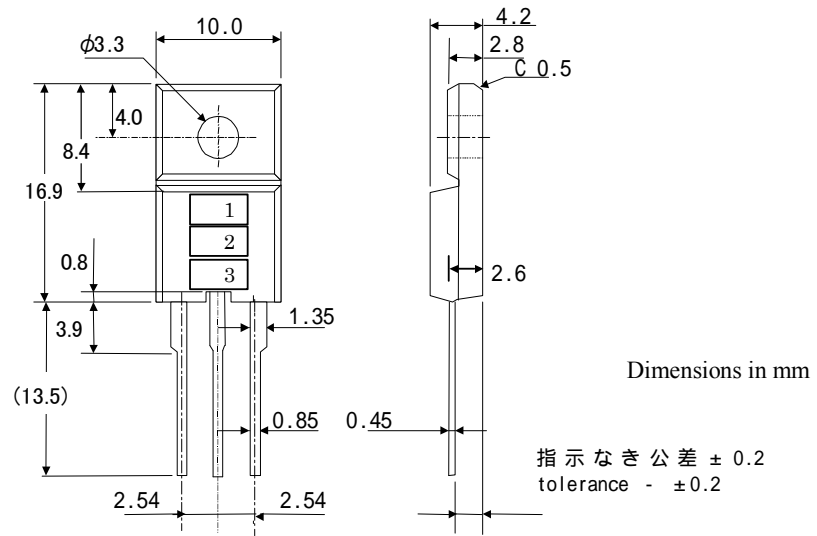


6. Derating Curve



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
FMX-2203	X2203		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. 3O29 (Oct. 29, 2003)