

1 Scope

The present specifications shall apply to Sanken silicon diode, FMJ-2303.

2 Outline

Type	Silicon Schottky Barrier 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	30	
2	Peak Reverse Voltage	V_{RM}	V	30	
3	Average Forward Current	$I_{F(AV)}$	A	30	Refer to derating curve in Section 6
4	Peak Surge Forward Current	I_{FSM}	A	150	10ms. Half sine wave, one shot
5	I^2t Limiting Value	I^2t	A^2s	112.5	
6	Junction Temperature	T_j	$^{\circ}C$	-40 to +150	
7	Storage Temperature	T_{stg}	$^{\circ}C$	-40 to +150	
8	Dielectric Strength		kV	A.C. 1.0	Junction to case (1minute)

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

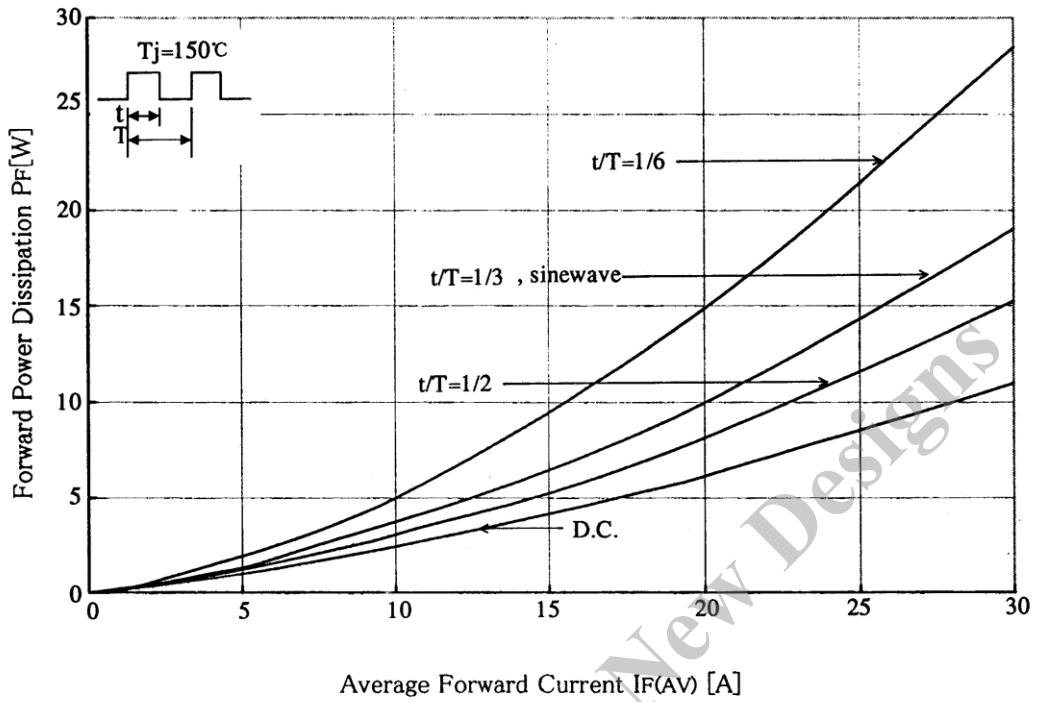
4 Electrical characteristics ($T_a=25^{\circ}C$, unless otherwise specified)

No.	Item	Symbol	Unit	Rating	Conditions
1	Forward Voltage Drop	V_F	V	0.48 max.	$I_F=15A$
2	Reverse Leakage Current	I_R	mA	15 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	500 max.	$V_R=V_{RM}, T_j=150^{\circ}C$
4	Thermal Resistance	$R_{th(j-c)}$	$^{\circ}C/W$	4.0 max.	Between Junction and case

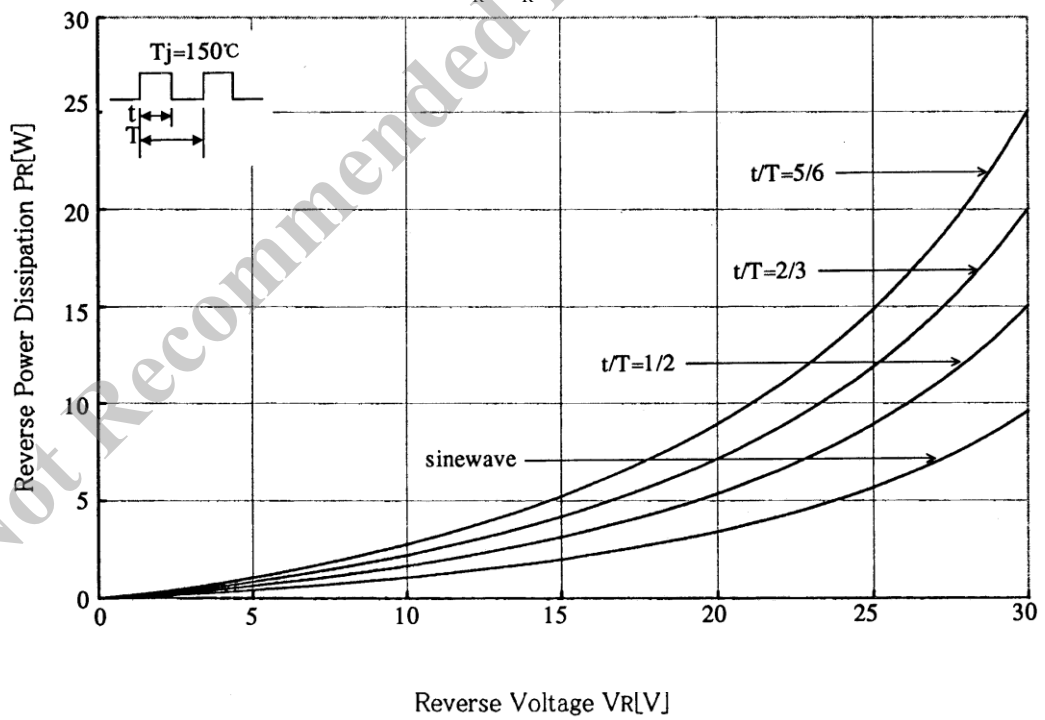
No.1, 2, and 3 show characteristics per one chip.

5 Characteristics

$P_F - I_{F(AV)}$

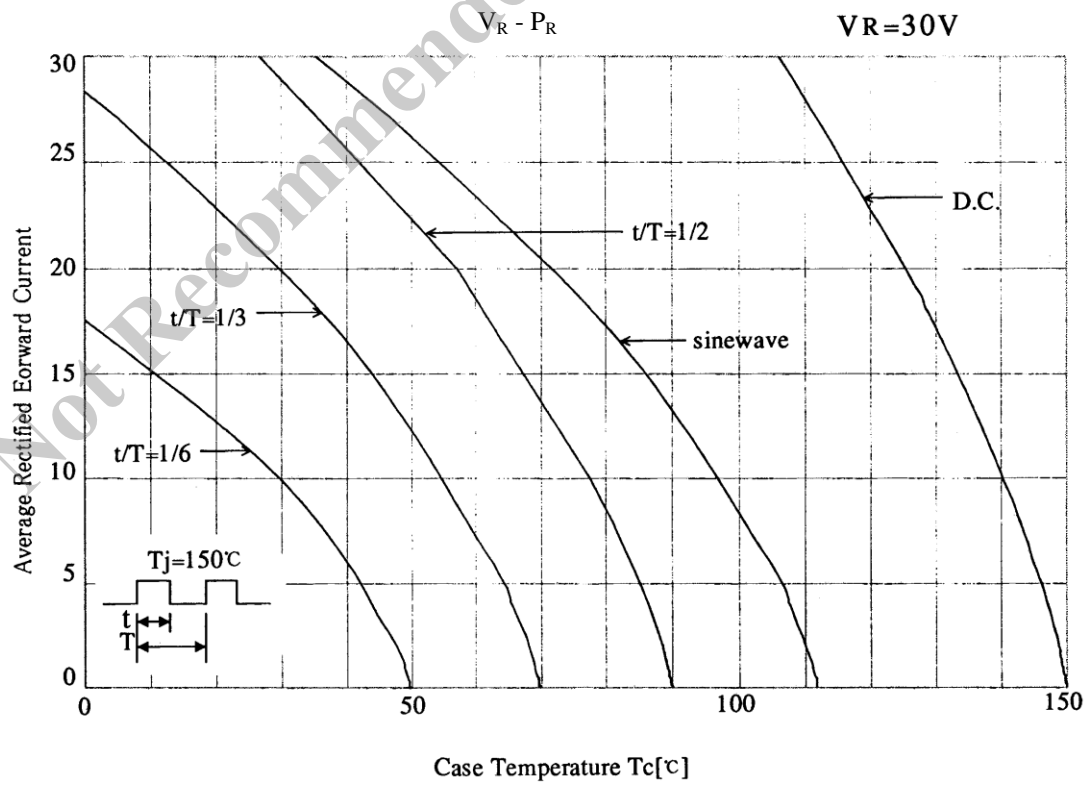
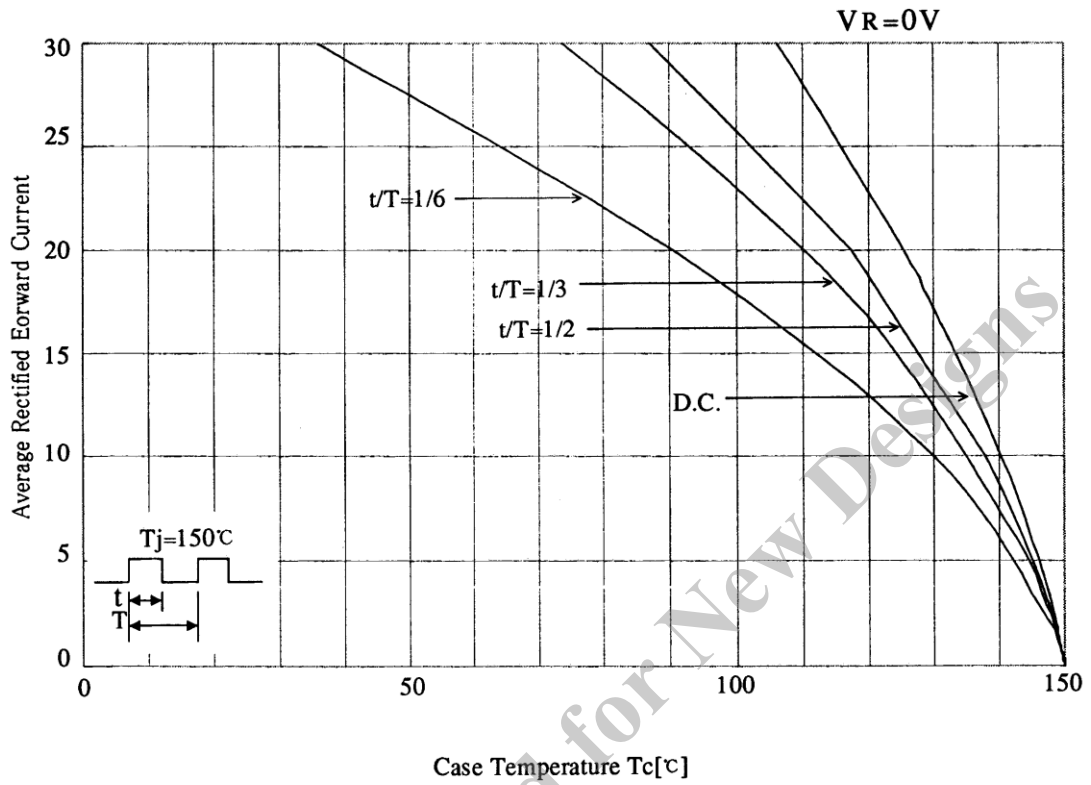


$V_R - P_R$



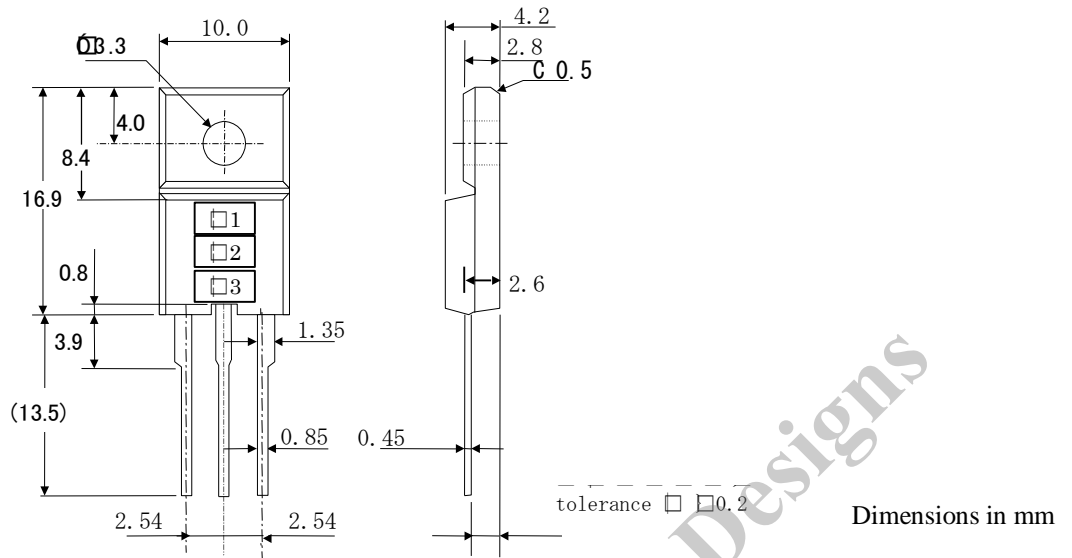
6 Derating

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



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 is type name	*2 is polarity	*3 is lot number
FMJ-2303	J2303		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.4909 (Sept. 9, 2004)