

1 Scope

The present specifications shall apply to FMN-4306S.

2 Outline

High Frequency Rectification

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	600	
2	Peak Reverse Voltage	V_{RM}	V	600	
3	Average Forward Current	$I_{F(AV)}$	A	30	Refer to derating curve in Section 7
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	$1\text{ ms} \leq t \leq 10\text{ ms}$
6	Junction Temperature	T_j	°C	-40 to +150	
7	Storage Temperature	T_{stg}	°C	-40 to +150	

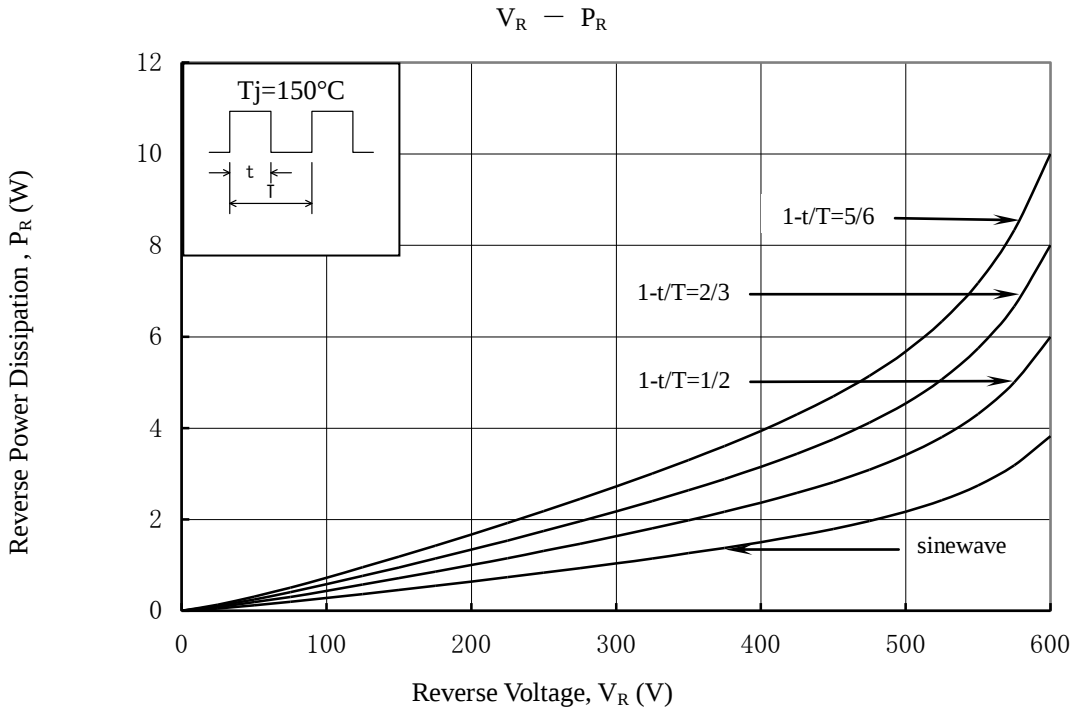
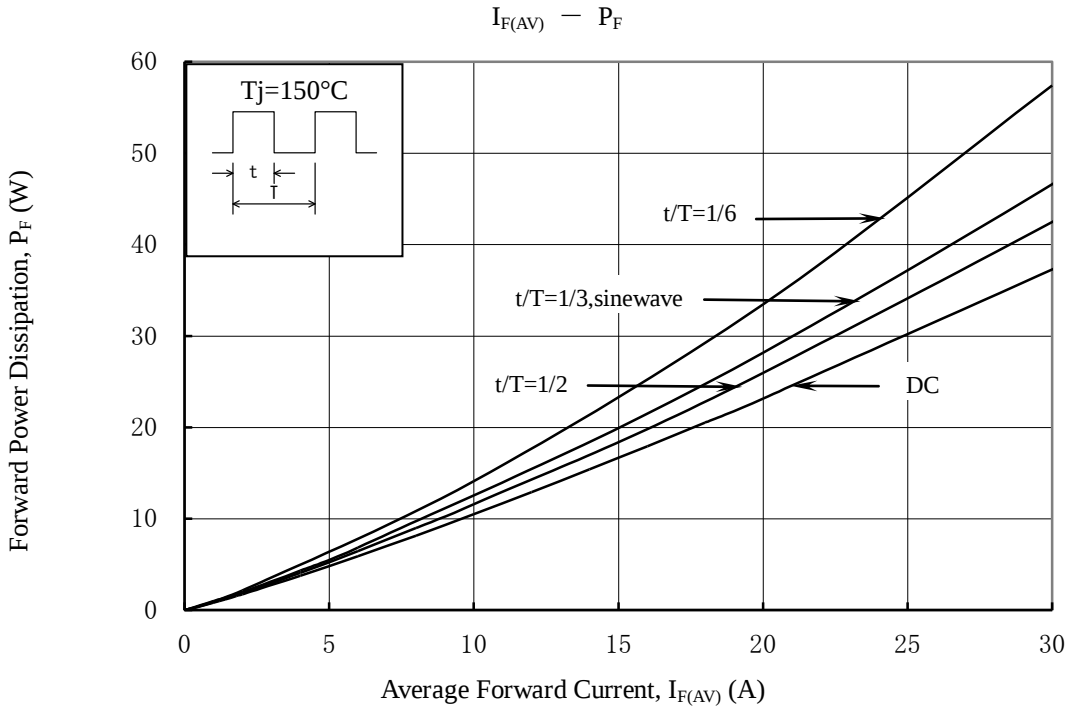
No.1, 2, 4 and 5 show ratings per one chip.

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

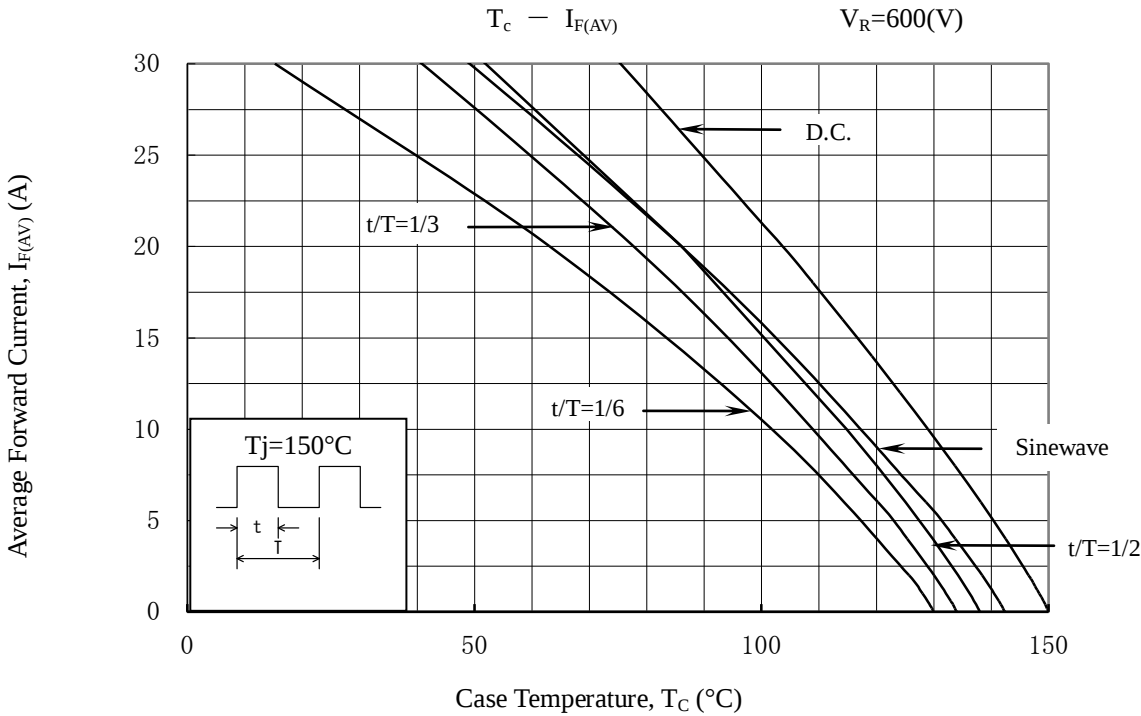
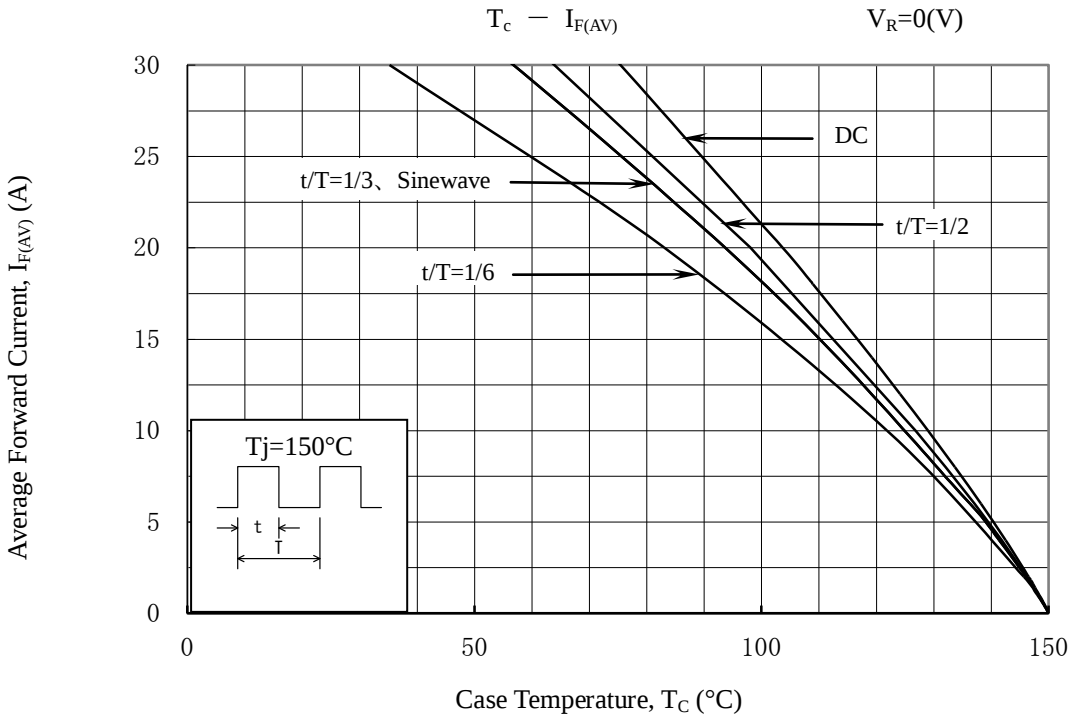
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	1.3 max.	$I_F=15\text{A}$
2	Reverse Leakage Current	I_R	μA	100 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	10 max.	$V_R=V_{RM}$, $T_j=150^\circ\text{C}$
4	Reverse Recovery Time	T_{rr1}	ns	100 max	$I_F=I_{RP}=100\text{mA}$ 90% Recovery point, $T_j=25^\circ\text{C}$
		T_{rr2}	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	$R_{th(j-c)}$	°C /W	2.0 max.	Between Junction and case

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

6 Characteristics

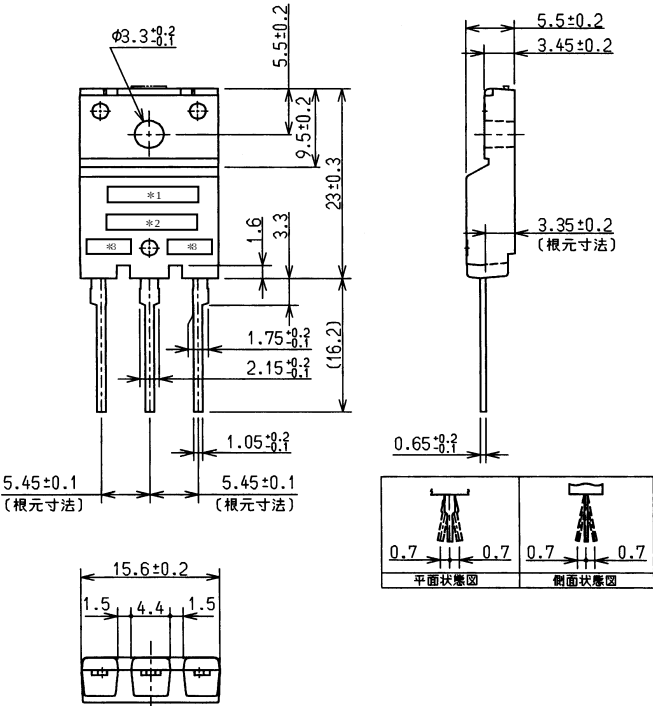


7 Derating



8 Package information

8-1 Package type, physical dimensions and material



tolerance — ± 0.2 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 is type name	*2 is polarity	*3 is lot number
FMN-4306S	N4306S		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)