



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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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	$^{\circ}C$	-40 to +150	
7	Storage Temperature	T_{stg}	$^{\circ}C$	-40 to +150	

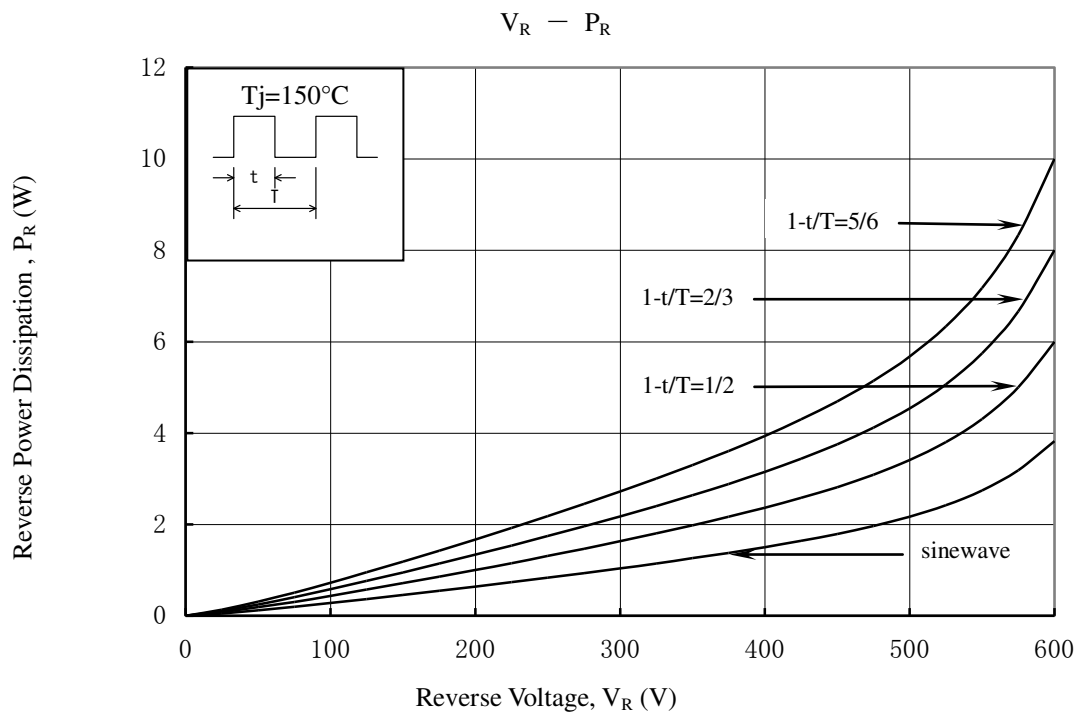
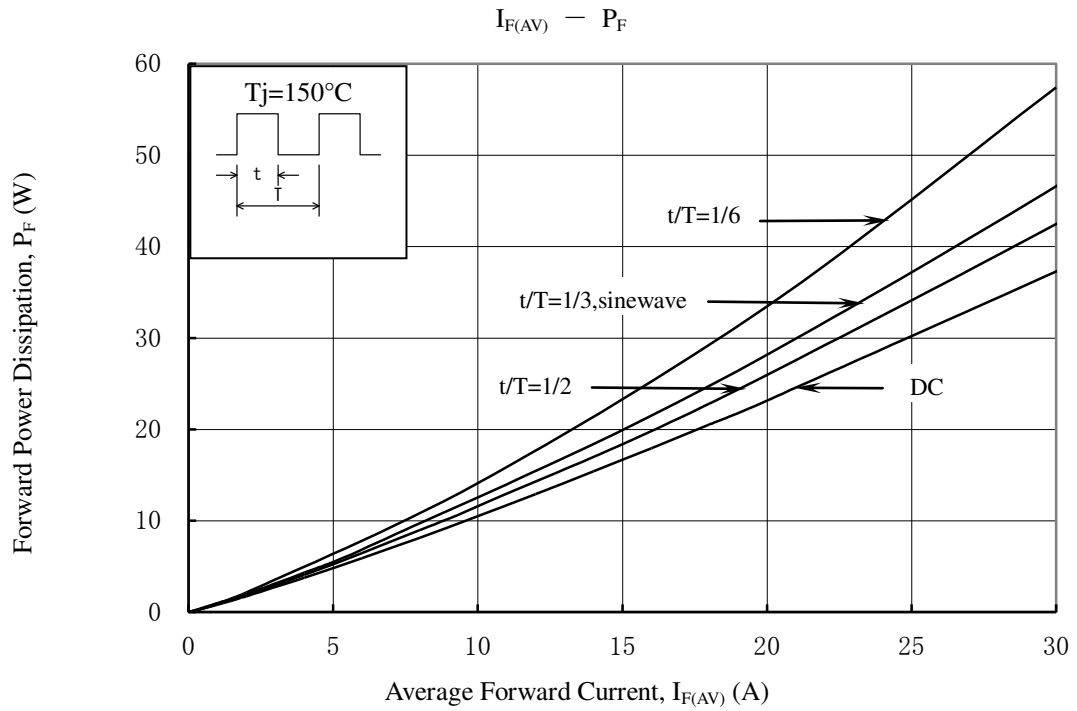
No.1, 2, 4 and 5 show ratings per one chip.

5 Electrical characteristics (Ta=25°C, unless otherwise specified)

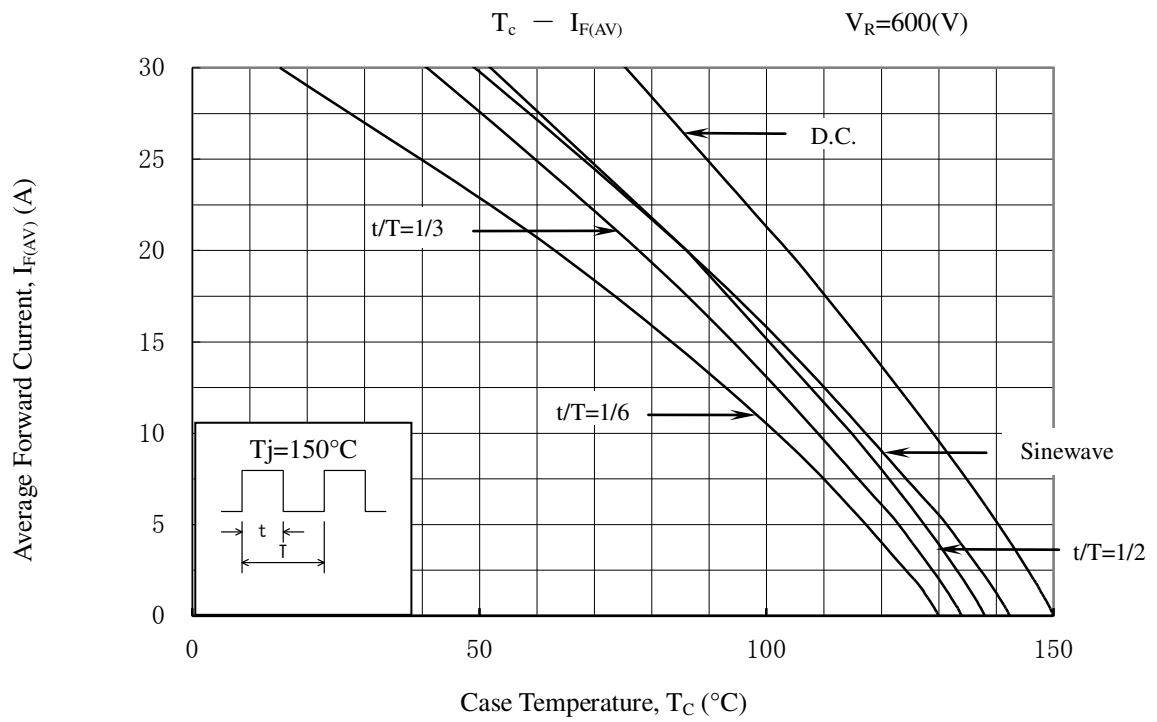
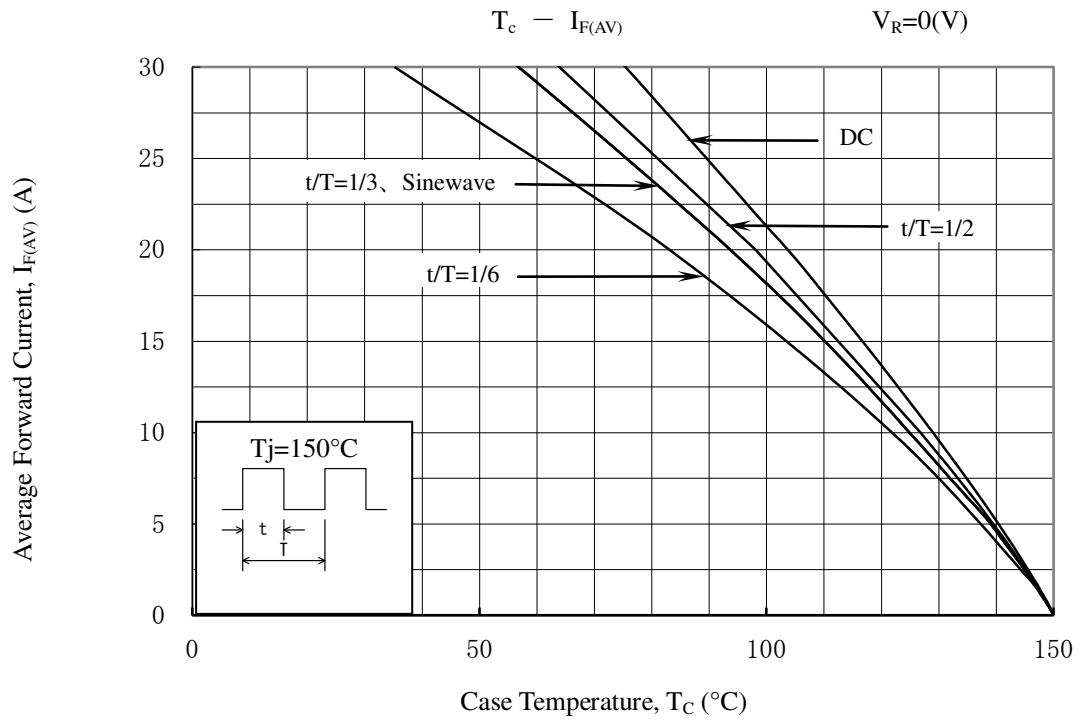
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	1.3 max.	$I_F=15A$
2	Reverse Leakage Current	I_R	μA	100 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	10 max.	$V_R=V_{RM}, T_j=150^{\circ}C$
4	Reverse Recovery Time	T_{rr1}	ns	100 max	$I_F=I_{RP}=100mA$ 90% Recovery point, $T_j=25^{\circ}C$
		T_{rr2}	ns	50 max	$I_F=100mA, I_{RP}=200mA$ 75% Recovery point, $T_j=25^{\circ}C$
5	Thermal Resistance	$R_{th(j-c)}$	$^{\circ}C/W$	2.0 max.	Between Junction and case

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

6 Characteristics

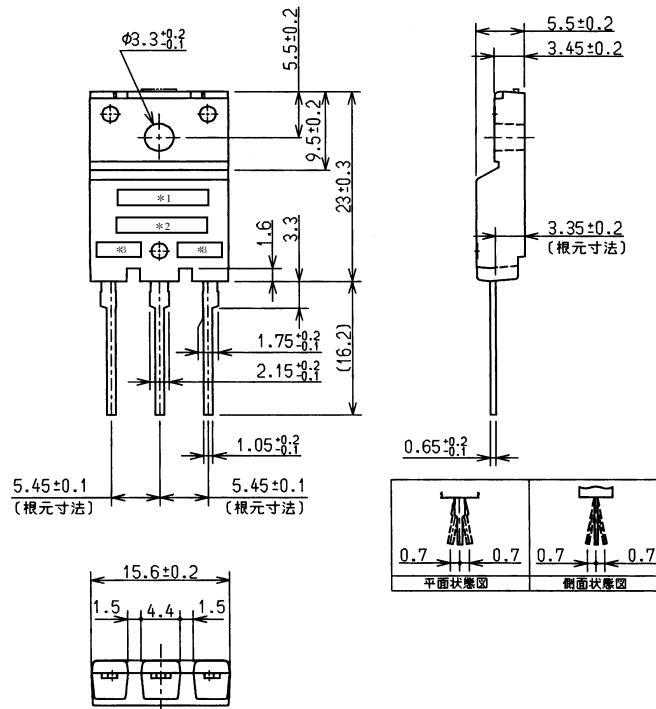


7 Derating



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)