

1 Scope

The present specifications shall apply to an FMU-12S/R.

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	250	
2	Peak Reverse Voltage	V_{RM}	V	200	
3	Average Forward Current	$I_{F(AV)}$	A	5.0	Refer to derating curve in Section 7
4	Peak Surge Forward Current	I_{FSM}	A	30	10 ms. Half sine wave, one shot
5	I^2t Limiting Value	I^2t	A^2s	4.5	$1\text{ ms} \leq t \leq 10\text{ ms}$
6	Junction Temperature	T_j	$^{\circ}C$	-40 to +150	
7	Storage Temperature	T_{stg}	$^{\circ}C$	-40 to +150	

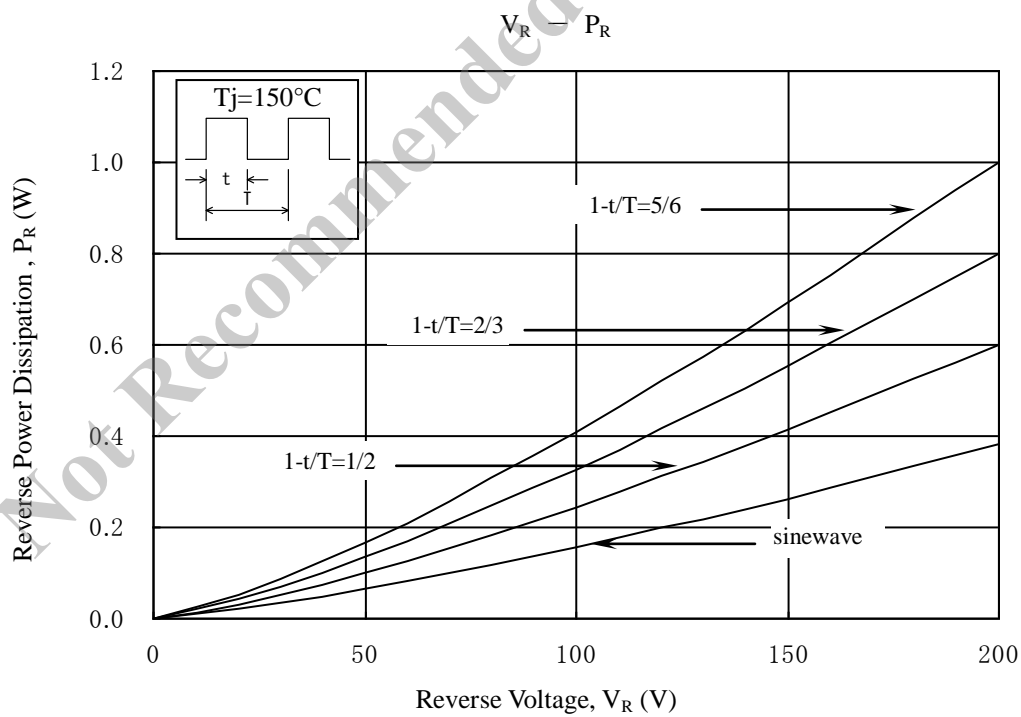
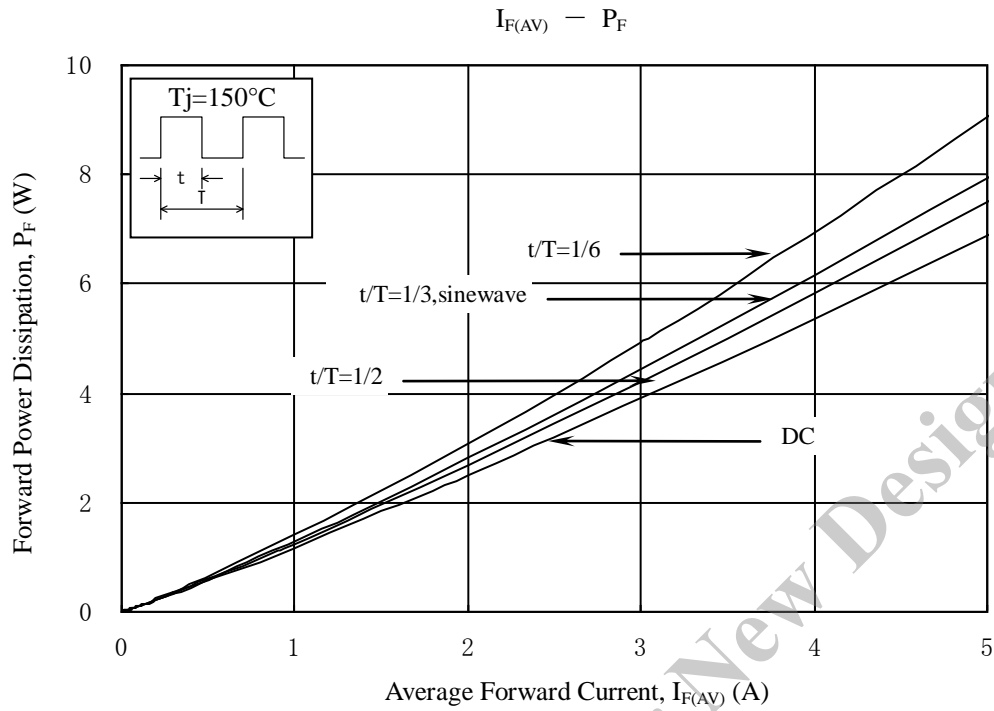
No.1, 2, 4 and 5 show ratings per one chip.

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

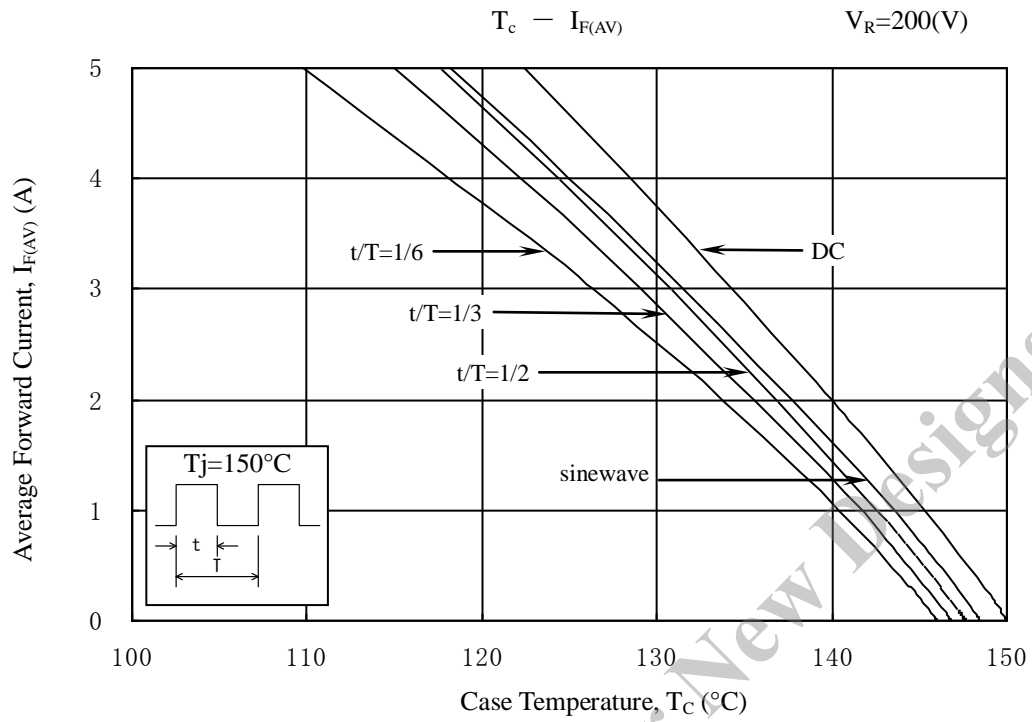
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	1.5 max.	$I_F=2.5A$
2	Reverse Leakage Current	I_R	μA	50 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μA	500 max.	$V_R=V_{RM}, T_j=150^{\circ}C$
4	Reverse Recovery Time	t_{rr1}	ns	400 max.	$I_F=I_{RP}=100mA$ 90% Recovery point, $T_j=25^{\circ}C$
		t_{rr2}	ns	180 max.	$I_F=100mA, I_{RP}=200mA$ 75% Recovery point, $T_j=25^{\circ}C$
5	Thermal Resistance	$R_{th(j-c)}$	$^{\circ}C/W$	4.0 max.	Between Junction and case

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

6 Characteristics



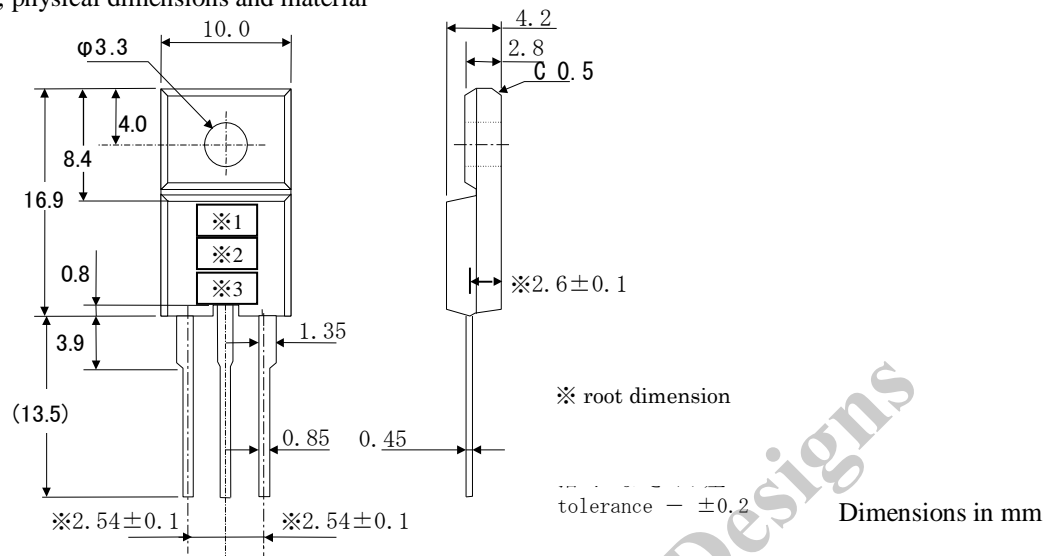
7 Derating



Not Recommended for New Designs

8 Package information

8-1 Package type, physical dimensions and material



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
FMU-12S	FMU12S		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)
FMU-12R	FMU12R		