



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 an FML-4202S.

## 2. Outline

|              |                              |
|--------------|------------------------------|
| Type         | Silicon Diode                |
| Structure    | Resin Molded                 |
| Applications | High Frequency Rectification |

## 3. Flammability

UL94V-0(Equivalent)

## 4. Absolute maximum ratings

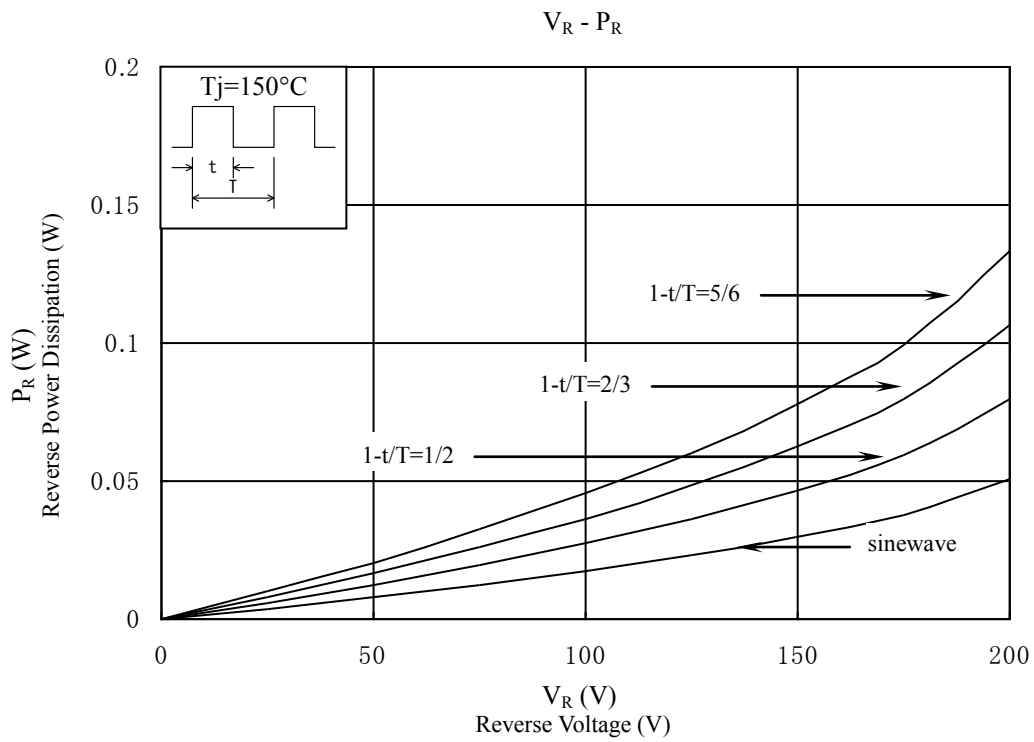
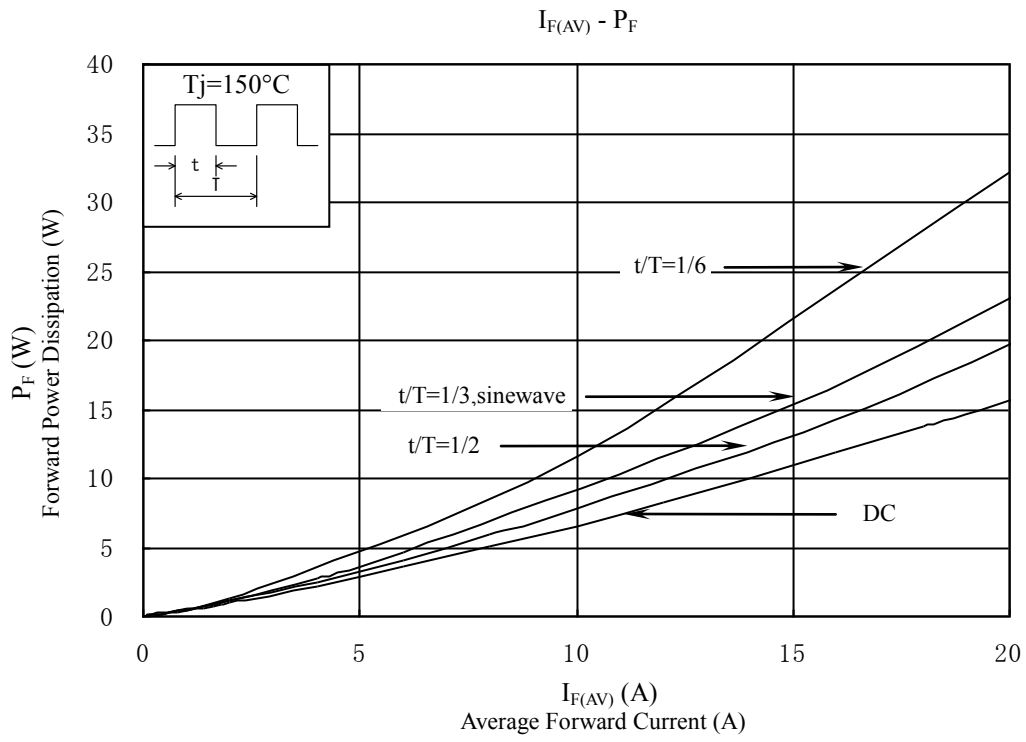
| No. | Item                           | Symbol      | Unit        | Rating   | Conditions                         |
|-----|--------------------------------|-------------|-------------|----------|------------------------------------|
| 1   | Transient Peak Reverse Voltage | $V_{RSM}$   | V           | 200      |                                    |
| 2   | Peak Reverse Voltage           | $V_{RM}$    | V           | 200      |                                    |
| 3   | Average Forward Current        | $I_{F(AV)}$ | A           | 20       | Refer to Derating of 7             |
| 4   | Peak Surge Forward Current     | $I_{FSM}$   | A           | 150      | 10msec.<br>Half sinewave, one shot |
| 5   | $I^2t$ Limiting Value          | $I^2t$      | $A^2s$      | 112.5    | $1msec \leq t \leq 10msec$         |
| 6   | Junction Temperature           | $T_j$       | $^{\circ}C$ | -40~+150 |                                    |
| 7   | Storage Temperature            | $T_{stg}$   | $^{\circ}C$ | -40~+150 |                                    |

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

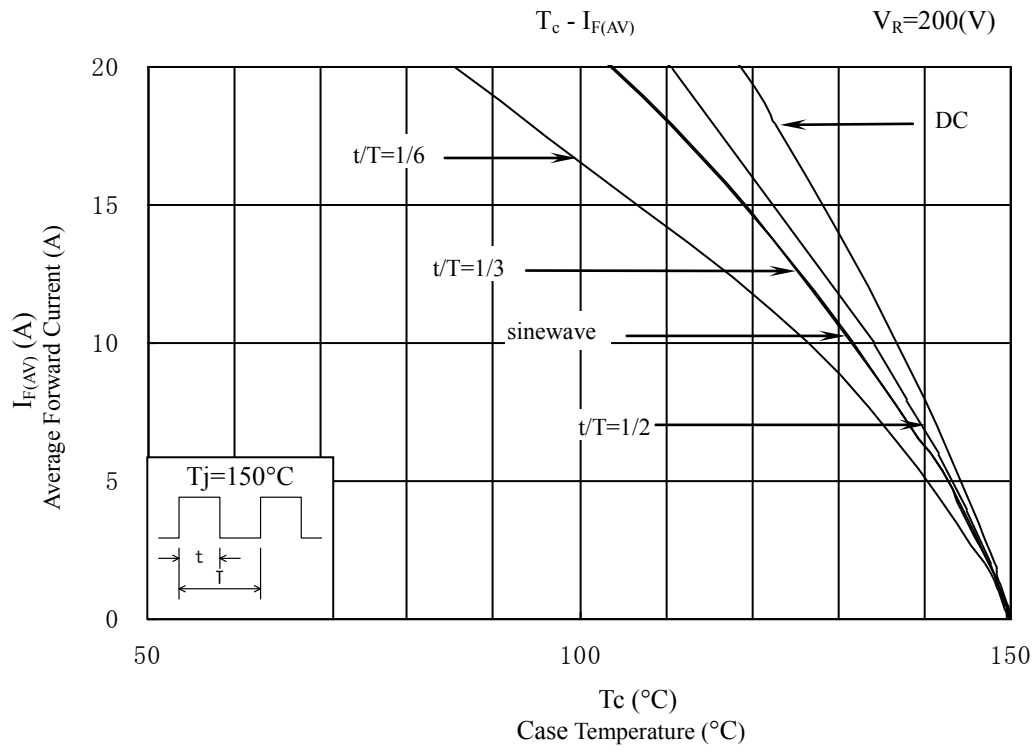
| No. | Item   | Symbol        | Unit          | Value     | Conditions  |
|-----|--|---------------|---------------|-----------|---|
| 1   | Forward Voltage Drop                           | $V_F$         | V             | 0.98 max. | $I_F=10A$   |
| 2   | Reverse Leakage Current                        | $I_R$         | $\mu A$       | 10 max.   | $V_R=V_{RM}$  |
| 3   | Reverse Leakage Current Under High Temperature | $H \cdot I_R$ | $\mu A$       | 400 max.  | $V_R=V_{RM}, T_j=150^{\circ}C$                                    |
| 4   | Reverse Recovery Time                          | trr1          | ns            | 40 max.   | $I_F=I_{RP}=500mA$<br>90% Recovery point, $T_j=25^{\circ}C$       |
|     |  | trr2          | ns            | 30 max.   | $I_F=500mA, I_{RP}=1.0A$<br>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&4 show characteristics per one chip.

6. Characteristics

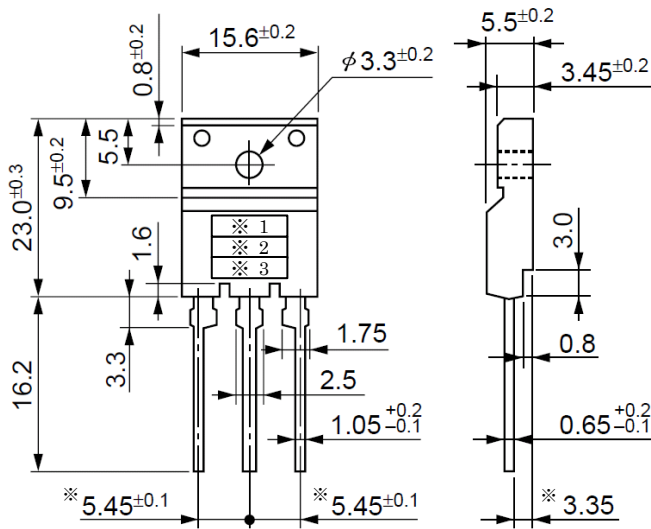


7. Derating



8. Package information

8-1 Package type, physical dimensions and material



※ : root dimension

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<br>Type Name | *2<br>Polarity | *3<br>Lot number  |
| FML-4202S | L4202S          |                | 1st letter: Last digit of year<br>2nd letter: Month From 1 to 9 for Jan. to Sep.,<br>O for Oct., N for Nov., D for Dec.<br>3rd & 4th letter: Day<br>ex. 4521 (May.21, 2004) |