

1. Scope

The present specifications shall apply to an FML-22S.

2. Outline

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

3. Flammability

UL94V-0(Equivalent)

Not Recommended for New Designs

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 | 10 | Refer to Derating of 7 |
| 4 | Peak Surge Forward Current | I_{FSM} | A | 65 | 10msec. Half sinewave, one shot |
| 5 | I^2t Limiting Value | I^2t | A^2s | 21 | $1\text{msec} \leq t \leq 10\text{msec}$ |
| 6 | Junction Temperature | T_j | $^{\circ}C$ | -40~+150 | |
| 7 | Storage Temperature | T_{stg} | $^{\circ}C$ | -40~+150 | |

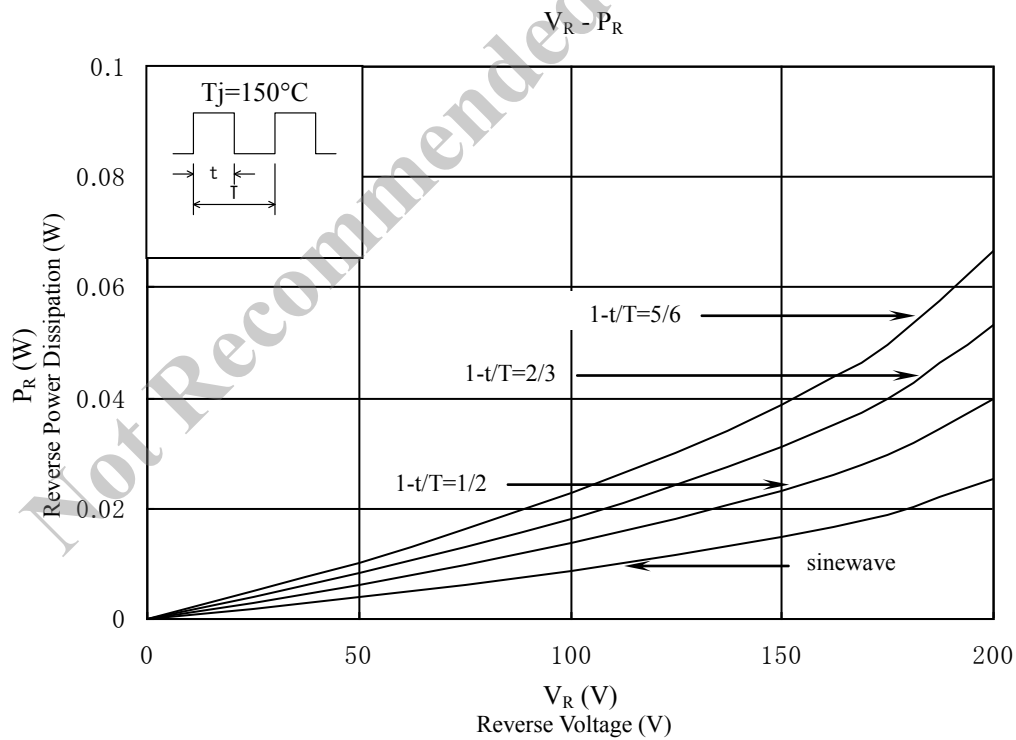
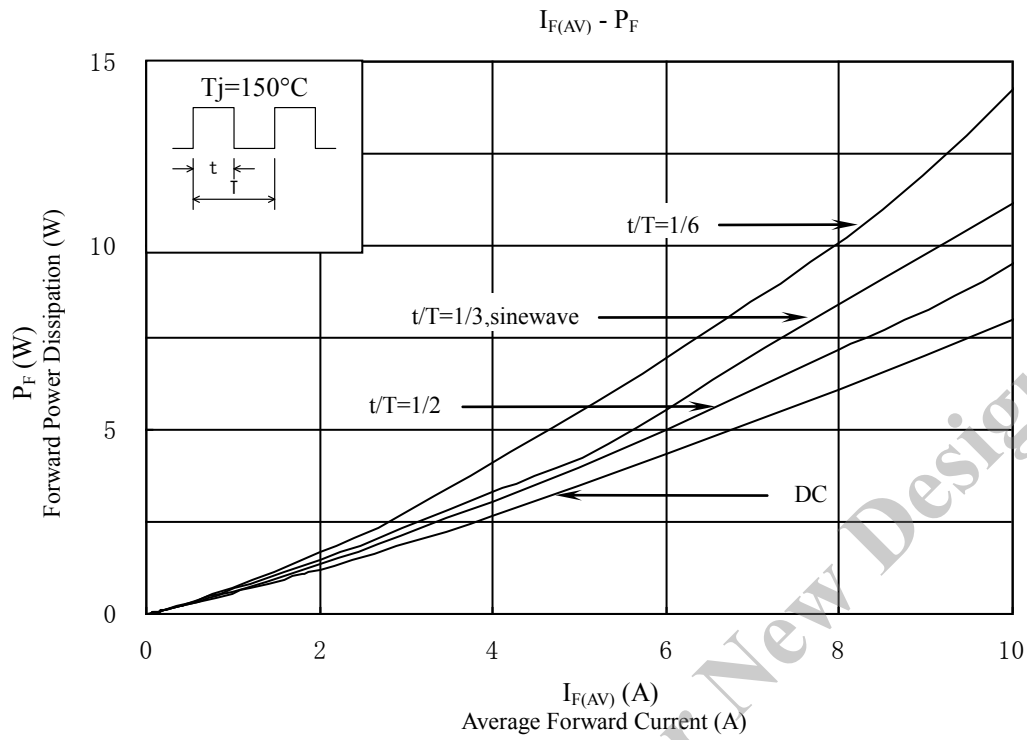
No.1,2,4&5 show ratings per one chip.

5. Electrical characteristics

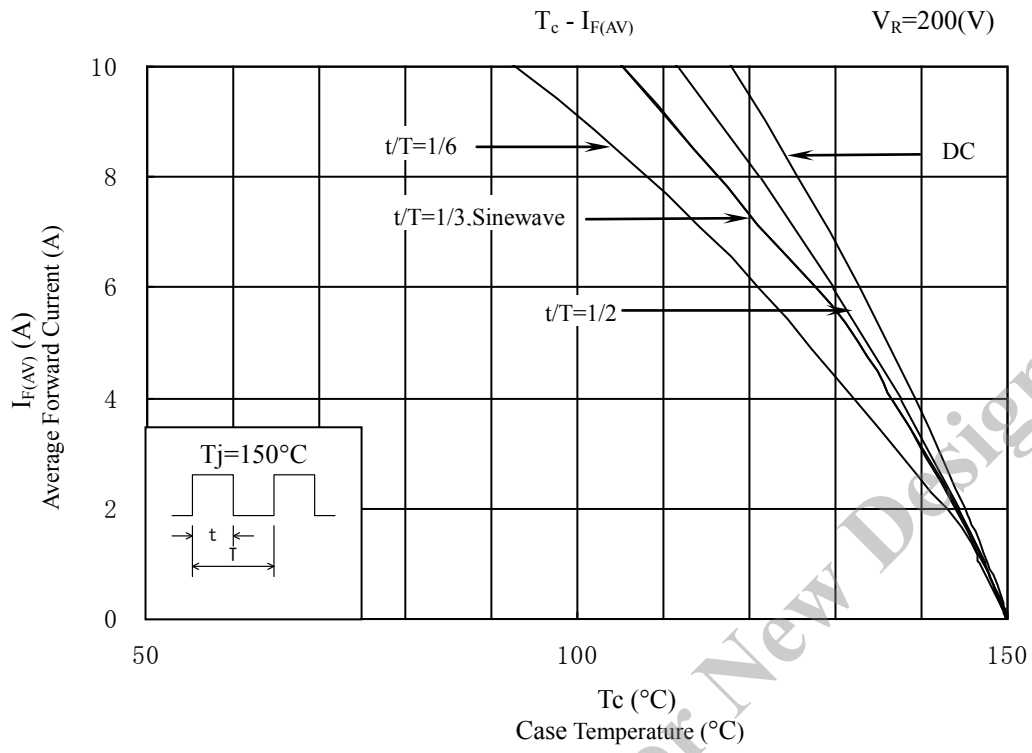
| No. | Item | Symbol | Unit | Value | Conditions |
|-----|--|---------------|---------------|-----------|--|
| 1 | Forward Voltage Drop | V_F | V | 0.98 max. | $I_F=5.0A$ |
| 2 | Reverse Leakage Current | I_R | μA | 100 max. | $V_R=V_{RM}$ |
| 3 | Reverse Leakage Current Under High Temperature | $H \cdot I_R$ | μA | 200 max. | $V_R=V_{RM}, T_j=150^{\circ}C$ |
| 4 | Reverse Recovery Time | trr1 | ns | 40 max. | $I_F=I_{RP}=100mA$ 90% Recovery point, $T_j=25^{\circ}C$ |
| | | trr2 | ns | 30 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&4 show characteristics per one chip.

6. Characteristics



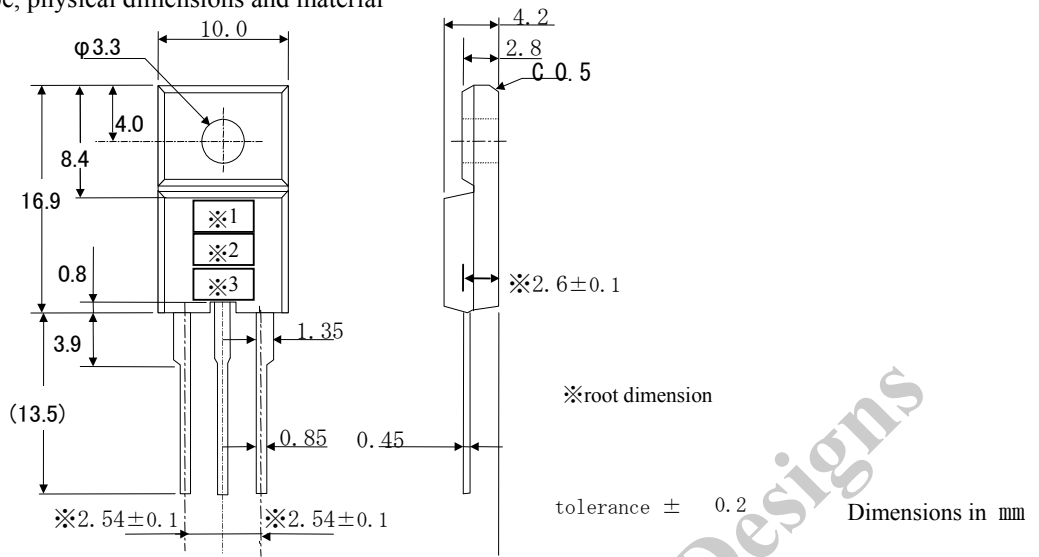
7. Derating



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 Type Name | *2 Polarity | *3 Lot number |
| FML-22S | FML22S | | 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. 3123 (Jan. 23, 2003) |