

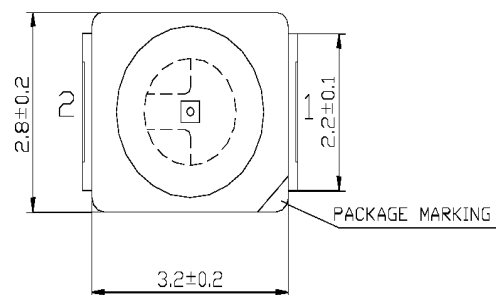
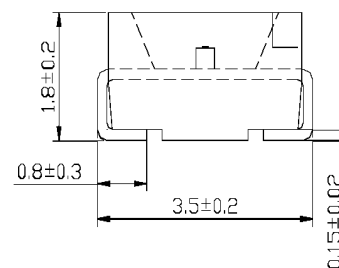
LM1-TYL1-01

Features

Industry Standard 1210 PLCC Package (3.2 x 2.8mm)
 High Operating Temperature Range: $-40^{\circ} \sim +100^{\circ} \text{C}$
 High luminosity with low power consumption
 120° Viewing Angle
 Wave and Re-flow Solderable

Applications

Indicators
 Illuminators
 LCD Backlights
 Automobile Applications



1: CATHODE
 2: ANODE

Maximum Ratings ($T_a=25^{\circ}\text{C}$)

| Characteristic | Symbol | Max. | Unit |
|-----------------------|-----------|-----------------|--------------------|
| Forward Current | I_F | 50 | mA |
| Reverse Voltage | V_R | 5 | V |
| Power Dissipation | P_D | 130.00 | mW |
| Operating Temperature | T_{opr} | $-40 \sim +100$ | $^{\circ}\text{C}$ |
| Storage Temperature | T_{stg} | $-40 \sim +100$ | $^{\circ}\text{C}$ |
| Soldering Temperature | T_{sol} | 260 | $^{\circ}\text{C}$ |
| Soldering Time | — | for 3 sec. max | — |

Opto-Electrical Characteristics ($T_a=25^{\circ}\text{C}$)

| Characteristic | Symbol | Test Condition | Min | Typ | Max | Unit |
|--------------------------|-----------------|-------------------|--------|---------------|------|---------------|
| Forward Voltage | V_F | $I_F=20\text{mA}$ | — | 2.10 | 2.60 | V |
| Reverse Current | I_R | $V_R=5\text{V}$ | — | — | 10 | μA |
| Luminous Intensity | I_v | $I_F=20\text{mA}$ | 224.00 | 320.00 | — | mcd |
| Viewing Angle | $2\theta^{1/2}$ | — | — | 120° | — | deg. |
| Peak Wavelength | λ_p | $I_F=20\text{mA}$ | — | 594 | — | nm |
| Dominant Wavelength | λ_d | $I_F=20\text{mA}$ | — | 591 | — | nm |
| Spectral Line Half Width | $\Delta\lambda$ | $I_F=20\text{mA}$ | — | 20 | — | nm |

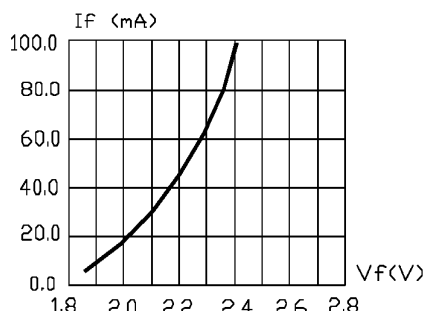


FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

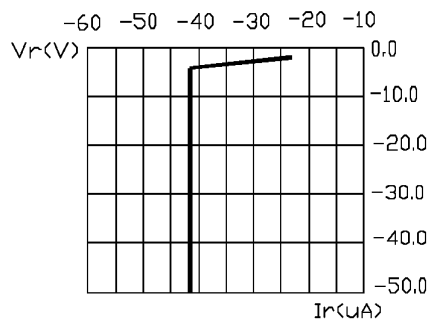


FIG.2 REVERSE CURRENT VS. REVERSE VOLTAGE.

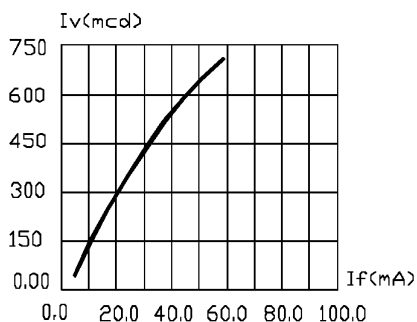


FIG.3 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

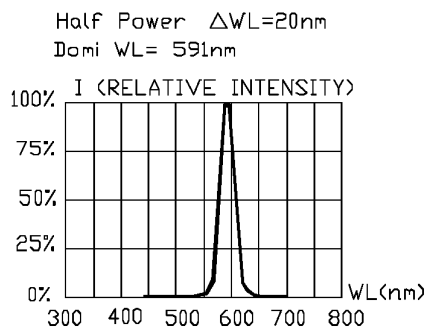


FIG.4 RELATIVE INTENSITY VS. WAVE LENGTH.

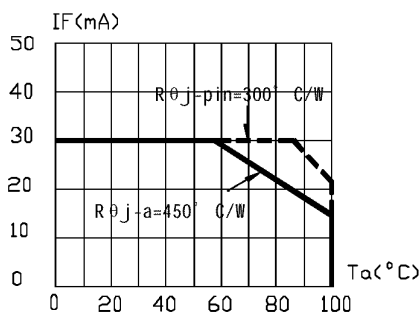


FIG.5 MAXIMUM FORWARD DC CURRENT VS TEMPERATURE. DERATING BASED ON $T_{jmax}=125^{\circ}C$

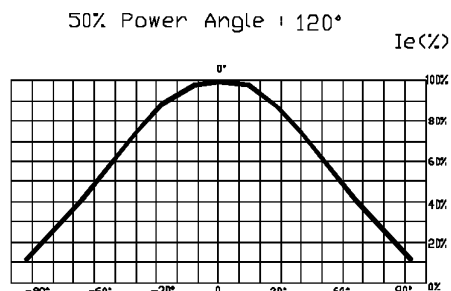


FIG.6 SPATIAL DISTRIBUTION.