



5F, No.371-1, Sec.2, Chung shan Road, Chung Ho, Taipei county

Taiwan 235

TEL : 886-2-82277070

FAX : 886-2-82277171

E-mail : lightop@anet.net.tw

光 楠 科 技 股 份 有 限 公 司
LIGHTOP TECHNOLOGY CO., LTD.

Data Sheet

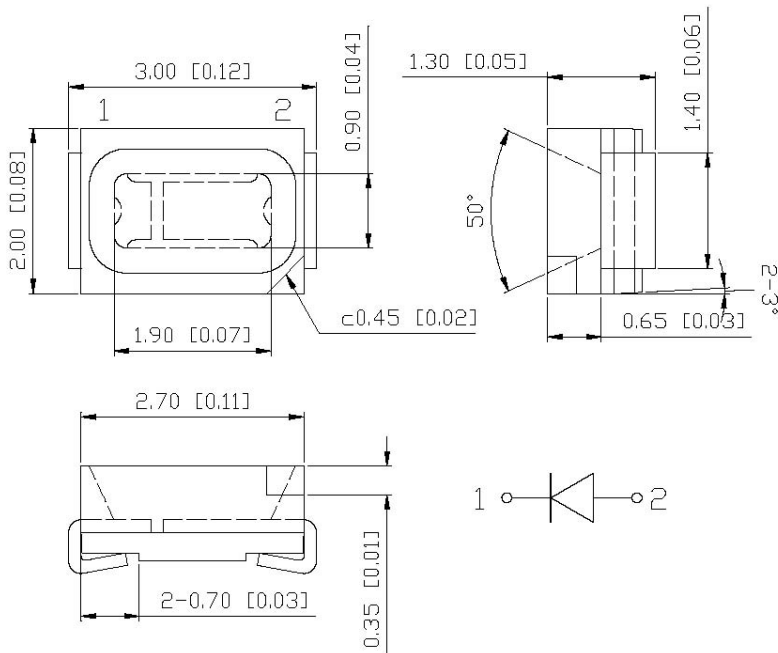


| | |
|--------------------|-----------|
| ACCEPTED BY | |
| QUALITY CONTROL BY | |
| CHECKED BY | |
| PREPARED BY | LUOFAXING |

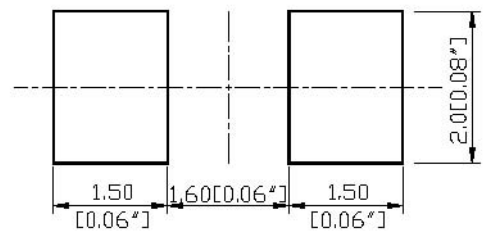
Features:

1. Low power consumption.
2. High intensity
3. Wide view angle
4. Chip Material: AlGaInP
5. Lens Color: Water Clear
6. Source Color: Orange RED

Outline Dimensions:



*** Recommended Soldering Pattern For Reflow Soldering**



Note :

1. All dimensions are in millimeters (inches)
2. Tolerance is $\pm 0.2\text{mm}$ (.008") unless otherwise noted
3. Specifications are subject to change without notices.

Absolute Maximum Ratings at Ta=25°C :

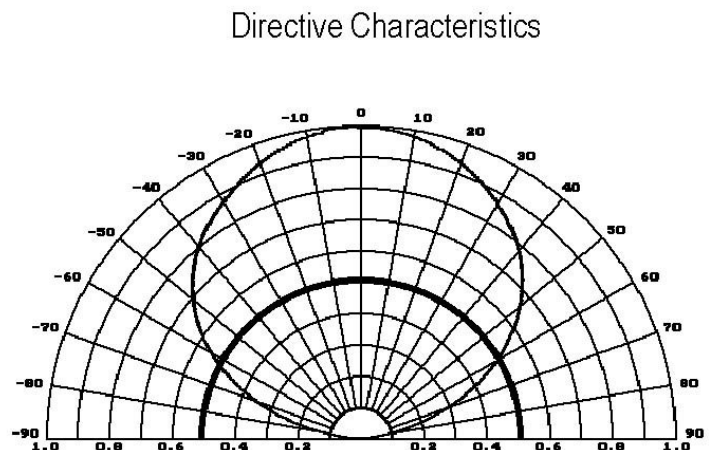
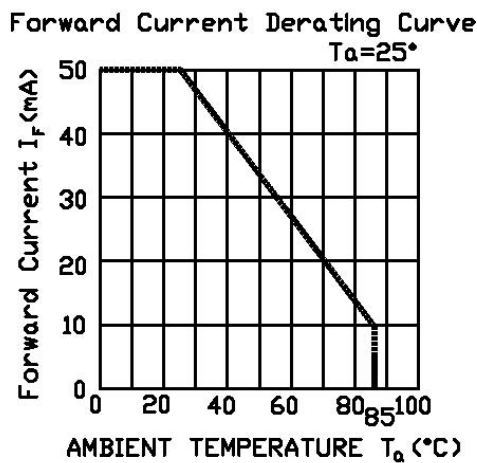
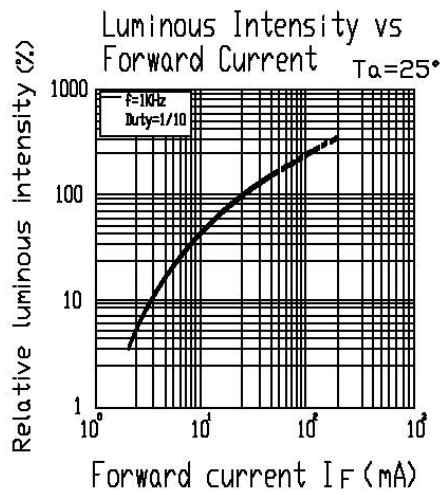
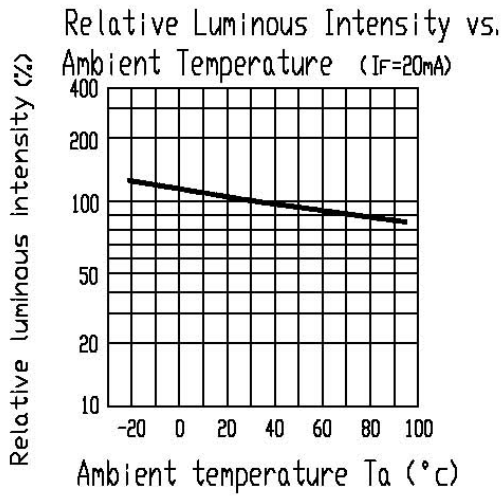
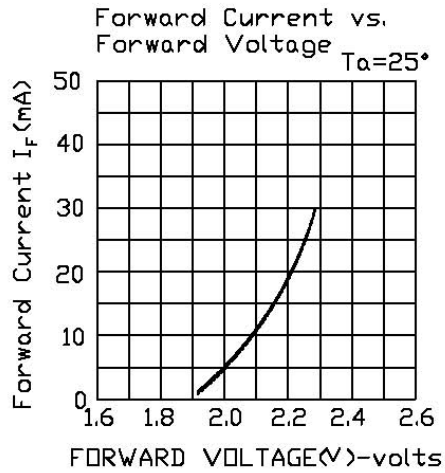
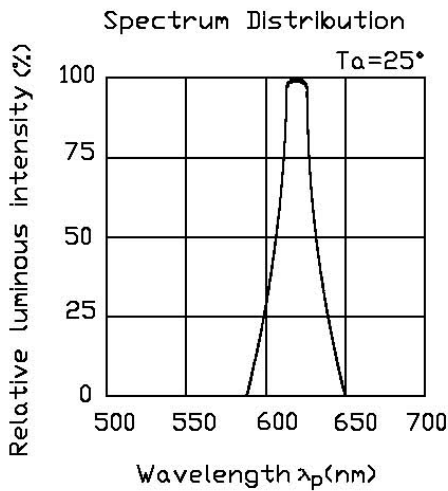
| Parameter | Maximum | Unit |
|---|---------------------|-------|
| Power Dissipation | 80 | mW |
| Peak Forward Current (1/10 Duty Cycle,0.1ms Pulse Width) | 100 | mA |
| Continuous Forward Current | 25 | mA |
| Derating Linear From 50°C | 0.5 | mA/°C |
| Reverse Voltage | 5 | V |
| Operating Temperature Range | -20°C to +65°C | |
| Storage Temperature Range | -30°C to +80°C | |
| Lead Soldering Temperature [1.6mm(0.63") from body] | 260°C for 3 Seconds | |

Electrical/Optical Characteristics at Ta=25°C :

| Parameter | Symbol | Test Condition | Min. | Typ. | Max. | Unit |
|---------------------|----------------|----------------------|------|------|------|------|
| Luminous Intensity | I _v | I _F =20mA | | 90 | | mcd |
| Dominant Wavelength | λ _d | I _F =20mA | | 624 | | nm |
| Viewing Angle | 2 θ 1/2 | I _F =20mA | | 120 | | deg |
| Forward Voltage | V _F | I _F =20mA | | 1.9 | 2.4 | V |
| Reverse Current | I _R | V _R =5V | | | 10 | uA |

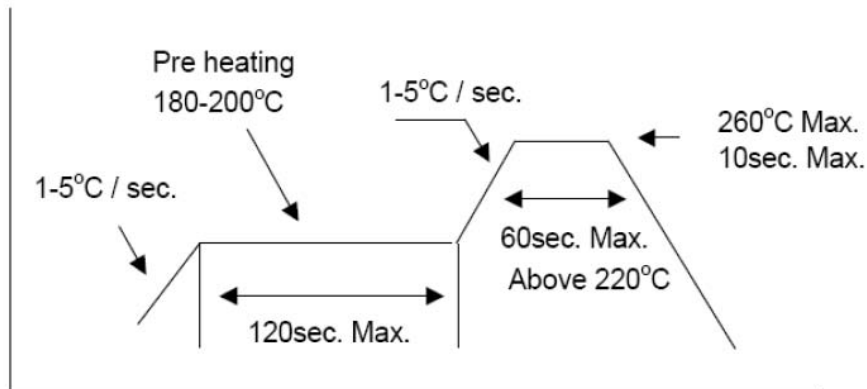
Typical Electrical/Optical Characteristics Curve:

(25°C Ambient Temperature Unless Otherwise Noted)

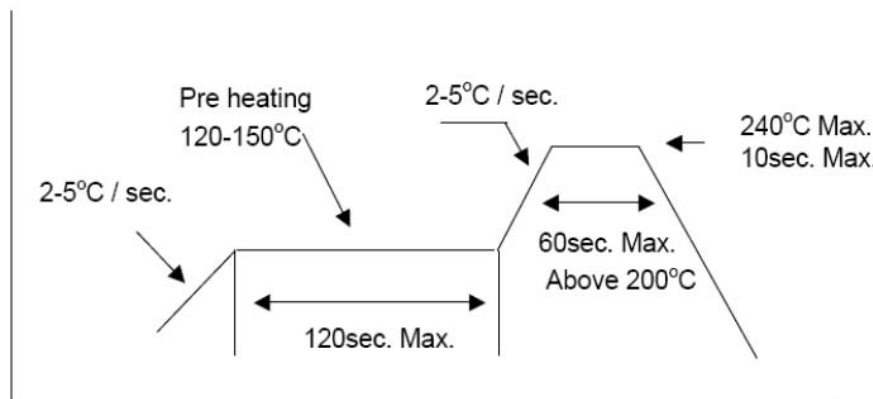


IR Reflow Soldering Profile

Lead Free Solder



Lead Solder



Reliability Test :

| Item | Conditions | Hours/Cycle | Ac/Re |
|------------------------------------|--|-------------|-----------------|
| Operation Life | Ta=25°C, If=20mA | 1000hrs | Power Decay<50% |
| High Temperature/ High Humidity | Ta=60±5°C, RH=90±5% | 1000hrs | 0 / 1 |
| High Temperature Storage | Ta=100±5°C | 1000hrs | 0 / 1 |
| Low Temperature Storage | Ta=-30±5°C | 1000hrs | 0 / 1 |
| Temperature Cycling | 100~25~-40~25°C 30~5~30~5 min | 10 Cycles | 0 / 1 |
| Thermal Shock | H: 85±5°C(10min)~ L: -45±5°C(10min) | 10 Cycles | 0 / 1 |
| Soldering Resistance | Ta=260±5°C, | 10 sec | 0 / 1 |