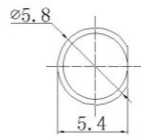
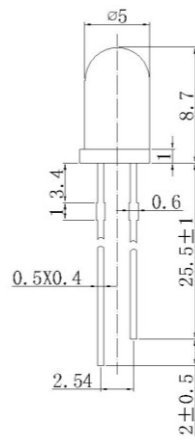


Specification for LED Product

3787

Package Dimensions(mm)



Notes:

All dimension units are millimeters.

All dimension tolerance is ± 0.2 mm unless otherwise noted.

An epoxy meniscus may extend about 1.5mm down the leads.

Burr around bottom of epoxy may be 0.5mm max.

Synopsis:

5mm Round Type

Water Clear Lens

Red LED Lamp

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| ITEMS | SYMBOL | CONDITION | MIN. | TYP. | MAX. | UNIT |
|-------------------------|--------|-----------|------|------|------|------|
| Forward Voltage | VF | IF = 20mA | 1,4 | 1,8 | 2,5 | V |
| Reverse Current | IR | VR = 5V | --- | --- | 1,1 | μA |
| Dominant Wavelength | λ D | IF = 20mA | 620 | --- | 630 | nm |
| Luminous Intensity | IV | IF = 20mA | 1627 | 2075 | 2666 | med |
| 50% Power Viewing Angle | 2θ½ | IF = 20mA | --- | 14 | --- | deg |

■ Absolute Maximum Ratings at (Ta = 25°C)

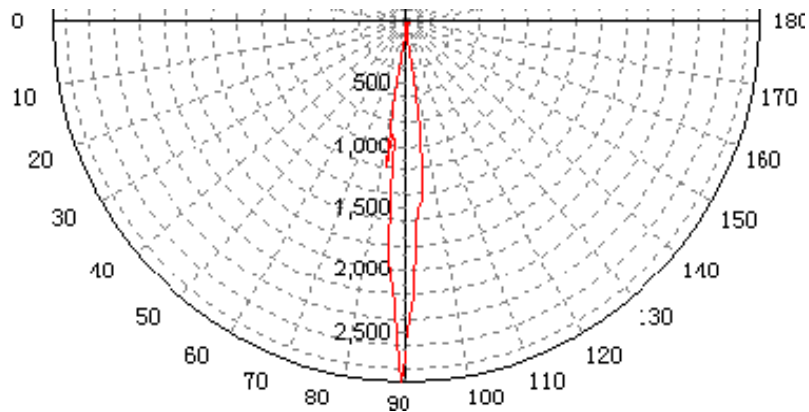
| ITEMS | SYMBOL | ABSOLUTE MAXIMUM RATING | UNIT |
|----------------------------|--------|--------------------------|------|
| Forward Current | IF | 50 | mA |
| Peak Forward Current | IFP | 220 | mA |
| Continuous Forward Current | IL | 20 | mA |
| Reverse Voltage | VR | 5 | V |
| Power Dissipation | PD | 90 | mW |
| Operation Temperature | Topr | -40 ~ +80 | °C |
| Storage Temperature | Tstg | -40 ~ +80 | °C |
| Lead Soldering Temperature | Tsol | Max.260°C for 5 sec Max. | |

IFP Conditions: Pulse Width ≤ 10msec duty ≤ 1/10

Tsol Conditions: 4mm from the base of the epoxy bulb

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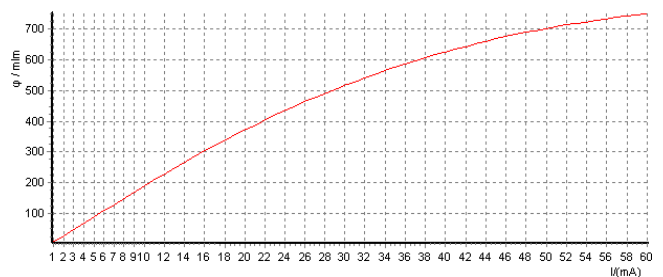
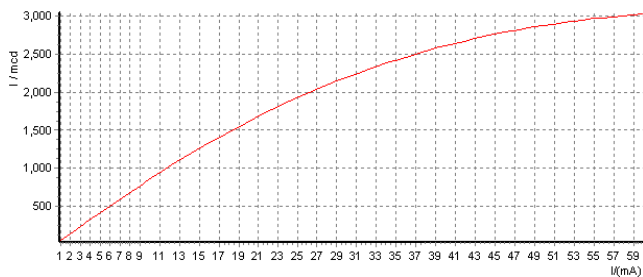
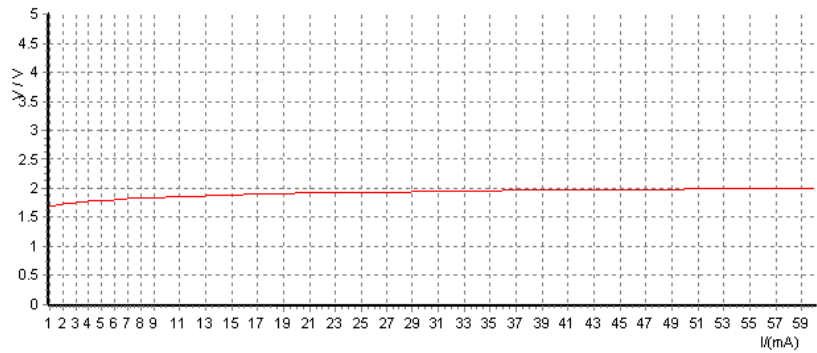
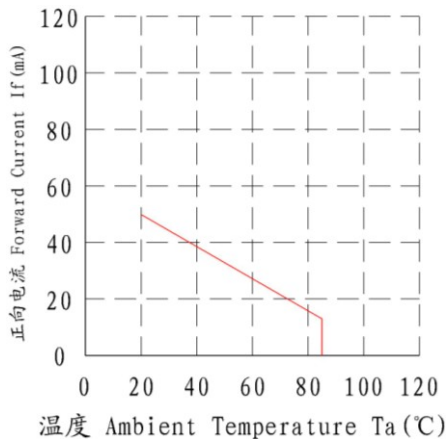
Spatial Distribution



Reliability Performance

| Test Classification | Test Item | Test Conditions | Test Duration | Sample Size | Standard |
|---------------------|---------------------------------------|--|---------------|-------------|----------|
| Life Test | Life Test | Ta=25°C±5°C, IF=20mA | 1000小时(hrs) | 10PCS | |
| Environment Test | Thermal Shock Test | -10 ±5 ↔ +100 ±5 5min. 10sec. 5min. | 100(cycles) | 10PCS | |
| | Temperature Cycle Test | -55 ±5 ↔ +85 ±5 30min. 5min. 30min. | 100(cycles) | 10PCS | |
| | High Temperature & High Humidity Test | Ta=85°C±5°C RH =85%±0.5 %RH | 240(hrs) | 10PCS | |
| | High Temperature Storage | Ta=100°C±5°C | 1000(hrs) | 10PCS | |
| | Low Temperature Storage | Ta=-55°C±5°C | 1000(hrs) | 10PCS | |
| Mechanical Test | Resistance to Soldering Heat | Ta=260°C±5°C | 5 (sec.) | 10PCS | |
| | Lead Integrity | 0° ~ 90° ~ 0° | 3 (times) | 10PCS | |

Typical Optical/Electrical Characteristics Curves (Ta=25°C Unless Otherwise Noted)



Current-Luminous intensity Curve

Current-Luminous flux Curve

