

FULL COLOR LED LAMPS

Model No. LEF-C5003D

Description:

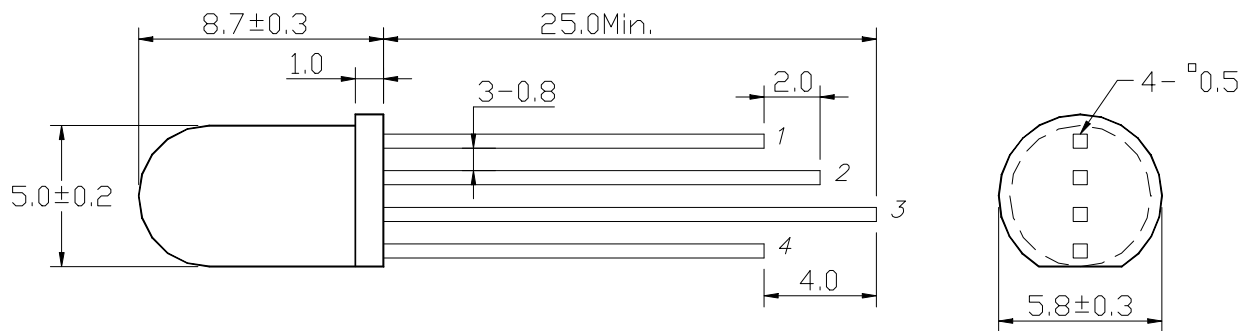
- Super bright LED Lamp
- Full Color
- Round type
- T1-3/4 (5mm)diameter
- 4 pin
- With Flange
- Solder leads without stand-off
- Package : bulk

Features :

- High Luminous intensity
- Technology : AlGaInP / GaN / GaN
- Peak wavelength $\lambda_p = 630 / 528 / 472$ nm
- Common Cathode
- UV resistant epoxy

Selection guide :

| Emitted Color | Material | Wavelength (nm) | Lens Color | Viewing Angle |
|---------------|----------|-----------------|----------------|---------------|
| Super Red | AlGaInP | 630 | White Diffused | 45° |
| Super Green | GaN | 528 | | |
| Super Blue | GaN | 472 | | |



Notes:
 1. All dimensions are in millimeter.
 2. Lead spacing is measured where the lead emerge from the package.

1. Green
 2. Blue
 3. Common Cathode
 4. Red

FULL COLOR LED LAMPS

Model No. LEF-C5003D

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

| Parameter | | Symbol | Max. Rating | Unit |
|---|--------------|-----------|-------------|--------------------|
| Power Dissipation | Red | P_D | 120 | mW |
| | Green | | 120 | |
| | Blue | | 120 | |
| Peak Forward Current (1/10 Duty Cycle @1KHz) | Red | I_{PF} | 200 | mA |
| | Green | | 100 | |
| | Blue | | 100 | |
| Continuous Forward Current | Red | I_{AF} | 50 | mA |
| | Green | | 30 | |
| | Blue | | 30 | |
| Reverse Voltage | | V_R | 5.0 | V |
| Operating Temperature Range | Red | T_{OPR} | -40~+85 | $^{\circ}\text{C}$ |
| | Green · Blue | | -20~+80 | |
| Storage Temperature Range | Red | T_{STG} | -40~+85 | $^{\circ}\text{C}$ |
| | Green · Blue | | -30~+100 | |
| Solder temperature 1.6mm from body for 3 seconds at 260°C | | | | |

Optical –Electrical Characteristics ($T_a=25^{\circ}\text{C}$)

| Parameter | | Symbol | Test condition | Min. | Typ. | Max. | Unit |
|------------------------------|-------|-----------------|----------------|------|------|------|---------------|
| Luminous Intensity | Red | IV | IF=20mA | 420 | 600 | | mcd |
| | Green | | | 700 | 1000 | | |
| | Blue | | | 140 | 200 | | |
| Forward Voltage | Red | VF | IF=20mA | | 2.0 | 2.4 | V |
| | Green | | | | 3.5 | 4.0 | |
| | Blue | | | | 3.5 | 4.0 | |
| Reverse Current | Red | IR | VR=5V | | | 10 | μA |
| | Green | | | | | 10 | |
| | Blue | | | | | 10 | |
| View Angle | | $2\theta\ 1/2$ | IF=20mA | | 45 | | deg. |
| Peak Wavelength | Red | λP | IF=20mA | | 630 | | nm |
| | Green | | | | 528 | | |
| | Blue | | | | 472 | | |
| Dominant Wavelength | Red | λD | IF=20mA | | 625 | | nm |
| | Green | | | | 525 | | |
| | Blue | | | | 470 | | |
| Spectrum Radiation Bandwidth | Red | $\Delta\lambda$ | IF=20mA | | 20 | | nm |
| | Green | | | | 30 | | |
| | Blue | | | | 35 | | |