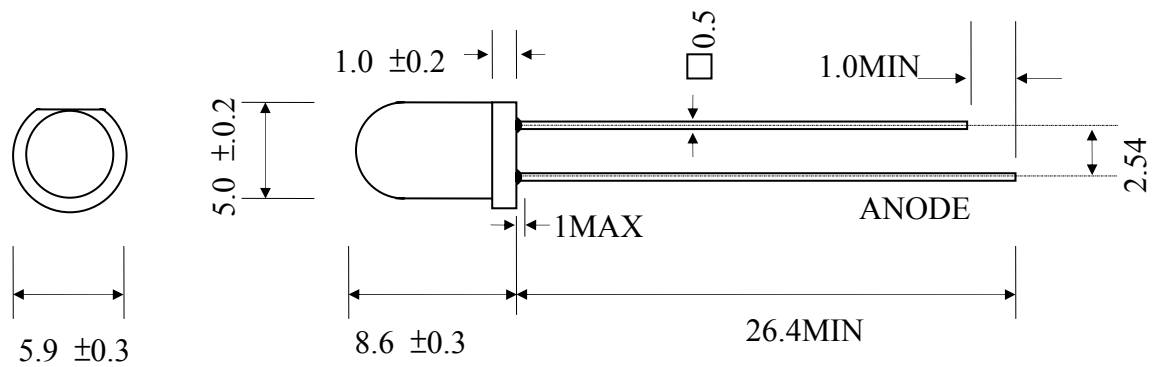


Light Emitting Diode Lamp

★ Package Dimensions



NOTE:

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

★ Selection Guide

| Part NO. | Chip | | Lens Color | Viewing Angle $2\theta_{1/2}$ (deg) |
|--------------|----------|---------------|-------------|-------------------------------------|
| | Material | Emitted Color | | |
| 5-22-WC37-GD | GaN | Blue | Water clear | 30 |

Light Emitting Diode Lamp

Part No: 5-22-WC37-GD

★Absolute Maximum Ratings

(Ta=25°C)

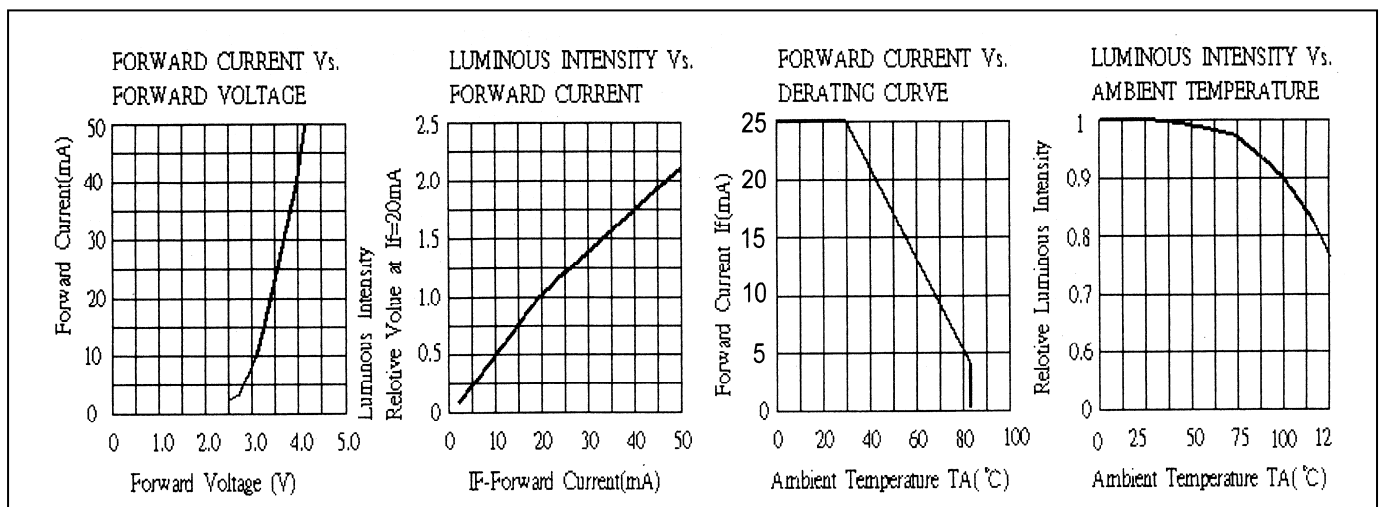
| Parameter | Symbol | MAX. Rating | Unit |
|---|--------|-------------|------|
| Power Dissipation | Pd | 100 | mW |
| Continuous Forward Current | IF | 30 | mA |
| Peak forward current (10μs Pulse) | IFM | 100 | mA |
| Reverse Voltage | VR | 5.0 | V |
| Operating Temperature | Topr | -40~+85 | °C |
| Storage Temperature | Tstg | -40~+85 | °C |
| Lead Soldering Temperature (1.6mm From Case Bottom 260°C For 5 SEC) | | | |

★Electric-Optical Characteristics

| Parameter | Symbol | Test Condition | MIN | TYP | MAX | Unit |
|------------------------------|--------|----------------|------|------|-----|------|
| Forward Voltage | VF | IF=20mA | | 3.2 | 3.8 | V |
| Reverse Voltage | VR | IR=10uA | 5 | | | V |
| Luminous Intensity | IV | IF=20mA | 3300 | 5000 | | mcd |
| Peak Emission Wavelength | λP | IF=20mA | | 470 | | nm |
| Spectrum Width Of Half Value | Δλ | IF=20mA | | 30 | | nm |

★Measurement Uncertainty of the Luminous Intensity:±10%

★Characteristics Diagrams



Light Emitting Diode Lamp

Part No: 5-22-WC37-GD

★Reliability Test

| No | Item | Test Condition | Test Hours/Cycles | Samples Tested | Acc./Rej |
|----|------------------------------------|------------------------------------|-------------------|----------------|----------|
| 1 | Room Temperature DC Operating Life | Ta=25°C, I _F =20mA | 1000 Hrs | 76 | 0/1 |
| 2 | Thermal Shock | -10°C (5min)→(10sec)→+100°C (5min) | 100 Cycles | 76 | 0/1 |
| 3 | Temperature Cycle | -40°C (30min)→(5min)→+85°C (30min) | 100 Cycles | 76 | 0/1 |
| 4 | High Temp./ High Humi. Test | 85°C/85%RH | 1000 Hrs | 76 | 0/1 |
| 5 | High Temperature Storage | Ta=100°C | 1000 Hrs | 76 | 0/1 |
| 6 | Low Temperature Storage | Ta= - 40°C | 1000 Hrs | 76 | 0/1 |
| 7 | Soldering Heat | 260°C±5°C | 5 Seconds | 76 | 0/1 |