

DESCRIPTION:

The 224 Ultra Bright series is conventional 3mm LED Lamps utilizing higher intensity materials to achieve superior performance.

The semi-conductor materials used are:

GaAlAs for (224UR3C/UR3D)

AlGaInP for (224UIC/UID, 224RS2C/RS2D, 224SYGC/SYGD, 224UO2C/UO2D, 224UY2C/UY2D)

ABSOLUTE MAXIMUM RATINGS: (Ta=25°C)

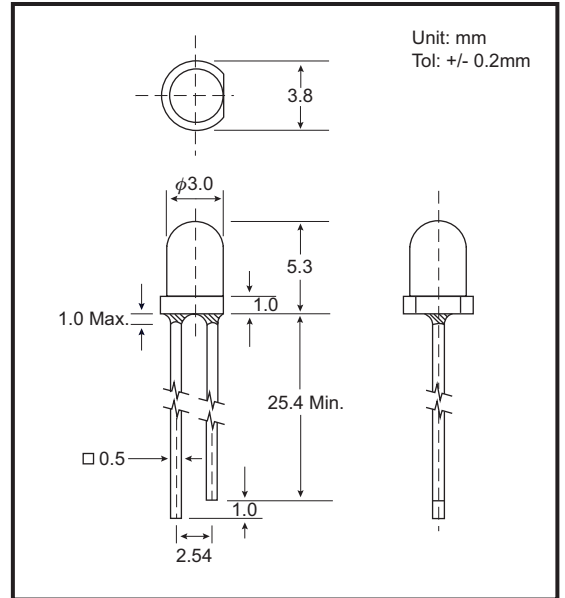
| | |
|---|---------------------|
| Reverse Voltage | 5 Volt |
| Reverse Current (Vr =5V) | 100µA |
| Operating Temperature Range | -40°C To 85°C |
| Storage Temperature Range | -40°C To 100°C |
| Lead Soldering Temperature (1.6mm (1/16)From Body) | 260°C For 5 Seconds |

NOTES : 1. All dimensions are in millimeters.

2. Lead spacing is measured where the leads emerge from the package.

3. Protuded resin under flange is 1.5 mm (0.059") Max.

PACKAGE DIMENSIONS



PART NO. SELECTION AND APPLICATION INFORMATION (RATINGS AT 25°C AMBIENT)

| Part No. | Emitted Color | Lens Color | Peak Wavelength λp (nm) | Vf (v) | | Rec. If (mA). | Iv (mcd) | | View Angle 2θ1/2(Deg) |
|------------|---------------|-----------------|-------------------------|--------|-----|---------------|----------|--------|-----------------------|
| | | | | Min | Max | | Min | Typ. | |
| GB-224UID | Ultra Red | Red Diffused | 640 | 1.7 | 2.6 | 10-20 | 175.0 | 250.0 | 35 |
| GB-224RS2D | Ultra Red | Red Diffused | 635 | 1.7 | 2.6 | 10-20 | 700.0 | 1000.0 | 35 |
| GB-224UR3D | Ultra Red | Red Diffused | 660 | 1.7 | 2.6 | 10-20 | 350.0 | 500.0 | 35 |
| GB-224SG2D | Ultra Green | Green Diffused | 570 | 1.7 | 2.6 | 10-20 | 60.0 | 80.0 | 35 |
| GB-224UY2D | Ultra Yellow | Yellow Diffused | 590 | 1.7 | 2.6 | 10-20 | 320.0 | 450.0 | 35 |
| GB-224UO2D | Ultra Orange | Orange Diffused | 620 | 1.7 | 2.6 | 10-20 | 300.0 | 420.0 | 35 |
| GB-224UIC | Ultra Red | Water Clear | 640 | 1.7 | 2.6 | 10-20 | 700.0 | 1000.0 | 18 |
| GB-224RS2C | Ultra Red | Water Clear | 635 | 1.7 | 2.6 | 10-20 | 1400.0 | 2000.0 | 18 |
| GB-224UR3C | Ultra Red | Water Clear | 660 | 1.7 | 2.6 | 10-20 | 700.0 | 1000.0 | 18 |
| GB-224SG2C | Ultra Green | Water Clear | 570 | 1.7 | 2.6 | 10-20 | 800.0 | 100.0 | 18 |
| GB-224UY2C | Ultra Yellow | Water Clear | 590 | 1.7 | 2.6 | 10-20 | 1050.0 | 1500.0 | 18 |
| GB-224UO2C | Ultra Orange | Water Clear | 620 | 1.7 | 2.6 | 10-20 | 500.0 | 700.0 | 18 |

TESTING CONDITION FOR EACH PARAMETER :

| PARAMETER: | SYMBOL | UNIT | TEST CONDITION |
|-------------------------------|----------|--------|----------------|
| REVERSE VOLTAGE | Vr | VOLT | Vr = 5.0 Volt |
| REVERSE CURRENT | Ir | µA | If = 20mA |
| FORWARD VOLTAGE | Vf | VOLT | If = 20mA |
| LUMINOUS INTENSITY | Iv | MCD | If = 20mA |
| VIEWING ANGLE | 2θ1/2 | DEGREE | |
| RECOMMENDED OPERATING CURRENT | If (Rec) | mA | |

