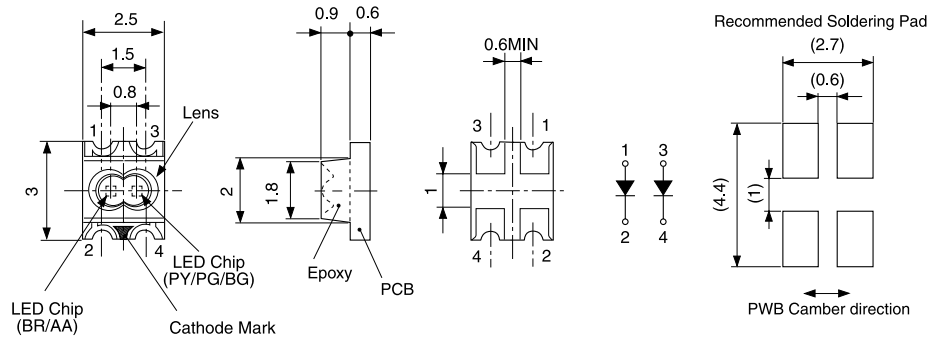
# BI-COLOR LED

## 1204W Standard Type with Inner Lens

S T A N D A R D  C O L O R

### Outline Dimensions




Unit: mm
Tolerances ± 0.2

### Absolute Maximum Ratings

(Ta=25°C)

| Item | Symbol | Red / Yellow Green | Red / Green | Red / Pure Green | Orange / Yellow Green | Units |
|---|---|---|---|---|---|---|
| | | BRPY | BRPG | BRBG | AAPY | |
| Power Dissipation | Pd | 75 | 75 | 75 | 75 | mW |
| Forward Current | $I_F$ | 30 | 30 | 30 | 30 | mA |
| Peak Forward Current | $I_{FM}$ | 70 | 70 | 70 | 70 | mA |
| Reverse Voltage | $V_R$ | 4 | 4 | 4 | 4 | V |
| Operating Temperature | Topr | -30 to +85 | | | | °C |
| Storage Temperature | Tstg | -40 to +100 | | | | °C |
| Derating* | $\Delta I_F$ | 0.42 (DC) 0.93 (Pulse) | | | | mA/°C |

* Ta=25°C, $I_{FM}$ applies for the pulse width ≤ 1msec. and duty cycle ≤1/20.

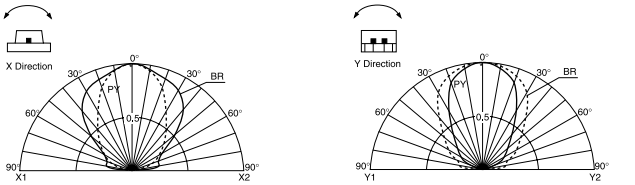
### Electro-Optical Characteristics

*The viewing angle is an average and will vary by color

(Ta=25°C)

| Part No. | Material | Emitted Color | Lens Color | Luminous Intensity $I_V$ MIN. | Luminous Intensity $I_V$ TYP. | Luminous Intensity $I_V$ $I_F$ | Wavelength Peak λp TYP. | Wavelength Dominant λd TYP. | Wavelength Spectral Line Half Width Δλ TYP. | Wavelength $I_F$ | Forward Voltage $V_F$ TYP. | Forward Voltage $V_F$ MAX. | Forward Voltage $V_F$ $I_F$ | Reverse Current $I_R$ MAX. | Reverse Current $I_R$ $V_R$ | Viewing Angle (2θ 1/2) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRPY1204W | GaAlAs | Red (BR) | Water Clear | 6.0 | 33.6 | 20 | 660 | 647 | 30 | 20 | 1.7 | 2.0 | 20 | 100 | 4 | 100° |
| | GaP | Yellow Green (PY) | | 6.0 | 24 | 20 | 570 | 572 | 30 | 20 | 2.1 | 2.5 | 20 | 100 | 4 | 80° |
| BRPG1204W | GaAlAs | Red (BR) | | 6.0 | 33.6 | 20 | 660 | 647 | 30 | 20 | 1.7 | 2.0 | 20 | 100 | 4 | 100° |
| | GaP | Green (PG) | | 6.0 | 12 | 20 | 560 | 567 | 30 | 20 | 2.1 | 2.5 | 20 | 100 | 4 | 80° |
| BRBG1204W | GaAlAs | Red (BR) | | 6.0 | 33.6 | 20 | 660 | 647 | 30 | 20 | 1.7 | 2.0 | 20 | 100 | 4 | 100° |
| | GaP | Pure Green(BG) | | 0.9 | 4.8 | 20 | 555 | 558 | 30 | 20 | 2.1 | 2.5 | 20 | 100 | 4 | 80° |
| AAPY1204W | GaAsP | Orange (AA) | | 5.0 | 9 | 20 | 605 | 606 | 30 | 20 | 2.2 | 2.5 | 20 | 100 | 4 | 80° |
| | GaP | Yellow Green (PY) | | 6.0 | 12 | 20 | 570 | 572 | 30 | 20 | 2.1 | 2.5 | 20 | 100 | 4 | 80° |
| Units | | | | mcd | | mA | nm | | | mA | V | | mA | μA | V | Deg. |

### Spatial Distribution




*Spatial distribution is viewed as a typical illustration and will vary by color

### Operation Current Derating Chart (DC)