



Absolute Maximum Ratings

Ta = 25°C

| | | Blue | Blue Green | Green | Yellow | Red | Units |
|----------------------|------|----------|------------|----------|----------|----------|-------|
| | | UB | UC | UG | UY | UR | |
| Power Dissipation | Pd | 105 | 105 | 105 | 150 | 150 | mW |
| Forward Current | IF | 25 | 25 | 25 | 50 | 50 | mA |
| Peak Forward Current | IFM | 60 | 60 | 60 | 100 | 100 | mA |
| Reverse Voltage | VR | 5 | 5 | 5 | 5 | 5 | V |
| Operating Temp. | Topr | -40~+85 | -40~+85 | -40~+85 | -40~+85 | -40~+85 | °C |
| Storage Temp. | Tstg | -40~+100 | -40~+100 | -40~+100 | -40~+100 | -40~+100 | °C |
| Derating * | ΔIF | 0.33 | 0.33 | 0.33 | 0.67 | 0.67 | mA/°C |

* The current derating for operation applies when temperature is above 25°C.

• IFM Condition : tw ≤ 1ms, Duty ≤ 1/20

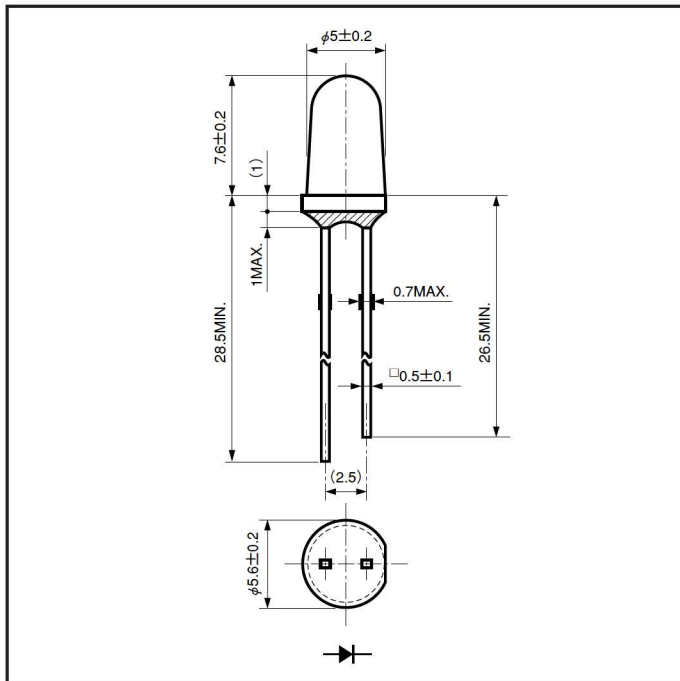
Electro-Optical Characteristics

Ta = 25°C

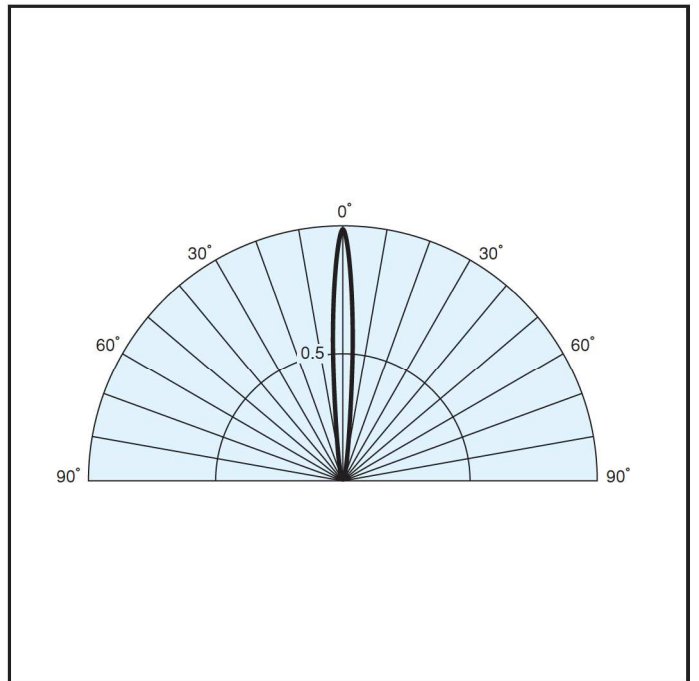
| Part No. | Chip | | Lens | Luminous Intensity | | | Wavelength | | | | Forward Voltage | | | Reverse Current | | |
|----------|----------|---------------|----------------------|--------------------|-------|-------|------------|-----|-----|----|-----------------|-----|-----|-----------------|-----|---|
| | Material | Emitted Color | | Iv | | | λ d | λ p | Δλ | | VF | | | IR | | |
| | | | | MIN | TYP | IF | TYP | TYP | TYP | IF | TYP | MAX | IF | MAX | VR | |
| UB5306X | InGaN | Blue | Water Clear Clear | 1,000 | 2,800 | 20 | 470 | 465 | 26 | 20 | 3.7 | 4.2 | 20 | 100 | 5 | |
| UC5306X | InGaN | Blue Green | | 2,400 | 6,720 | 20 | 505 | 502 | 30 | 20 | 3.7 | 4.2 | 20 | 100 | 5 | |
| UG5306X | InGaN | Green | | 3,360 | 6,720 | 20 | 525 | 517 | 35 | 20 | 3.7 | 4.2 | 20 | 100 | 5 | |
| UY5366X | AlGaInP | Yellow | | Pastel Yellow | 2,000 | 4,000 | 20 | 590 | 592 | 18 | 20 | 2.2 | 2.8 | 20 | 100 | 5 |
| UR5366X | AlGaInP | Red | | Pastel Red | 1,800 | 3,600 | 20 | 630 | 641 | 18 | 20 | 2.2 | 2.8 | 20 | 100 | 5 |
| Units | | | | mcd | mcd | mA | nm | nm | nm | mA | V | V | mA | μA | V | |

Package Dimensions

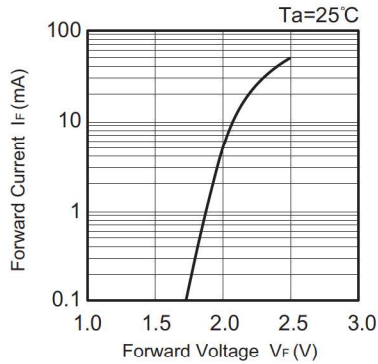
Unit : mm



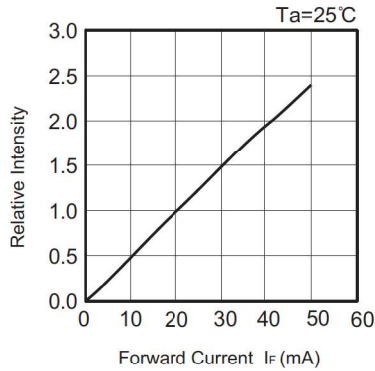
Spatial Distribution



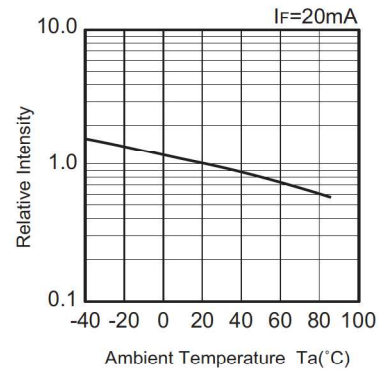
■ Forward Voltage vs. Forward Current



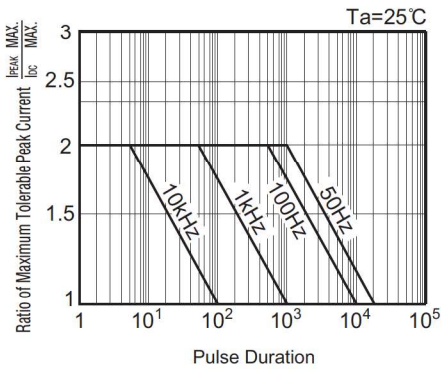
■ Forward Current vs. Relative Intensity



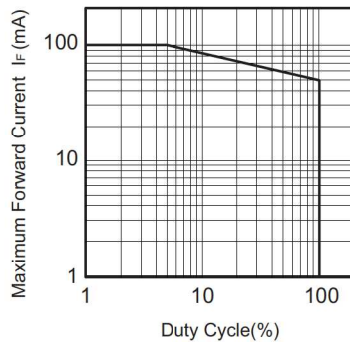
■ Ambient Temperature vs. Relative Intensity



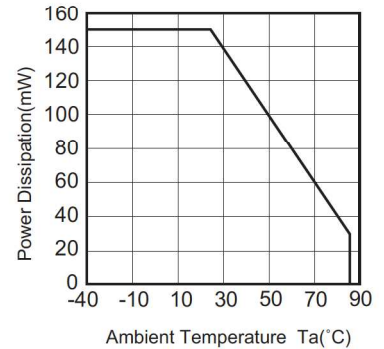
■ Pulse Duration vs. Maximum Tolerable Peak Current



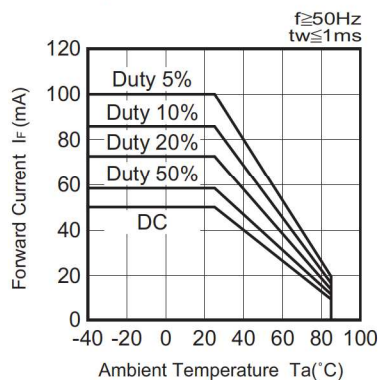
■ Duty Cycle vs. Maximum Forward Current



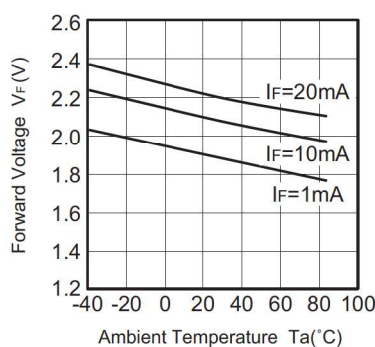
■ Power Dissipation vs. Ambient Temperature



■ Ambient Temperature vs. Maximum Forward Current



■ Forward Voltage vs. Ambient Temperature



■ Spectral Distribution

