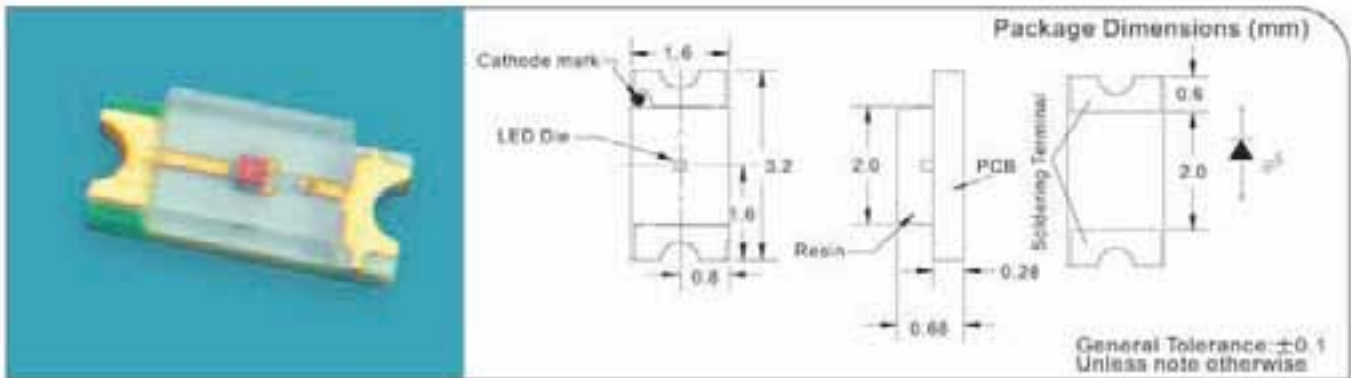


3.2x1.6x0.68mm (1206)SMD


| Part Number | Chip Material | Lens Type | Emitted Color | Forward Voltage (V) | | Dominant Wavelength (nm) | | Luminous Intensity (mcd) | | Reverse Current (uA) | Viewing Angel (deg) |
|-------------|---------------|-------------|---------------|---------------------|-----|----------------------------------------------------|-----|--------------------------|-----|----------------------|---------------------|
| | | | | Min | Max | Min | Max | Min | Max | | |
| RL-S150SC | GaP | Water Clear | Super Red | 1.7 | 2.8 | 620 | 630 | 90 | 300 | 10 | 120 |
| RL-S150YC | GaAsP | Water Clear | Super Yellow | 1.7 | 2.8 | 585 | 595 | 110 | 350 | 10 | 120 |
| RL-S150GC | GaP | Water Clear | Yellow Green | 1.7 | 2.8 | 565 | 575 | 50 | 100 | 10 | 120 |
| RL-S150BC | GaN | Water Clear | Blue | 3.0 | 3.8 | 465 | 475 | 110 | 350 | 10 | 120 |
| RL-S150PGC | InGaN | Water Clear | Pure Green | 3.0 | 3.8 | 515 | 525 | 125 | 460 | 10 | 120 |
| RL-S150WC | InGaN | Water Clear | White | 3.0 | 3.8 | Typical $\lambda_d=0.3$ Typical $\lambda_s=0.3$ | | 125 | 600 | 10 | 120 |

| | | | | | |
|----------------|---------|----------|----------|-------|----------|
| Test condition | IF=20mA | AIF=20mA | AIF=20mA | AVR=5 | VIF=20mA |
|----------------|---------|----------|----------|-------|----------|

Absolute Maximum Ratings at Ta=25°C

| Parameter | MAX. | Unit |
|--------------------------------------------------------------|---------------------|-------|
| Power Dissipation | 100 | mW |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) | 100 | mA |
| Continuous Forward Current | 40 | mA |
| Dating Linear From 50°C | 0.4 | mA/°C |
| Reverse Voltage | 5 | V |
| Operating Temperature Range | -40°C to +80°C | |
| Storage Temperature Range | -40°C to +80°C | |
| Lead Soldering Temperature [4mm(.157") From Body] | 260°C for 5 Seconds | |

FEATURES:

- ◆ Low power consumption
- ◆ Wide viewing angle
- ◆ Ideal for backlight and indicator
- ◆ Various colors and lens types available
- ◆ Package:4000pcs/reel

- Note:**
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve.
 2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity.
 3. The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram and represents the single wavelength, which defines the color of the device.

Reliability Test

| No | Item | Test Condition | Test Hours/Cycles | Samples Tested | Acc./Rej |
|----|------------------------------------|----------------------------------------|-------------------|----------------|----------|
| 1 | Room Temperature DC Operating Life | Ta=25°C, IF=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 |

Typical Electrical / Optical Characteristics Curves (25°C Ambient Temperature Unless Otherwise Noted)

