

FLASHING LED– BLINKING LED**Part Nos. 08L5013SRC-B, 08L5013UBC-B, 08L5013UGC-B, 08L5013UYC-B****ULTRA LED LAMPS**

FYL-5013XX-XX

■ Features:

- 5.0mm Round Type LED Lamps.
- Ultra brightness.
- Choice of various viewing angles.
- Water clear lens.
- Popular T-1 diameter package.
- IC compatible /Low current capability.

■ Part No.:

| |
|-------------|
| FYL-5013SRX |
| FYL-5013UYX |
| FYL-5013UGX |
| FYL-5013UBX |

Note:X = Len Color: C=Water Clear,

■ Description:

- Color Code & Chip characteristics: (Test Condition: IF=20mA)

| Emitting Color | | Dice Material | Peak Wave Length(λ_P) (nm) | Spectral Line halfwidth($\Delta\lambda_{1/2}$) | Forward Voltage(VF) Unit:V | | Luminous Intensity (lv) Unit:ucd |
|----------------|--------------|---------------|--------------------------------------|--|-------------------------------|------|-------------------------------------|
| | | | | | Typ | Max | |
| SR | Hi Red | AlGaAs,SH | 660nm | 20nm | 1.85 | 2.20 | 3500 |
| UY | Ultra Yellow | AlGaInP | 590nm | 20nm | 2.10 | 2.50 | 7000 |
| UG | Ultra Green | AlGaInP | 574nm | 30nm | 2.20 | 2.50 | 5000 |
| UB | Ultra Blue | InGaN | 470nm | 30nm | 3.50 | 4.20 | 7000 |

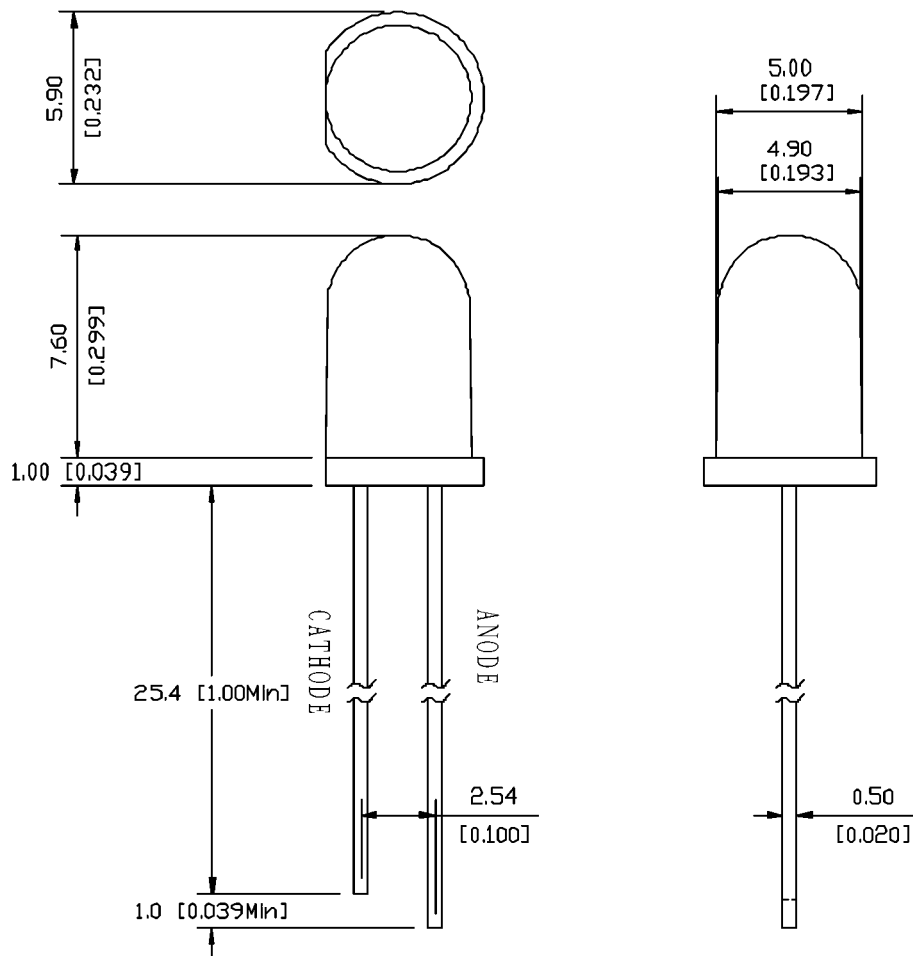
■ Electrical-optical characteristics: (Ta=25°C)

| Parameter | Symbol | AlGaAs | GaAsP | AlGaN | InGaN | Unit |
|----------------------------|----------|--------|-------|-------|-------|------|
| Power Dissipation | P_{ad} | 60 | 80 | 75 | 120 | mW |
| Peak Forward Current * | I_{pf} | 150 | 150 | 150 | 100 | mA |
| Continuous Forward Current | I_{af} | 25 | 30 | 30 | 30 | mA |

Notes:

- * Test Condition = Duty 0.1, 10KHZ

■ Package configuration & Internal circuit diagram:



Notes:

- All dimensions are in millimeters (inches)
- Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
- Specifications are subject to change without notice.

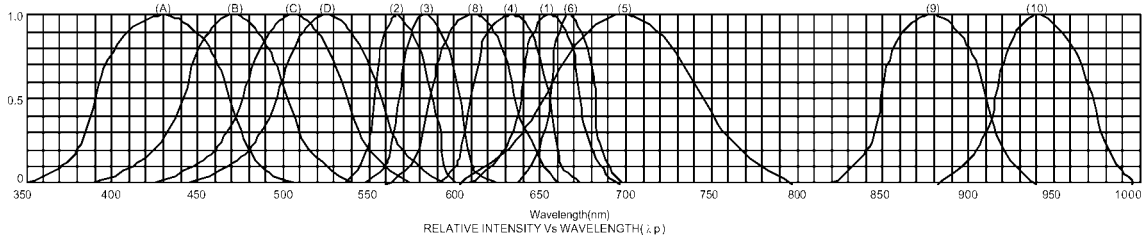
ULTRA LED LAMPS

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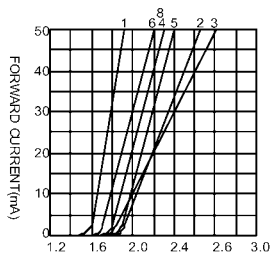
Absolute maximum ratings (Ta=25°C)

| | |
|--|----------------|
| Reverse Voltage | 5V |
| Reverse Current | 20μA |
| Operating Temperature Range | -40°C to +85°C |
| Storage Temperature Range | -40°C to +85°C |
| Lead Solder Temperature (1.6mm(1/16") from body) 230°C for 5 Seconds | |

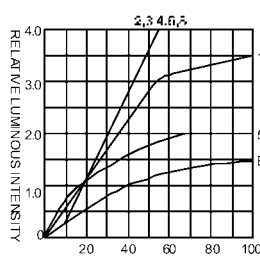
Typical electrical-optical characteristics curves:



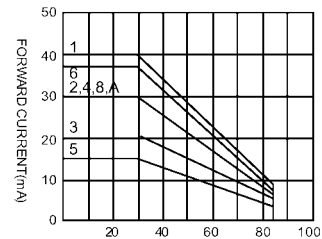
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) - GaN/SiC 430nm/Blue
- (B) - InGaN/SiC 470nm/Blue
- (C) - InGaN/SiC 505nm/Ultra Green
- (D) - InGaAl/SiC 525nm/Ultra Green



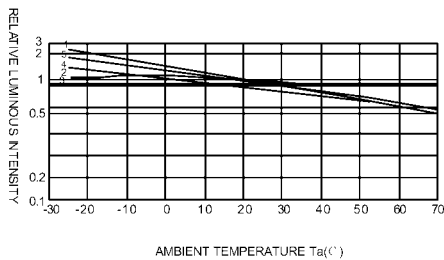
FORWARD VOLTAGE (V)
FORWARD CURRENT vs.
FORWARD VOLTAGE



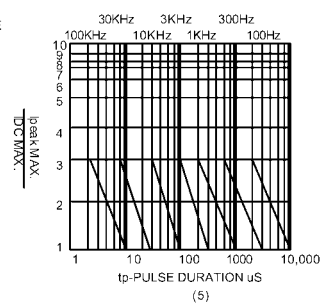
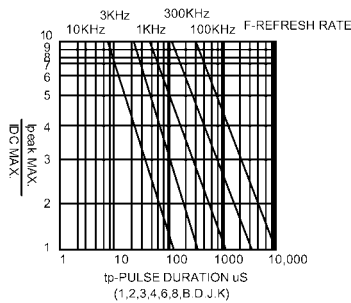
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY vs. FORWARD
CURRENT



AMBIENT TEMPERATURE Ta (°C)
FORWARD CURRENT vs. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta (°C)



NOTE: 25°C free air temperature unless otherwise specified