

PRODUCT SPECIFICATION

DATE : 05/27/2004

| | | | |
|---|-----------------|--------------|----------|
| cosmo ELECTRONICS CORPORATION | LAMP LED: | NO. 60L51004 | REV. |
| | KLR05UYX | SHEET 1 OF 2 | 1 |

KLR05UYX

FEATURE:

- SUPER LUMINOSITY YELLOW LED (AlInGaP/GaAs).
- WATER CLEAR PACKAGE.
- 5 mm ALL RESIN MOLD.
- WIDE VIEWING ANGLE.
- UV RESISTENT EPOXY.

ABSOLUTE MAXIMUM RATING: Ta=25°C

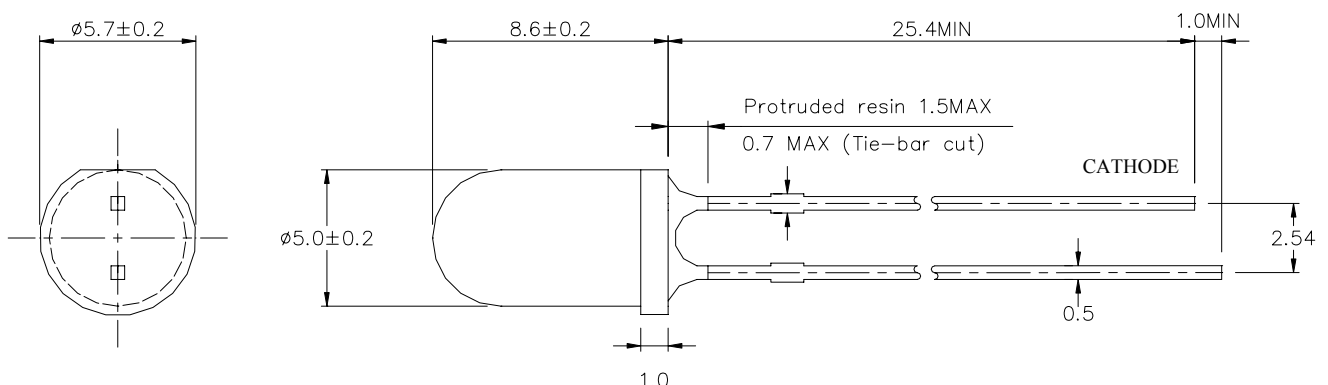
- POWER DISSIPATION..... 120mW
- PEAK FORWARD CURRENT..... 100mA *
- CONTINUOUS FORWARD CURRENT..... 50mA
- DERATING FACTOR..... 0.67mA/°C
- REVERSE VOLTAGE..... 5V
- OPERATING TEMPERATURE..... -25 TO +85°C
- STORAGE TEMPERATURE..... -35 TO +100°C
- SOLDERING TEMPERATURE..... 260°C / 5sec

*Note Duty Ratio=1/16 , Pulse Width=0.1ms

ABSOLUTE OPTICAL CHARACTERISTIC Ta=25°C

| PARAMETER | | SYMBOL | MIN | TYP | MAX | UNIT |
|------------------------------|--------------------|-------------------|------|-----|------|------|
| Forward Voltage | If=20mA | V _F | | 2.0 | 2.4 | V |
| Luminous Intensity | If=20mA | I _v | 1900 | | 5500 | mcd |
| Dominant Wavelength | If=20mA | λ _d | | 590 | | nm |
| Spectrum Radiation Bandwidth | If=20mA | Δλ | | 20 | | nm |
| Reverse Current | V _R =5V | I _R | | | 10 | μA |
| Viewing Angle | | 2θ _{1/2} | | 15 | | deg |

OUTLINE DIMENSIONS Unit (mm) Tolerance (±0.25)



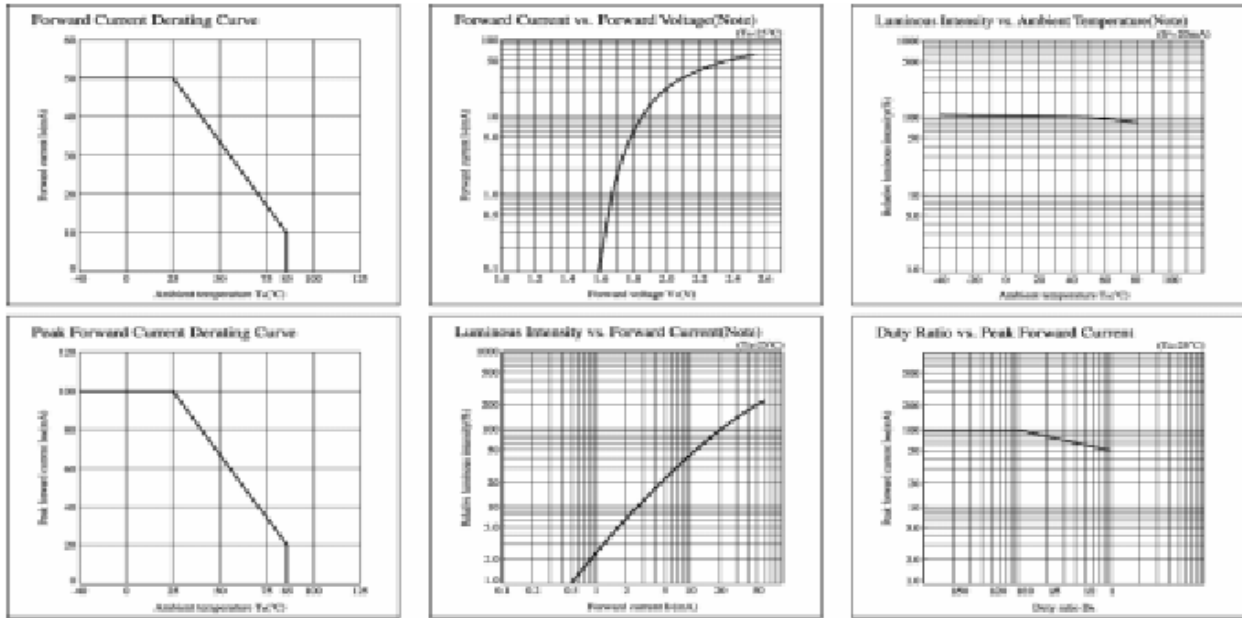
PRODUCT SPECIFICATION

DATE : 05/27/2004

| | | | |
|---|-----------------|--------------|------|
| cosmo ELECTRONICS CORPORATION | LAMP LED: | NO. 60L51004 | REV. |
| | KLR05UYX | SHEET 2 OF 2 | 1 |

KLR05UYX

Characteristics Diagrams



Device :
 AlInGaP Yellow LED
 T 1-3/4 (5mm) Standard LED Package
 View Angles : 8° 15° 23° 30°

Application :
 Traffic Signals
 Railroad Signals
 Commercial Outdoor Signs
 Auto Motive Interior Lights

Luminous Intensity Rank
 (mcd at 20mA)

| Rank Name | Min | Max |
|-----------|-------|-------|
| P | 880 | 1150 |
| Q | 1150 | 1500 |
| R | 1500 | 1900 |
| S | 1900 | 2500 |
| T | 2500 | 3200 |
| U | 3200 | 4200 |
| V | 4200 | 5500 |
| W | 5500 | 7200 |
| X | 7200 | 9300 |
| Y | 9300 | 12000 |
| Z | 12000 | 16000 |

Color Rank λ_d (nm at 20 mA)

| Rank Name | Min | Max |
|-----------|-------|-------|
| 1 | 585 | 587.5 |
| 2 | 587.5 | 590 |
| 3 | 590 | 592.5 |
| 4 | 592.5 | 595 |

Note :
 Tolerance for intensity rank bin limit $\pm 15\%$
 Tolerance for color rank bin limit is $\pm 1\text{nm}$