



EXCEED PERSEVERANCE ELECTRONIC INDUSTRY CO., LTD.

深圳市超毅光电子有限公司

φ 4.9mm ROUND TYPE WITH FLANGE LEDS.

Part Number:

RL511-RD313
RL511-HY213

RL511-SR113
RL511-YG413

RL511-HO313
RL511-SO423

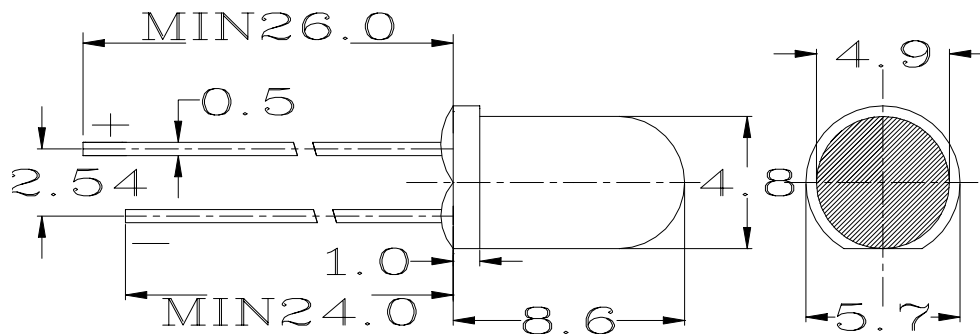
Features

- 1.LOW POWER CONSUMPTION.
- 2.RELIABLE AND RUGGED.
- 3.EXCELLENT UNIFORMITY OF LIGHT OUTPUT.
- 4.SUITABLE FOR LEVEL INDICATOR.
- 5.I.C COMPATIBLE.
- 6.LONG LIFE-SOLIDSTATE RELIABILTY.

Notes:

- 1.All dimensions are in millimeters (inches)
- 2.Tolerance is $\pm 0.25(0.01'')$ unless otherwise niter
- 3.Lead spacing is measured where the lead emerge package
- 4.Specifications are subject to change without notice

Package Dimensions



Selection Guide

| Part NO. | Lens Type | Material | Chip | | Viewing Angle |
|-------------|-------------------------|-------------|----------|-------|---------------|
| | | | IV (mcd) | | |
| | | | @10mA | *20mA | 2 θ 1/2 |
| RL511-RD313 | Bright Red Diffused | GaP/GaP | 1.2 | 2.0 | 45° |
| RL511-SR113 | Super Red Diffused | GaAlAs/GaAs | 42 | 80 | 45° |
| RL511-HO313 | Orange Red Diffused | GaAsP/GaP | 35 | 63 | 45° |
| RL511-HY213 | Yellow Diffused | GaAsP/GaP | 28 | 45 | 45° |
| RL511-YG413 | Yellow Green Diffused | GaP/GaP | 34 | 58 | 45° |
| RL511-SO423 | Super Amber Transparent | GaAsP/GaP | 34 | 62 | 25° |

1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2the optical centerline value.

2. *Luminous intensity with measured at 20mA.



EXCEED PERSEVERANCE ELECTRONIC INDUSTRY CO., LTD.

深圳市超毅光电子有限公司

Electrical/Optical characteristics at TA=25°C.

| Symbol | Parameter | Device | Type. | Max. | Units | Test Conditions |
|------------------------|-----------------------|--|--|--|-------|-----------------|
| λ_{peak} | Peak Wavelength | Bright Red Super Red Orange Red Yellow Yellow Green Super Amber | 700 660 630 585 570 610 | | nm | IF-20mA |
| λ_D | Dominate Wavelength | Bright Red Super Red Orange Red Yellow Yellow Green Super Amber | 690 640 610 580 560 600 | | nm | IF-20mA |
| $\Delta \lambda_{1/2}$ | Spectral Line Halfwit | Bright Red Super Red Orange Red Yellow Yellow Green Super Amber | 45 20 45 35 30 45 | | nm | IF-20mA |
| C | Capacitance | Bright Red Super Red Orange Red Yellow Yellow Green Super Amber | 40 45 15 20 15 15 | | pF | VF=0V; f=1MHZ |
| VF | Forward Voltage | Bright Red Super Red Orange Red Yellow Yellow Green Super Amber | 2.1 1.8 2.0 2.0 2.1 2.0 | 2.8 2.4 2.8 2.8 2.8 2.8 | V | IF-20mA |
| IR | Reverse Current | All | | 10 | uA | VR=5V |

Absolute Maximum Ratings at TA=25°C.

| Parameter | Bright Red | Super Red | Orange Red | Yellow | Yellow Green | Super Amber | Units |
|----------------------|------------|-----------|------------|--------|--------------|-------------|-------|
| Power dissipation | 45 | 110 | 100 | 85 | 100 | 100 | mW |
| DC Forward Current | 25 | 25 | 25 | 25 | 25 | 25 | mA |
| Peak Forward Current | 50 | 200 | 160 | 160 | 160 | 160 | mA |
| Reverse Voltage | 5 | 5 | 5 | 5 | 5 | 5 | V |

NOTES:

- 1.Operating temperature: 40°C. TO 80°C.
- 2.Lead soldering: 260°C for 5 seconds.