

# TOL-502URNC

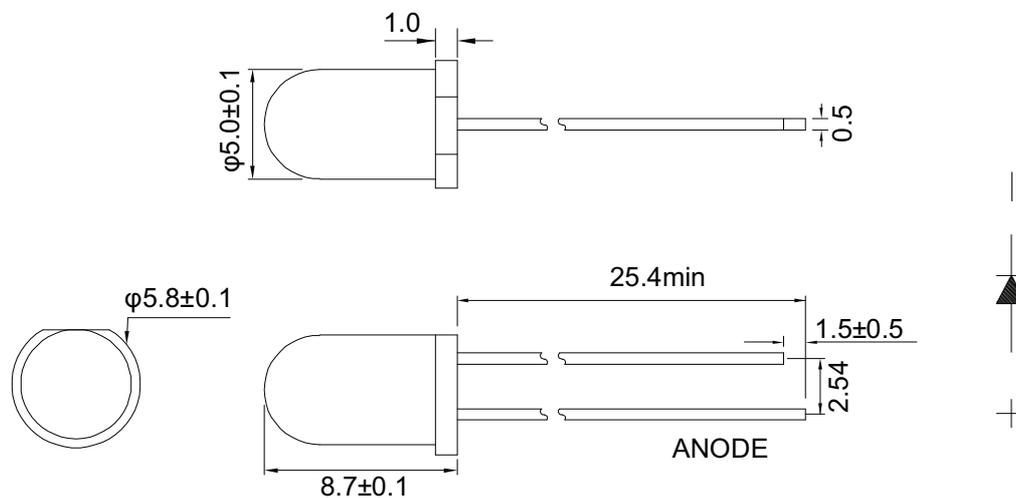
## Lamp LED

Part Number	Chip		Lens Color
	Material	Source Color	
TOL-502URNC	AlGaInP	Ultra Red	Water Clear

### Features

- I.C. compatible.
- Low power consumption.
- Compatible with wave soldering process.
- 5mm diameter package.
- Long life, stable and reliable.
- RoHS compliant.

### Dimensions



#### Notes:

1. All dimensions are in millimeter.
2. Tolerance is  $\pm 0.25 \text{ mm}$  unless otherwise noted.

### Absolute Maximum Rating @ Ta=25°C

Parameter	Maximum Rating	Unit
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	100	mA
Power Dissipation (Tamb≤60°C)	75	mW
Continuous Forward Current	20	mA
Reverse Voltage	5	V
Operating Temperature Range	-40°C to +100°C	
Storage Temperature Range	-40°C to +100°C	
Wave Soldering Profile For Lead Free Soldering	260°C for 5 Sec	

### Electrical / Optical Characteristic @ Ta=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Luminous Intensity	I <sub>v</sub>		3800		mcd	I <sub>F</sub> =20mA
Viewing Angle	2θ <sub>1/2</sub>		20		deg	I <sub>F</sub> =20mA
Dominant Wavelength	λ <sub>d</sub>		630		nm	I <sub>F</sub> =20mA
Spectral Line Half-Width	Δλ		15		nm	I <sub>F</sub> =20mA
Forward Voltage	V <sub>F</sub>		2.0		V	I <sub>F</sub> =20mA
Reverse Current	I <sub>R</sub>			10	μA	V <sub>R</sub> =5V

\* Please refer to CIE 1931 chromaticity diagram.

## Bin Code List for Reference

Luminous Intensity		Unit : mcd@20mA	
Bin Code	Min	Max	
A43	1930	2410	
A44	2410	3000	
A45	3000	3800	
A46	3800	4800	
A47	4800	6000	
A48	6000	7500	

Tolerance of Luminous Intensity on each bin is  $\pm 15\%$ .

Forward Voltage		Unit : V@20mA	
Bin Code	Min	Max	
V08	1.8	2.0	
V06	2.0	2.2	
V07	2.2	2.4	

Tolerance for each Forward Voltage Bin is  $\pm 0.1V$ .

Dominant Wavelength		Unit : nm@20mA	
Bin Code	Min	Max	
104	626	628	
105	628	630	
106	630	632	
107	632	634	

Tolerance of Dominant Wavelength on each bin is  $\pm 1nm$