

# **ROUND-TOWER TYPE LED**

## **Features**

- High intensity
- Wide viewing angle
- General purpose leads
- Reliable and rugged

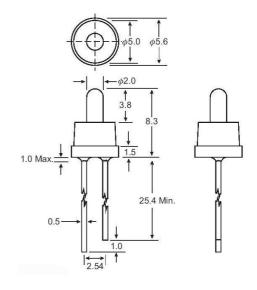
Absolute Maximum Ratings at Ta=25℃

7 to colute maximum ratings at 14 25 0							
Parameter	Max.	Unit					
Power Dissipation	100	mW					
Peak Forward Current	100	mA					
(1/10 Duty Cycle, 0.1ms Pulse Width)	100						
Continuous Forward Current	40	mA					
Derating Linear From 50°C	0.4	mA / ℃					
Reverse Voltage	5	V					
Operating Temperature Range	-40°C to +80°C						
Storage Temperature Range	-40°C to +80°C						
Lead Soldering Temperature	260°C for E Seconds						
[4mm(.157") From Body]	260°C for 5 Seconds						

#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Protruded resin under flange is 1.0mm (.04") max.
- 3. Lead spacing is measured where the leads emerge from the package.
- 4. Specifications are subject to change without notice.

## **Package Dimensions**



Unit: mm (inches)

Tolerance: ± 0.25mm (.010") max.

Part No.	Emitting Color	Lens Color	Peak Wavelength λp (nm)	Vf (V) I <sub>f</sub> = 20mA (Note E1)	Iv (mcd) (Note E2)	Viewing Angle 2 <i>θ</i> <sub>1/2</sub> (Deg) (Note E3)
				Min Typ	Min Typ	
EL-2R83X31	Hi-Red	Red Diffused	660	1.7 - 2.0	20 – 40	130
EL-2G83X31	Hi-Green	Green Diffused	570	1.7 - 2.2	15 – 25	130
EL-2Y83X31	Hi-Yellow	Yellow Diffused	590	1.7 - 2.0	15 – 25	130
EL-2O83X31	Hi-Orange	Orange Diffused	610	1.7 - 2.2	18 – 30	130

### Parameter Test Condition

 $Luminous\ Intensity \\ I_f = 20mA\ (Note\ E1.\ Luminous\ intensity\ is\ measured\ with\ a\ light\ sensor\ and\ filter\ combination\ that\ approximates$ 

the CIE eye-response curve.)

Dominant Wavelength  $I_f = 20mA$  (Note E2: The dominant wavelength ( $\lambda d$ ) is derived from the CIE chromaticity diagram and represents

the single wavelength which defines the color of the device.)

Peak Emission Wavelength  $I_f = 20 \text{mA}$ 

Viewing Angle (Note E3.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity.)

 $\begin{array}{lll} \mbox{Spectral Line Half-Width} & \mbox{I}_{\mbox{f}} = 20\mbox{mA} \\ \mbox{Forward Voltage} & \mbox{I}_{\mbox{f}} = 20\mbox{mA} \\ \mbox{Reverse Current} & \mbox{I}_{\mbox{f}} = 20\mbox{mA} \\ \end{array}$