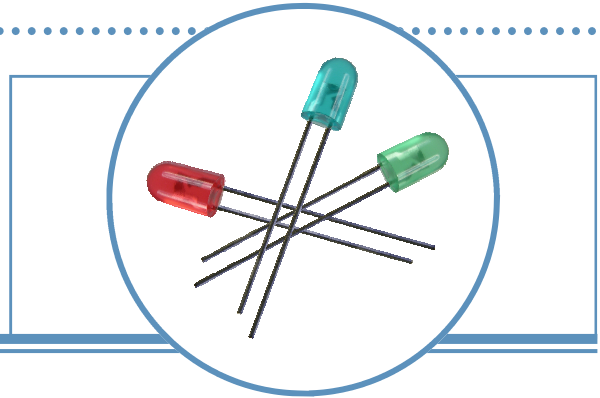


# Round Red Through-Hole LED Lamp (3 mm)

## OVLBR4C7

- High brightness with well-defined spatial radiation patterns
- UV-resistant epoxy lens
- Red (623 nm)

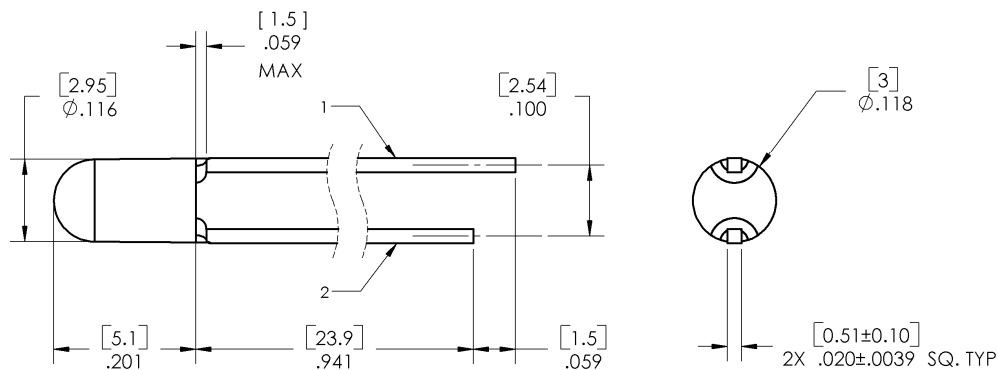


The **OVLBR4C7** is a high-intensity AlInGaP LED mounted in a clear plastic T-1 package. This LED provides a well-defined and even emission pattern. Its UV-resistant epoxy lens makes this device an optimal solution for outdoor applications.

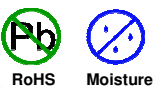
## Applications

- Pedestrian signals
- Signage and architectural lighting
- Backlighting
- Automotive
- Outdoor/indoor displays

Part Number	Material	Emitted Color	Intensity Typ. mcd	Lens Color
OVLBR4C7	AlInGaP	Red	1800	Water Clear



1 ANODE 2 CATHODE DIMENSIONS ARE IN INCHES AND [MILLIMETERS].



**DO NOT LOOK DIRECTLY AT LED WITH UNSHIELDED EYES OR DAMAGE TO RETINA MAY OCCUR.**

OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

# Round Red Through-Hole LED

## OVLBR4C7



### Absolute Maximum Ratings

$T_A = 25^\circ\text{C}$  unless otherwise noted

Storage Temperature Range	-40 ~ +100° C
Operating Temperature Range	-40 ~ +85° C
Reverse Voltage	5 V
Continuous Forward Current	30 mA
Peak Forward Current (10% Duty Cycle, 1 KHz)	100 mA
Power Dissipation	78 mW
Current Linearity vs. Ambient Temperature	-0.5 mA/° C
LED Junction Temperature	125° C
Lead Soldering Temperature (3 mm from the base of the epoxy bulb) <sup>1</sup>	260° C

Note:

- Solder time less than 5 seconds at temperature extreme.

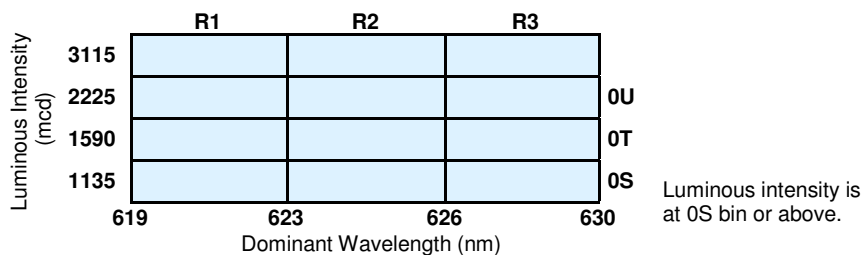
### Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
$I_V$	Luminous Intensity	1135	1800	----	mcd	$I_F = 20\text{ mA}$
$V_F$	Forward Voltage	----	2.2	2.6	V	$I_F = 20\text{ mA}$
$I_R$	Reverse Current	----	----	10	$\mu\text{A}$	$V_R = 5\text{ V}$
$\lambda_P$	Peak Wavelength	----	633	----	nm	$I_F = 20\text{ mA}$
$\lambda_D$	Dominant Wavelength	619	623	630	nm	$I_F = 20\text{ mA}$
$2\Theta_{1/2H-H}$	50% Power Angle	----	45	----	deg	$I_F = 20\text{ mA}$

### Standard Bins ( $I_F = 20\text{ mA}$ )

Lamps are sorted to luminous intensity ( $I_V$ ) and dominant wavelength ( $\lambda_D$ ) bins shown. Orders for OVLBR4C7 may be filled with any or all bins contained as below.



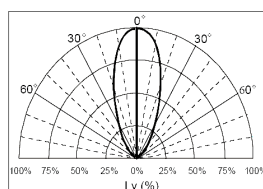
Forward Voltage ( $V_F$ )

Rank	G	H	J	6
Voltage	1.8–2.0	2.0–2.2	2.2–2.4	2.4–2.6

### Important Notes:

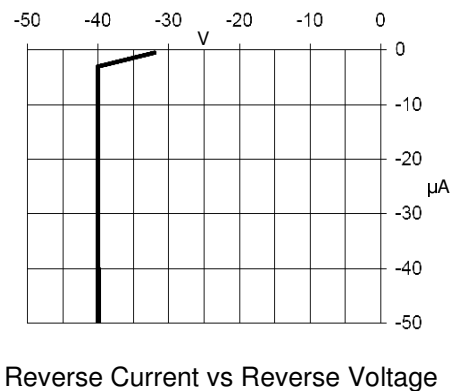
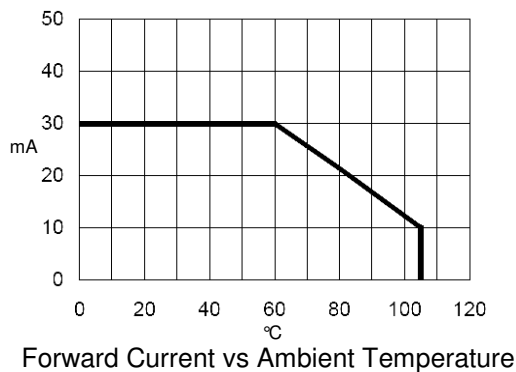
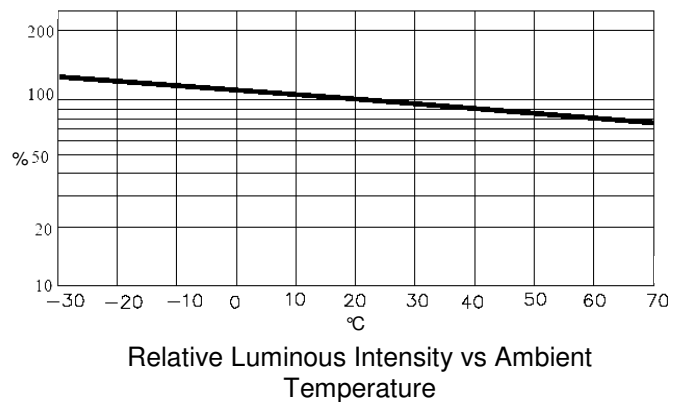
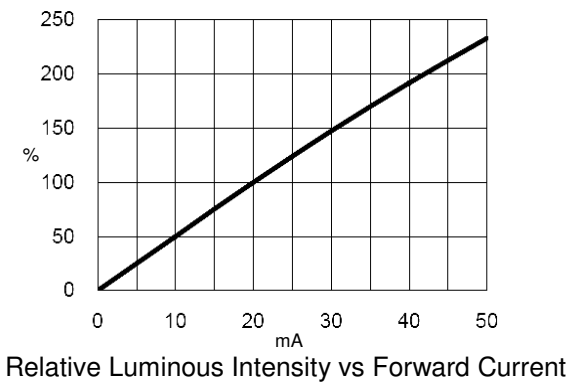
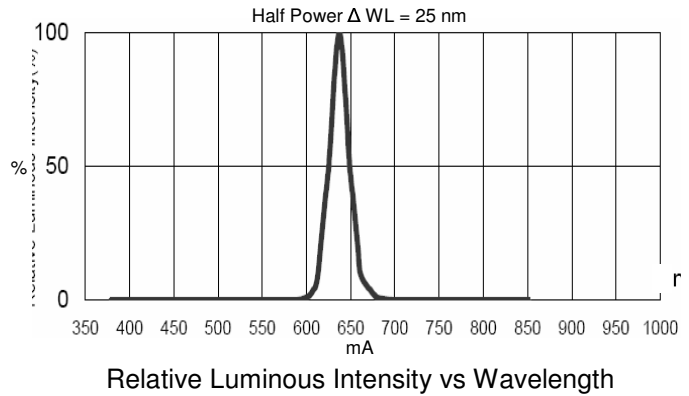
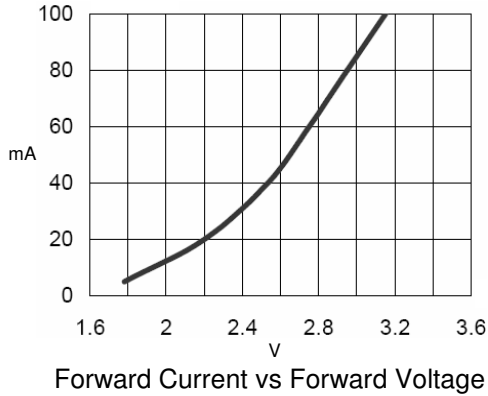
- All ranks will be included per delivery, rank ratio will be based on the chip distribution.
- To designate luminous intensity ranks, please contact OPTEK.
- Pb content <1000 PPM.

### Beam Pattern



OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.

### Typical Electro-Optical Characteristics Curves

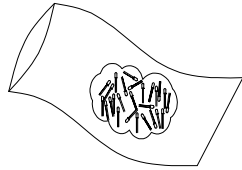


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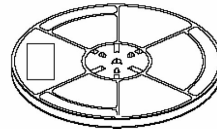
# Round Red Through-Hole LED

## OVLBR4C7

Packing Information: Available in bulk or reel

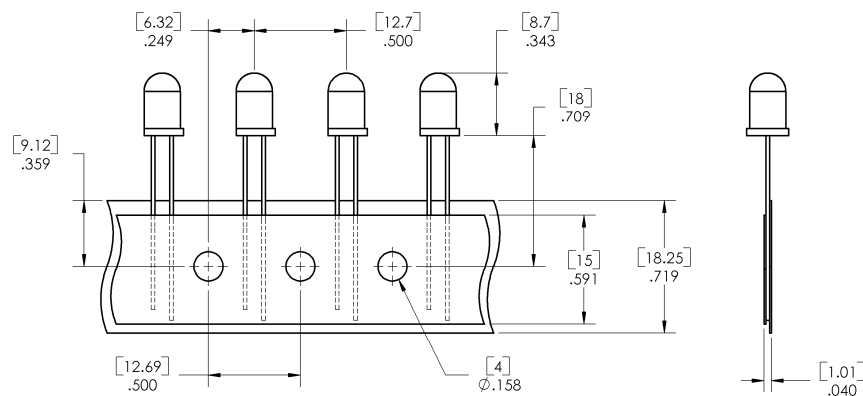


Bulk: 500 pcs/bag



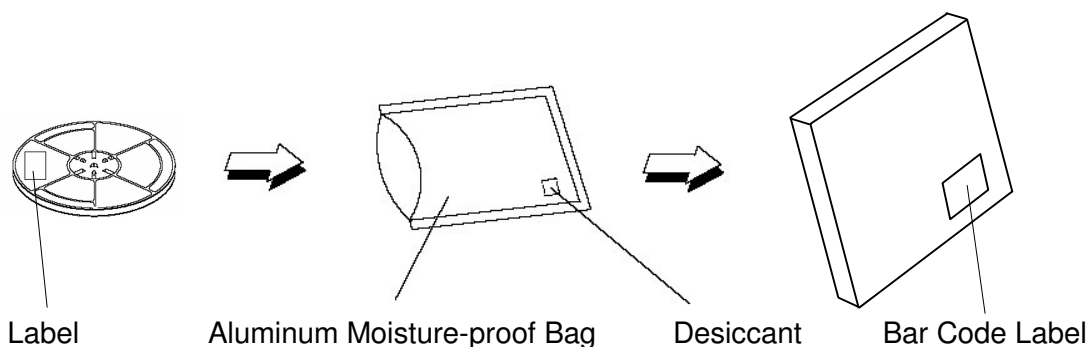
13-Inch reel: 2500 pcs/reel

Carrier Tape Dimensions: Loaded quantity 2500 pieces per reel



DIMENSIONS ARE IN INCHES AND [MILLIMETERS].

## Moisture Resistant Packaging



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