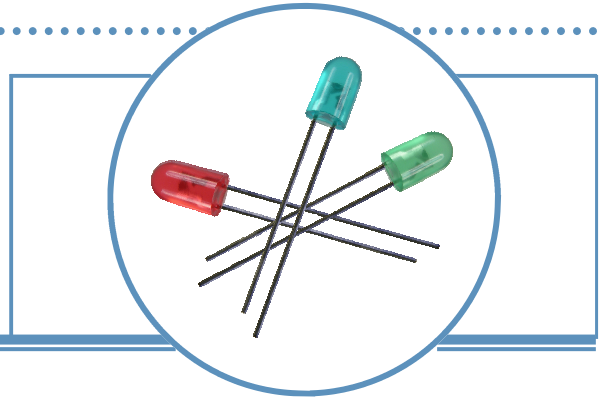


Round Blue Through-hole LED Lamp (3mm)

OVLBB4C7

- High Brightness with Well-defined Spatial Radiation Patterns
- UV-resistant Epoxy Lens
- Blue (470nm)

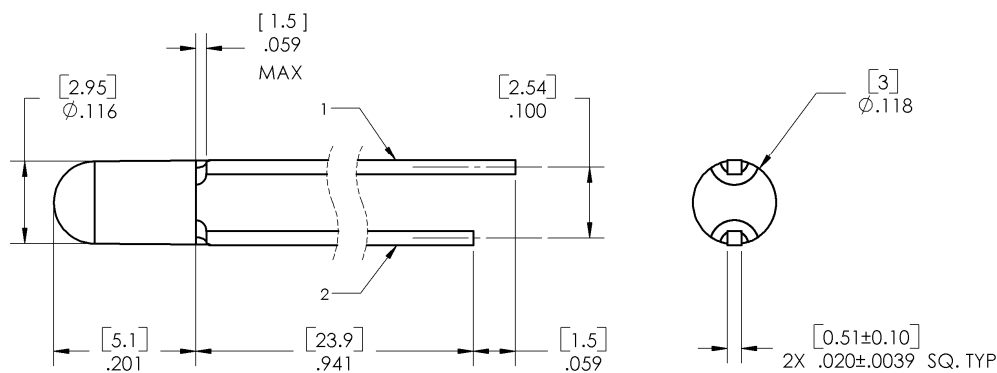


The OVLBB4C7 is a high-intensity InGaN LED mounted in a clear plastic T-1 package. Its UV-resistant epoxy lens makes this device an optimal solution for outdoor applications. This LED provides a well-defined and even emission pattern.

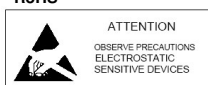
Applications

- Pedestrian Signals
- Signage and Architectural Lighting
- Backlighting
- Automotive

Part Number	Material	Emitted Color	Intensity Typ. mcd	Lens Color
OVLBB4C7	InGaN	Blue	900	Water Clear



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



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

Round Blue Through-hole LED (3mm) OVLBB4C7



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	20 mA
Peak Forward Current (10% Duty Cycle, 1KHz)	50 mA
Power Dissipation	80 mW
Current Linearity vs. Ambient Temperature	-0.2 mA/°C
LED Junction Temperature	125°C
Lead Soldering Temperature (3mm from the base of the epoxy bulb) ¹	260°C

Note:

- Solder time less than 5 seconds at temperature extreme.

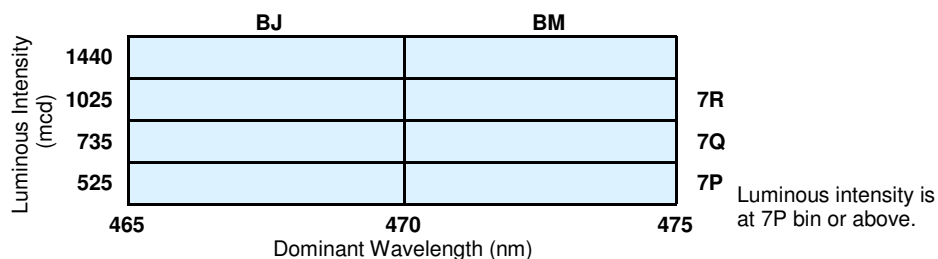
Electrical Characteristics

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

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I_V	Luminous Intensity	525	900	----	mcd	$I_F = 20\text{mA}$
V_F	Forward Voltage	----	3.4	4.0	V	$I_F = 20\text{mA}$
I_R	Reverse Current	----	----	50	μA	$V_R = 5\text{V}$
λ_P	Peak Wavelength	----	466	----	nm	$I_F = 20\text{mA}$
λ_D	Dominant Wavelength	465	470	475	nm	$I_F = 20\text{mA}$
$2\Theta_{1/2\text{H-H}}$	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 (λ_D) bins shown. Orders for OVLBB4C7 may be filled with any or all bins contained as below.



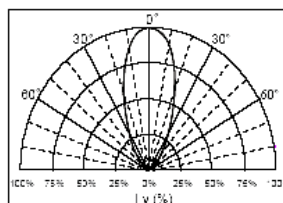
Forward Volt-

Rank	H	J	K	L
Voltage	2.6–3.0	3.0–3.3	3.3–3.6	3.6–4.0

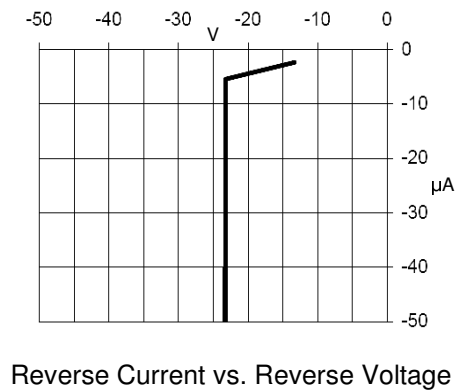
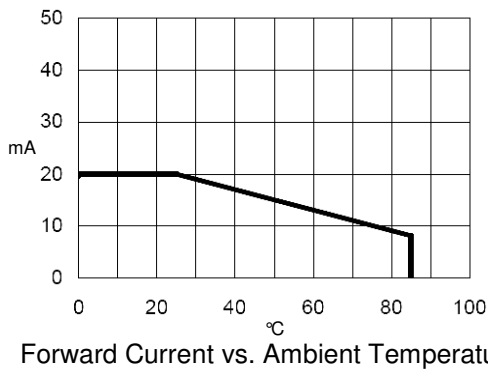
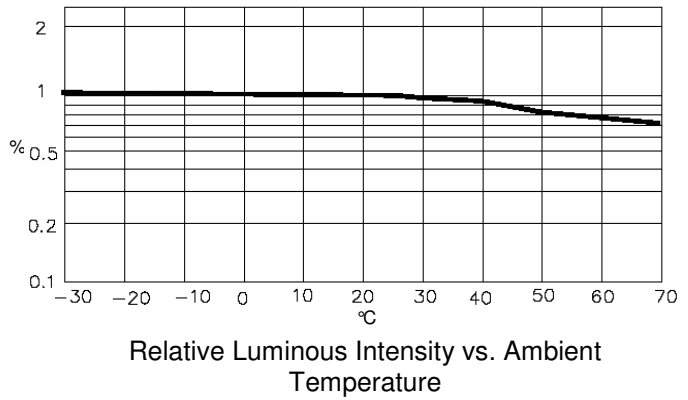
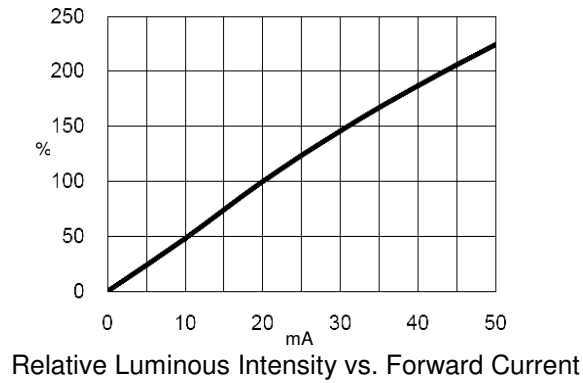
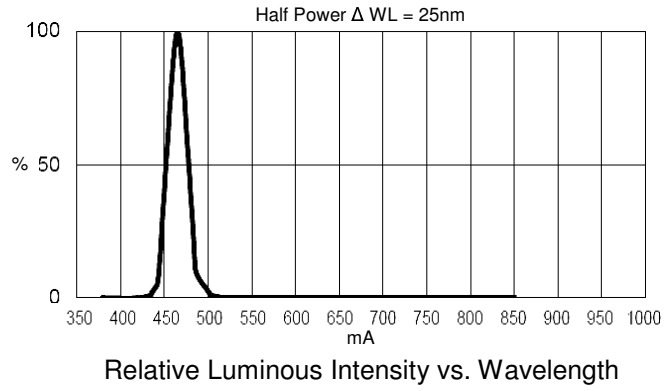
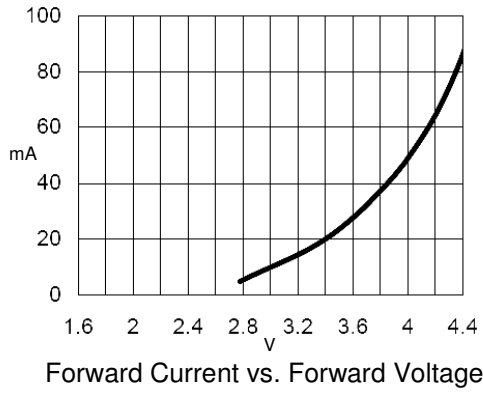
Important Notes:

- 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 <1000PPM.

Beam Pattern

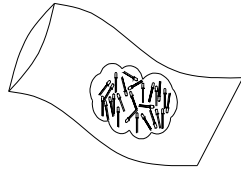


Typical Electro-Optical Characteristics Curves

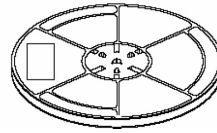


Round Blue Through-hole LED (3mm) OVLBB4C7

Packing Information: Available in Bulk or Reel

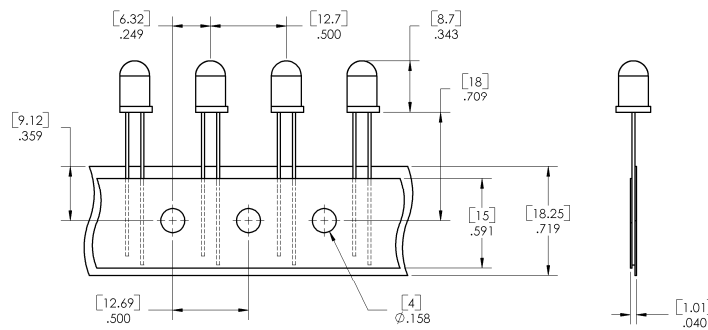


Bulk: 500 pcs/bag



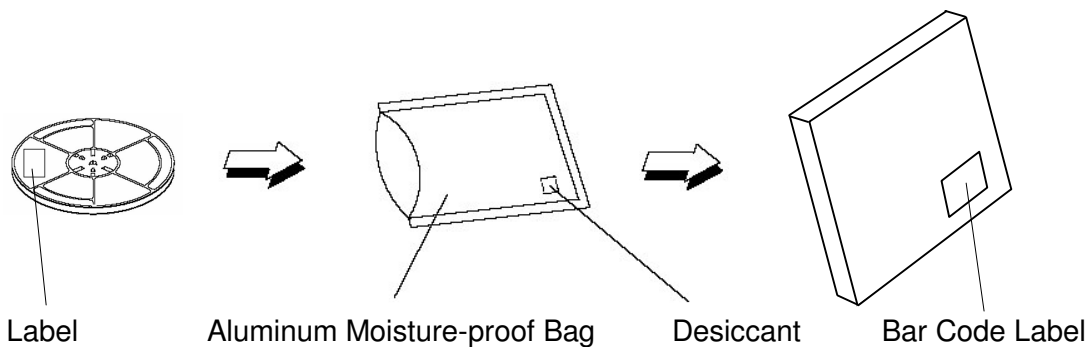
13-Inch Reel: 2500 pcs/reel

Carrier Tape Dimensions



DIMENSIONS ARE IN INCHES AND [MILLIMETERS].

Moisture Resistant Reel Packaging



Issue	Change Description	Approval	Date
1.0	Initial Release	J. Haynie	7/20/05