

# Blue PLCC4 Surface Mount LED

## OVSABBC2R8

- High intensity with low power consumption
- White PLCC4 packaged in 8mm tape on 7" diameter reel
- Compatible with automatic placement equipment
- Dimensions: 3.5x2.8x1.95mm
- 120° viewing angle

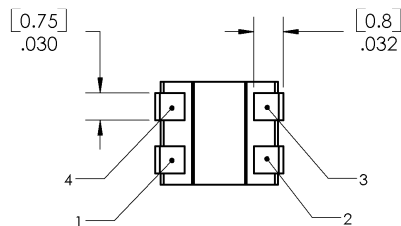
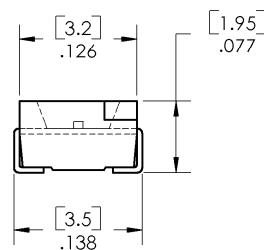
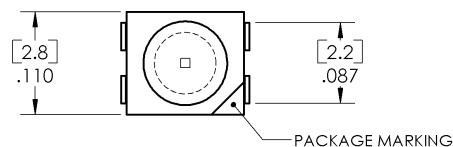


The OVSABBC2R8 is designed for wide angle, uniform light output. Its internal reflector and colorless clear lens optimize luminous intensity and make it ideal for backlighting applications and for coupling with light guides.

### Applications

- Traffic Lights
- Signal and Symbol Luminaire
- Mono-color Indicators
- Backlighting (LCD, Switches, Displays, Illuminated Advertising)
- Interior Automotive Lighting (Instrumentation Clusters)
- Safety Marker Lights (Steps, Exit Ways)

Part Number	Material	Emitted Color	Intensity Typ. mcd	Lens Color
OVSABBC2R8	InGaN	Blue	200	Water Clear



1, 2, 3 CATHODE 4 ANODE  
DIMENSIONS ARE IN INCHES AND [MILLIMETERS].



Data is subject to change without prior notice.

### Absolute Maximum Ratings

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

Storage Temperature Range	-40 ~ +100°C
Operating Temperature Range	-40 ~ +100°C
Junction Temperature	110°C
Junction/Ambient <sup>1</sup>	350°C/W
Junction/Solder Point	200°C/W
Reverse Voltage	5 V
Continuous Forward Current	30 mA
Peak Forward Current (10% Duty Cycle, PW ≤ 100 μsec)	100 mA
Power Dissipation	140 mW

Note:

1.  $R_{th}$  test condition: Mounted on PC board FR 4 (pad size ≥ 16mm<sup>2</sup>)

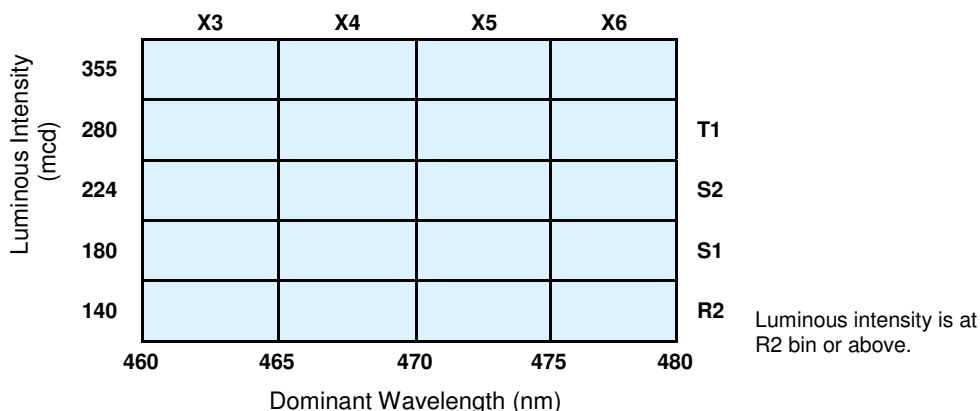
### Electrical Characteristics

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

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
$I_V$	Luminous Intensity	140	200	----	mcd	$I_F = 30\text{mA}$
$V_F$	Forward Voltage	----	3.9	4.6	V	$I_F = 30\text{mA}$
$I_R$	Reverse Current	----	----	10	μA	$V_R = 5\text{V}$
$\lambda_D$	Dominant Wavelength	460	470	480	nm	$I_F = 30\text{mA}$
$2\ \Theta_{1/2}$	50% Power Angle	----	120	----	deg	$I_F = 30\text{mA}$

### Standard Bins ( $I_F = 30\text{mA}$ )

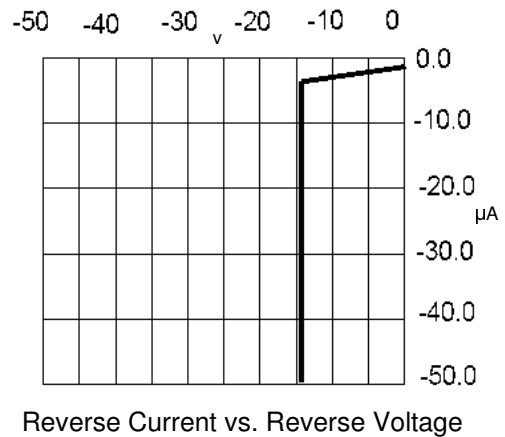
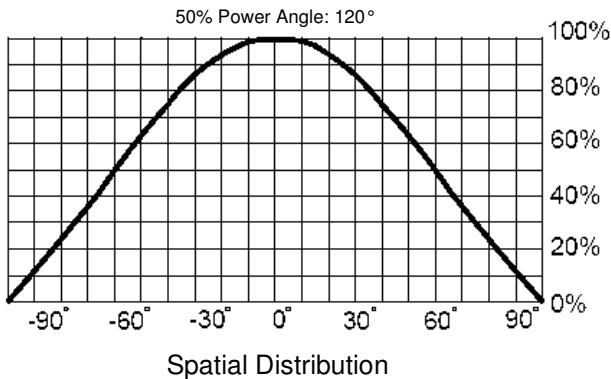
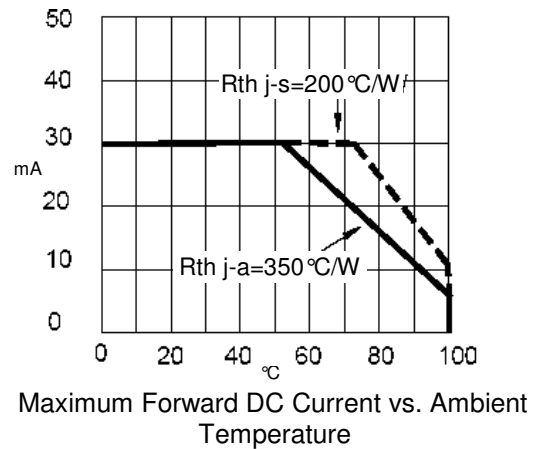
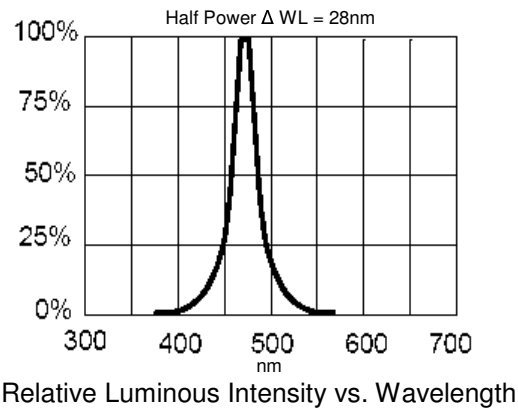
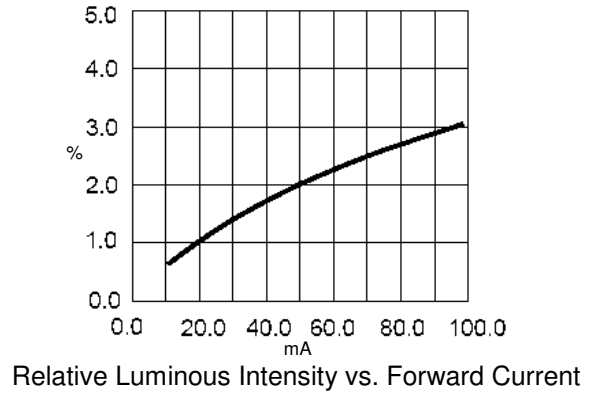
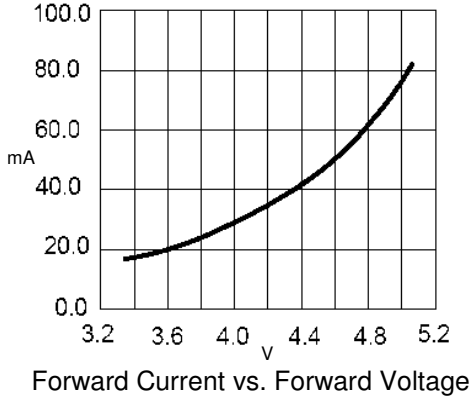
Lamps are sorted to luminous intensity ( $I_V$ ) and dominant wavelength ( $\lambda_D$ ) bins shown. Orders for OVSABBC2R8 may be filled with any or all bins contained as below.



### Important Notes:

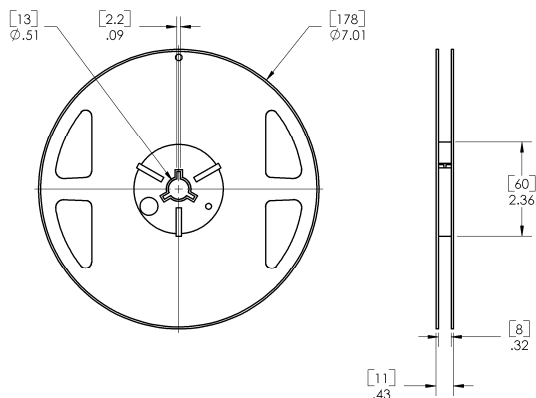
1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
2. To designate luminous intensity ranks, please contact OPTEK.

Typical Electro-Optical Characteristics Curves

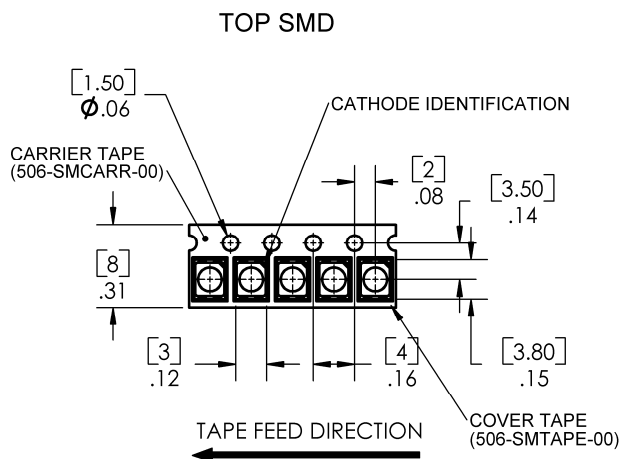


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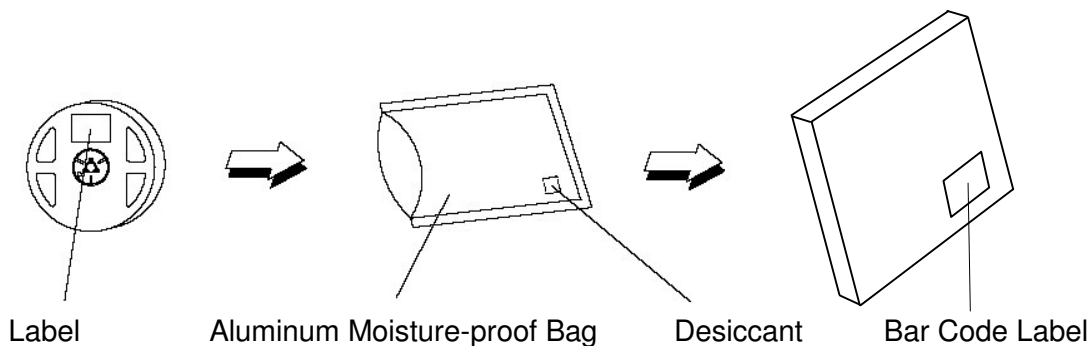
## Reel Dimensions (7 Inch)



## Carrier Tape Dimensions: Loaded Quantity 2000 PCS per Reel



## Moisture Resistant Packaging



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Issue	Change Description	Approval	Date
1.0	Initial Release	J. Haynie	July 29, 2005