

Blue PLCC4 Surface Mount LED

OVSABBC2R8

- High intensity with low power consumption
- White PLCC4 packaged in 8 mm tape on 7" diameter reel
- Compatible with automatic placement equipment
- Dimensions: 3.5 x 2.8 x 1.95 mm
- 120° viewing angle

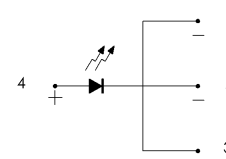
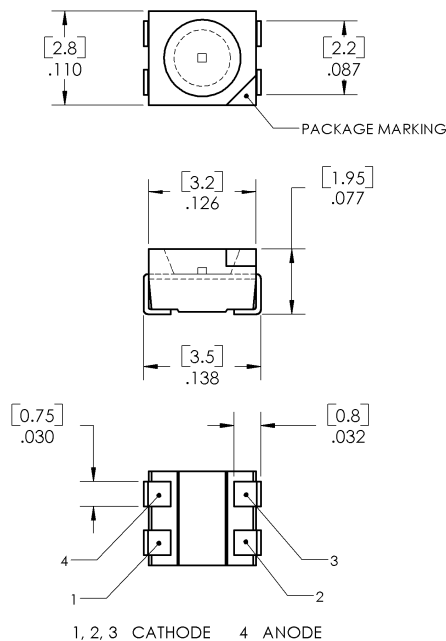


The **OVSABBC2R8** is designed for wide angle, uniform light output. Its internal reflector and colorless clear lens optimize luminous intensity and make it ideal for backlighting applications and for coupling with light guides.

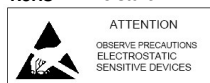
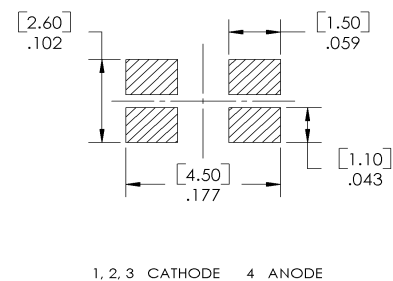
Applications

- 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 |



Recommended Soldering Pad



DIMENSIONS ARE IN: [MILLIMETERS] INCHES

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

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Absolute Maximum Ratings

T_A = 25° C unless otherwise noted

| | |
|---|---------------|
| Storage Temperature Range | -40 ~ +100° C |
| Operating Temperature Range | -40 ~ +100° C |
| Junction Temperature | 110° C |
| Junction/Ambient ¹ | 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 μ sec) | 100 mA |
| Power Dissipation | 140 mW |

Note:

1. R_{th} test condition: Mounted on PC board FR 4 (pad size ≥ 16 mm²)

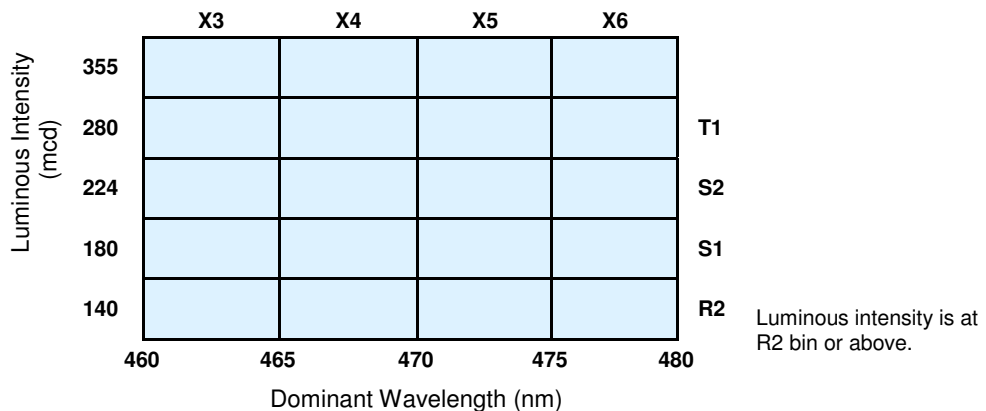
Electrical Characteristics

T_A = 25° C unless otherwise noted

| SYMBOL | PARAMETER | MIN | TYP | MAX | UNITS | CONDITIONS |
|--------------------|---------------------|------|------|------|-------|------------------------|
| I _V | Luminous Intensity | 140 | 200 | ---- | mcd | I _F = 30 mA |
| V _F | Forward Voltage | ---- | 3.9 | 4.6 | V | I _F = 30 mA |
| I _R | Reverse Current | ---- | ---- | 10 | μA | V _R = 5 V |
| λ _D | Dominant Wavelength | 460 | 470 | 480 | nm | I _F = 30 mA |
| 2 Θ _{1/2} | 50% Power Angle | ---- | 120 | ---- | deg | I _F = 30 mA |

Standard Bins (I_F = 30 mA)

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

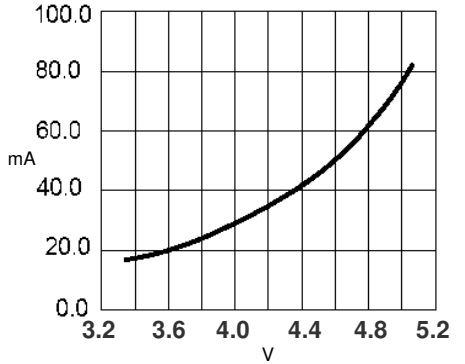


Important Notes:

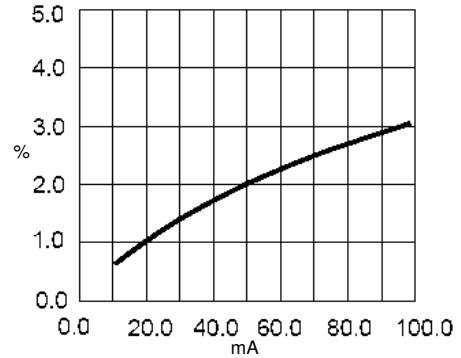
1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
2. To designate luminous intensity ranks, please contact OPTEK.

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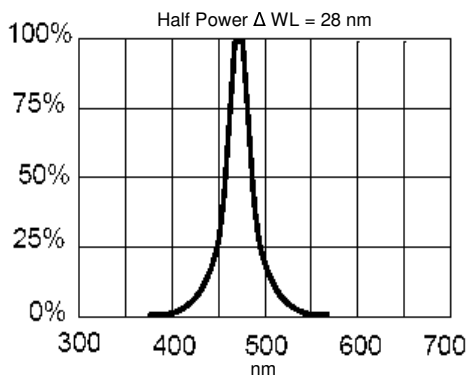
Typical Electro-Optical Characteristics Curves



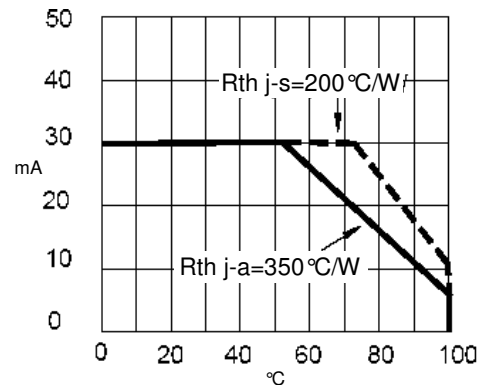
Forward Current vs Forward Voltage



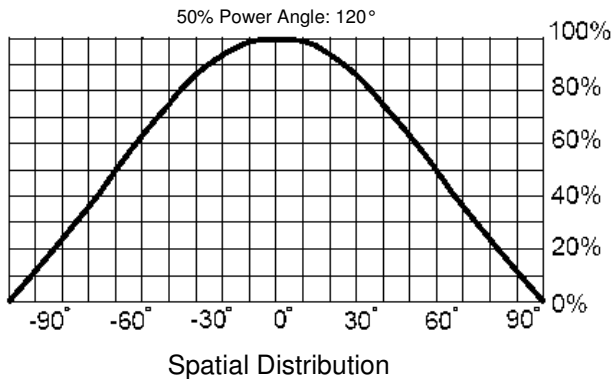
Relative Luminous Intensity vs Forward Current



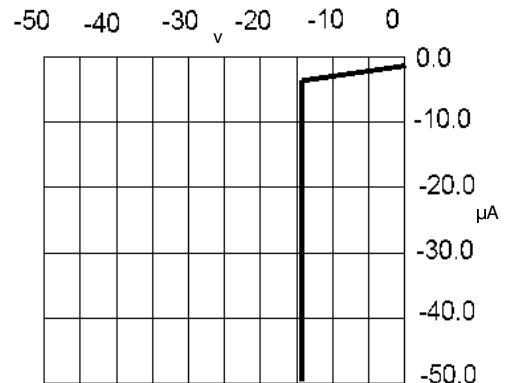
Relative Luminous Intensity vs Wavelength



Maximum Forward DC Current vs Ambient Temperature



Spatial Distribution



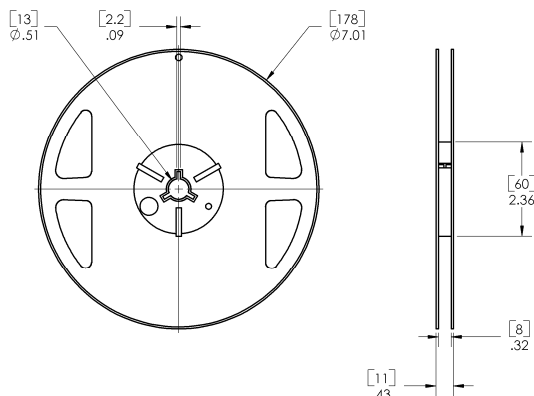
Reverse Current vs Reverse Voltage

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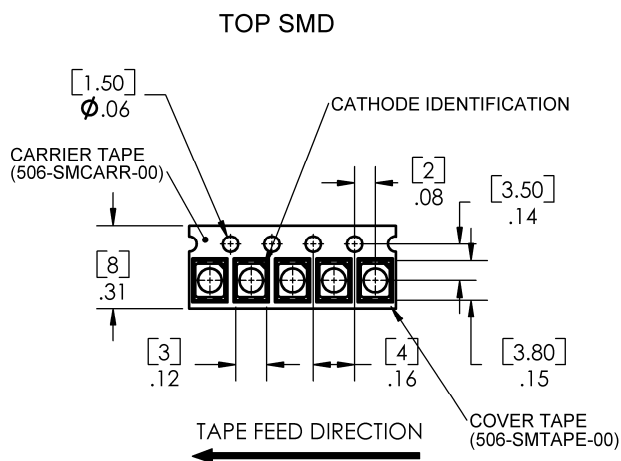
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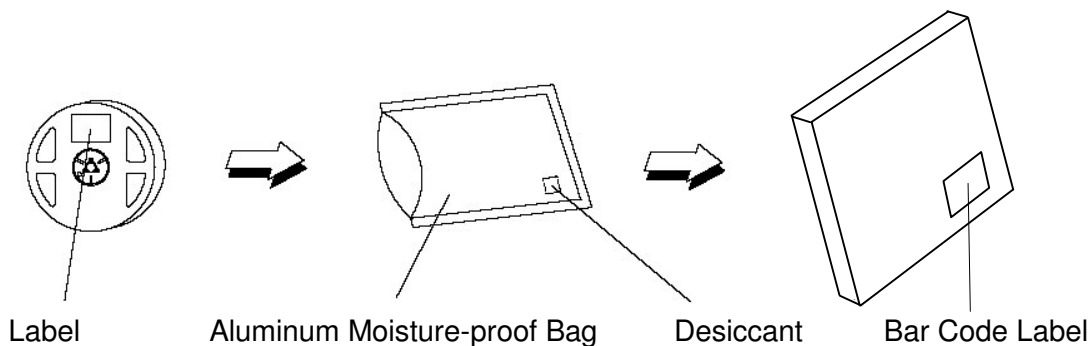
Reel Dimensions: 7-inch reel



Carrier Tape Dimensions: Loaded quantity 2000 pieces per reel



Moisture Resistant Packaging



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