Amber PLCC4 Surface Mount LED with Domed Lens



OVSAABLCR8

- High intensity with low power consumption
- White PLCC4 package with clear domed lens
- Wide viewing angle
- Packaged in 8mm tape on 7" diameter reel
- Compatible with automatic placement equipment
- Compatible with infrared and vapor phase reflow solder process
- Amber (591nm)



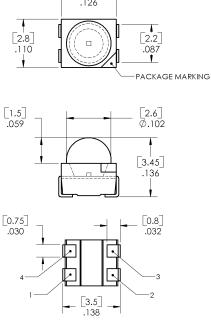
The **OVSAABLCR8** is designed for wide angle, uniform light output. Its internal reflector and colorless clear lens optimize luminous intensity and make it ideal for backlighting applications and for coupling with light guides.

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 |
|-------------|----------|---------------|--------------------|-------------|
| OVSAABLCR8 | AllnGaP | Amber | 1650 | Water Clear |

3.2





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

Amber PLCC4 SMD LED with Domed Lens OVSAABLCR8



Absolute Maximum Ratings

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

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|--|---------------|
| Storage Temperature Range | -40 ~ +100° C |
| Operating Temperature Range | -40 ~ +100° C |
| Soldering Temperature ¹ | 260°C |
| Reverse Voltage | 5 V |
| Continuous Forward Current | 70 mA |
| Peak Forward Current (10% Duty Cycle, PW ≤ 100 μsec) | 200 mA |
| Power Dissipation | 225 mW |

Note:

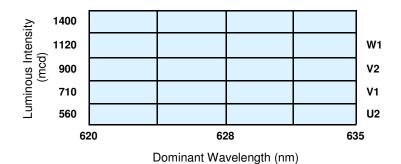
Electrical Characteristics

T_A = 25° C unless otherwise noted

| SYMBOL | PARAMETER | MIN | TYP | MAX | UNITS | CONDITIONS |
|----------------|---------------------|-----|------|-----|-------|------------------------|
| I _V | Luminous Intensity | 900 | 1650 | | mcd | I _F = 50 mA |
| V_{F} | Forward Voltage | | 2.6 | 3.2 | V | I _F = 50 mA |
| I _R | Reverse Current | | | 10 | μΑ | V _R = 5 V |
| λ_{D} | Dominant Wavelength | | 591 | | nm | I _F = 50 mA |
| λ_{P} | Peak Wavelength | | 594 | | nm | I _F = 50 mA |
| 2 ⊝½ | 50% Power Angle | | 60 | | deg | I _F = 50 mA |

Standard Bins (I_F = 50mA)

Lamps are sorted to luminous intensity (I_V) and dominant wavelength (λ_D) bins shown. Orders for OVSAABLCR8 may be filled with any or all bins contained as below.



Luminous intensity is at U2 bin or above.

Notes:

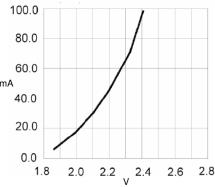
- 1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
- 2. To designate luminous intensity ranks, please contact OPTEK.

^{1.} Solder time less than 5 seconds at temperature extreme.

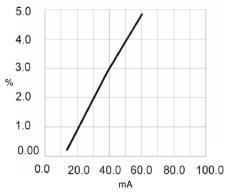
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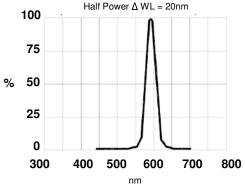
Typical Electro-Optical Characteristics Curves



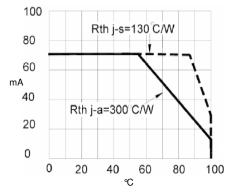
Forward Current vs Forward Voltage



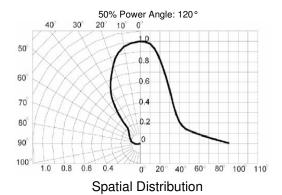
Relative Luminous Intensity vs Forward Current

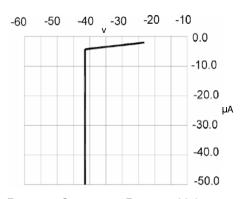


Relative Luminous Flux vs Wavelength



Maximum Forward DC Current vs Ambient Temperature



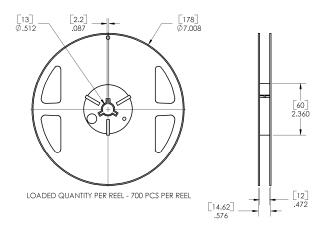


Reverse Current vs Reverse Voltage

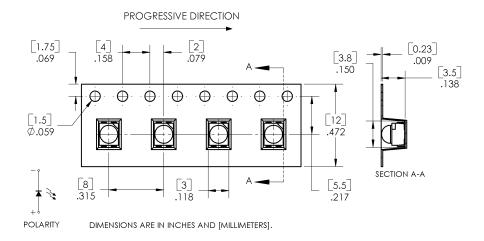
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Reel Dimensions: 7-inch reel



Carrier Tape Dimensions: Loaded quantity 700 pieces per reel



Moisture Resistant Packaging

