# Amber PLCC4 Surface Mount LED



### **OVSAABC2R8**

- 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

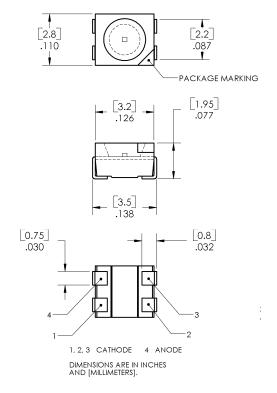


The **OVSAABC2R8** is designed for wide angle, uniform light output. Its internal reflector and colorless clear lens optimize luminous intensity and make it ideal for backlighting applications and for coupling with light guides.

### **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
OVSAABC2R8	AllnGaP	Amber	700	Water Clear





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

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## Absolute Maximum Ratings

T<sub>A</sub> = 25° C unless otherwise noted

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Storage Temperature Range	-40 ~ +100° C
Operating Temperature Range	-40 ~ +100° C
Junction Temperature	110°C
Junction/Ambient <sup>1</sup>	300°C/W
Junction/Solder Point	150°C/W
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:

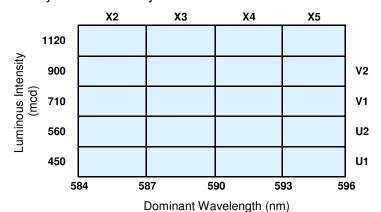
### **Electrical Characteristics**

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

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I <sub>V</sub>	Luminous Intensity	450	700		mcd	$I_F = 50 \text{ mA}$
$V_{F}$	Forward Voltage		2.6	3.2	V	$I_F = 50 \text{ mA}$
I <sub>R</sub>	Reverse Current			10	μΑ	$V_R = 5 V$
$\lambda_{D}$	Dominant Wavelength	584	591	596	nm	I <sub>F</sub> = 50 mA
2 ⊝½	50% Power Angle		120		deg	I <sub>F</sub> = 50 mA

## Standard Bins (I<sub>F</sub> = 50 mA)

Lamps are sorted to luminous intensity ( $I_V$ ) and dominant wavelength ( $\lambda_D$ ) bins shown. Orders for OVSAABC2R8 may be filled with any or all bins contained as below.



Luminous intensity is at U1 bin or above.

#### **Important Notes:**

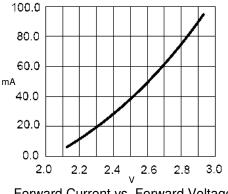
- 1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
- To designate luminous intensity ranks, please contact OPTEK.

<sup>1.</sup> Rth test condition: Mounted on PC board FR 4 (pad size≥16 mm²)

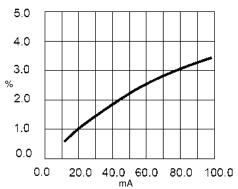
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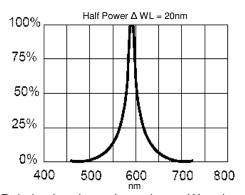
## Typical Electro-Optical Characteristics Curves



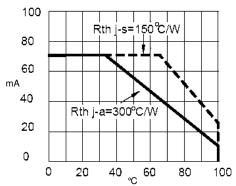
Forward Current vs. Forward Voltage



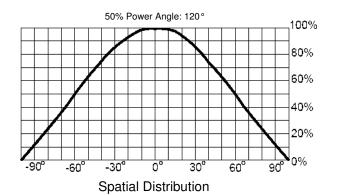
Relative Luminous Intensity vs. Forward Current

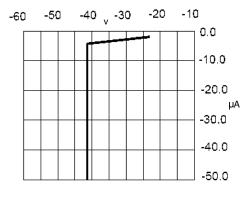


Relative Luminous Intensity vs. Wavelength



Maximum Forward DC Current vs. Ambient **Temperature** 



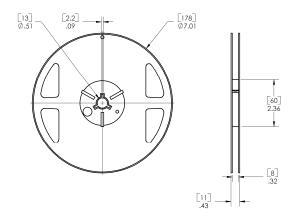


Reverse Current vs. Reverse Voltage

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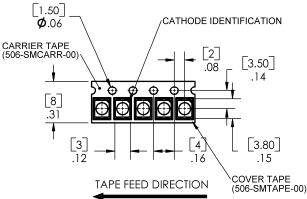


## Reel Dimensions: 7-inch reel



# Carrier Tape Dimensions: Loaded Quantity 2000 pieces per reel

# TOP SMD



## Moisture Resistant Packaging

