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

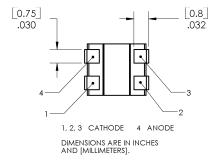
Moisture

ATTENTION

OBSERVE PRECAUTION ELECTROSTATIC SENSITIVE DEVICES

- 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	Emitted Color Intensity Typ. mcd		
OVSAABC2R8	AllnGaP	Amber 700		Water Clear	
	[2.8] .110		[2.2] .087 1 ACKAGE MARKING [1.95] .077		





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



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	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:

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

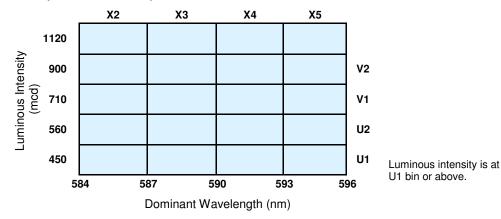
Electrical Characteristics

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

SYMBOL	PARAMETER	MIN	ТҮР	МАХ	UNITS	CONDITIONS
Iv	Luminous Intensity	450	700		mcd	I _F = 50 mA
V _F	Forward Voltage		2.6	3.2	V	I _F = 50 mA
I _R	Reverse Current			10	μA	$V_R = 5 V$
λ_{D}	Dominant Wavelength	584	591	596	nm	I _F = 50 mA
2 ⊖¹⁄2	2 Θ ¹ / ₂ 50% Power Angle		120		deg	I _F = 50 mA

Standard Bins $(I_F = 50 \text{ mA})$

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



Important Notes:

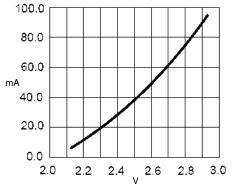
1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.

2. To designate luminous intensity ranks, please contact OPTEK.

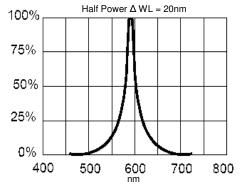
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Typical Electro-Optical Characteristics Curves



Forward Current vs. Forward Voltage



Relative Luminous Intensity vs. Wavelength

50% Power Angle: 120°

0°

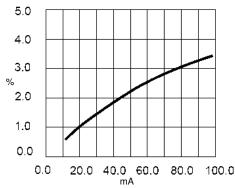
Spatial Distribution

30

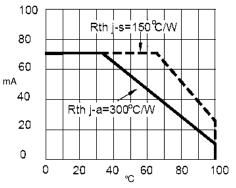
-60°

-90

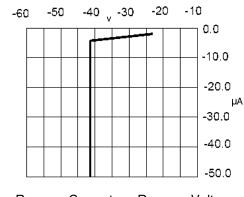
-30



Relative Luminous Intensity vs. Forward Current



Maximum Forward DC Current vs. Ambient Temperature



Reverse Current vs. Reverse Voltage

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100%

80%

60%

40%

20%

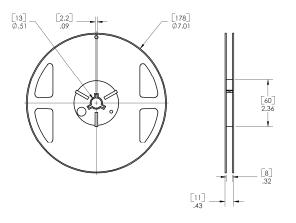
0%

90°

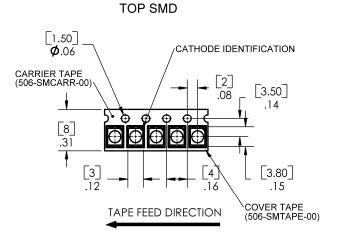
60[°]



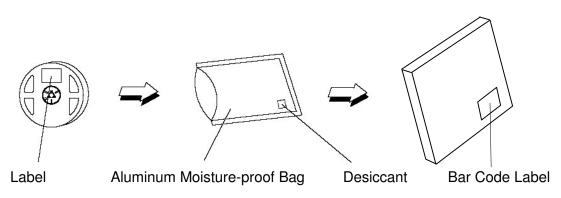
Reel Dimensions: 7-inch reel



Carrier Tape Dimensions: Loaded Quantity 2000 pieces per reel



Moisture Resistant Packaging



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