Blue-Green Top-View Surface Mount LED



OVSACBC2R8

- 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

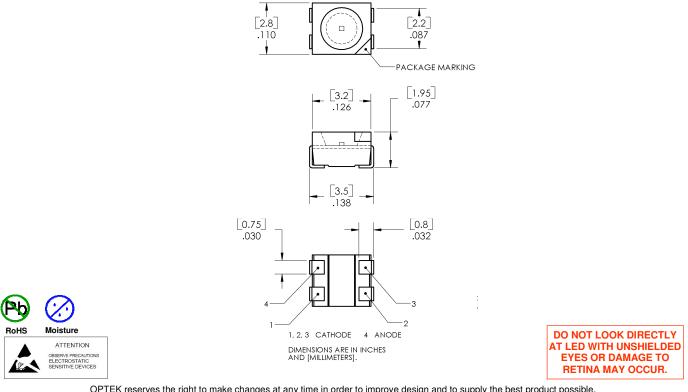


The OVSACBC2R8 is designed for wide angle, uniform light output. Its internal reflector and colorless clear lens optimize luminous intensity and make it ideal for backlighting applications and for coupling with light guides.

Applications

- Traffic lights •
- Signal and symbol luminaire
- Mono-color indicators
- Backlighting (LCD, switches, displays and illuminated advertising) •
- Interior automotive lighting (instrumentation clusters) •
- Safety marker lights (steps, exit ways)

Part Number	Material	Emitted Color	Intensity Typ. mcd	Lens Color
OVSACBC2R8	InGaN	Blue-Green	560	Water Clear



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

OPTEK Technology Inc. - 1645 Wallace Drive, Carrollton, Texas 75006 Phone: (972) 323-2200 or (800) 341-4747 FAX: (972) 323-2396 visibleLED@optekinc.com www.optekinc.com

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Absolute Maximum Ratings

$T_A = 25^{\circ}$ C unless otherwise noted	
Storage Temperature Range	-40 ~ +100°C
Operating Temperature Range	-40 ~ +100 ° C
Junction Temperature	110°C
Junction/Ambient ¹	350 ℃/W
Junction/Solder Point	200 <i>°</i> 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. Rth test condition: Mounted on PC board FR 4 (pad size ≥ 16 mm²)

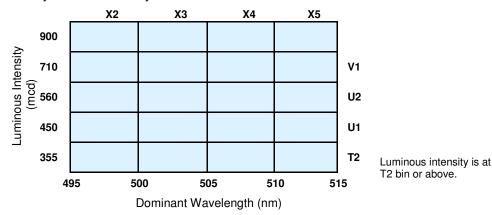
Electrical Characteristics

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

SYMBOL	PARAMETER	MIN	ТҮР	МАХ	UNITS	CONDITIONS
Ι _V	Luminous Intensity	355	560		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	495	505	515	nm	I _F = 30 mA
2 O ¹ ⁄2	50% Power Angle		120		deg	I _F = 30 mA

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

Lamps are sorted to luminous intensity (I_V) and dominant wavelength (λ_D) bins shown. Orders for OVSACBC2R8 may be filled with any or all bins contained as below.



Important Notes:

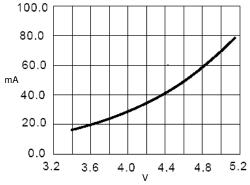
- 1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
- 2. To designate luminous intensity ranks, please contact OPTEK.

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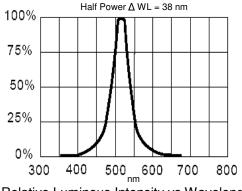
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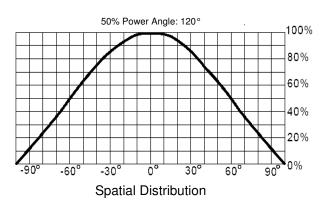
Typical Electro-Optical Characteristics Curves

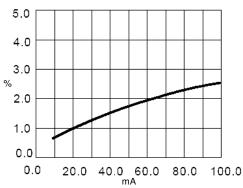


Forward Current vs Forward Voltage

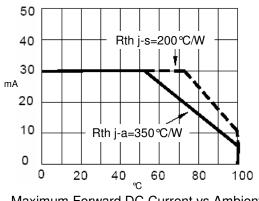


Relative Luminous Intensity vs Wavelength

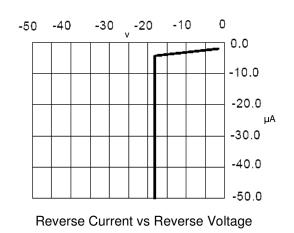




Relative Luminous Intensity vs Forward Current



Maximum Forward DC Current vs Ambient Temperature

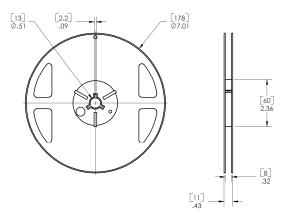


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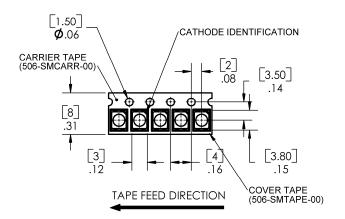


Reel Dimensions: 7-inch reel

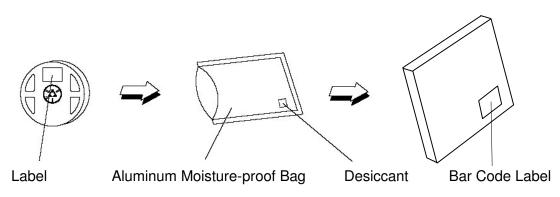


Carrier Tape Dimensions: Loaded quantity 2000 pieces per reel

TOP SMD



Moisture Resistant Packaging



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