

#### **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

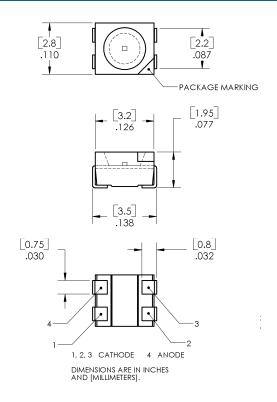


The **OVSACBC2R8** is designed for wide angle, uniform light output. Its internal reflector and colorless clear lens optimize luminous intensity and make it ideal for backlighting applications and for coupling with light guides.

#### **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 Numbe	r	Material	Emitted Color	Intensity Typ. mcd	Lens Color	
OVSACBC2F	R8	InGaN	Blue-Green	560	Water Clear	





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



#### Absolute Maximum Ratings

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

Storage Temperature Range	-40 ~ +100° C
Operating Temperature Range	-40 ~ +100°C
Junction Temperature	110°C
Junction/Ambient <sup>1</sup>	350℃/W
Junction/Solder Point	200℃/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:

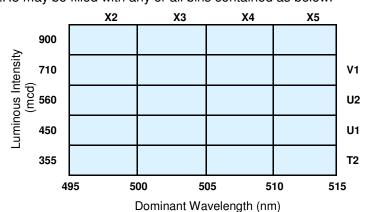
#### **Electrical Characteristics**

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

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I <sub>V</sub>	Luminous Intensity	355	560		mcd	I <sub>F</sub> = 30 mA
V <sub>F</sub>	Forward Voltage		3.9	4.6	V	I <sub>F</sub> = 30 mA
I <sub>R</sub>	Reverse Current			10	μΑ	$V_R = 5 V$
$\lambda_{D}$	Dominant Wavelength	495	505	515	nm	$I_F = 30 \text{ mA}$
2 ⊝½	50% Power Angle		120		deg	I <sub>F</sub> = 30 mA

#### Standard Bins (I<sub>F</sub> = 30 mA)

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



Luminous intensity is at T2 bin or above.

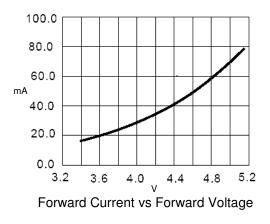
#### **Important Notes:**

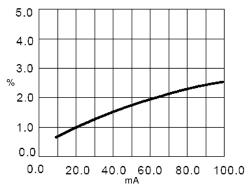
- 1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
- 2. To designate luminous intensity ranks, please contact OPTEK.

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

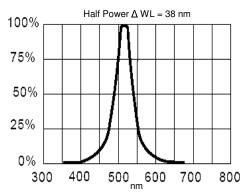


### Typical Electro-Optical Characteristics Curves

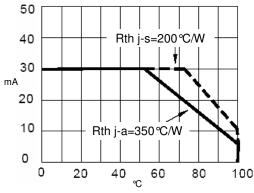




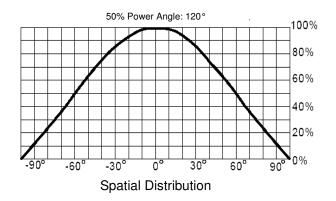
Relative Luminous Intensity vs Forward Current

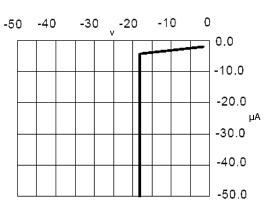


Relative Luminous Intensity vs Wavelength



Maximum Forward DC Current vs Ambient Temperature

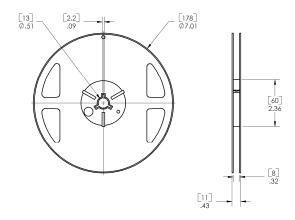




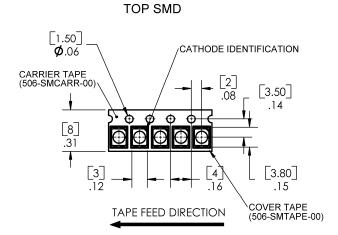
Reverse Current vs Reverse Voltage



#### Reel Dimensions: 7-inch reel



### Carrier Tape Dimensions: Loaded quantity 2000 pieces per reel



### Moisture Resistant Packaging

