Blue-Green Top-View Surface Mount LED

TT electronics
OPTEK Technology

OVSACBC2R8

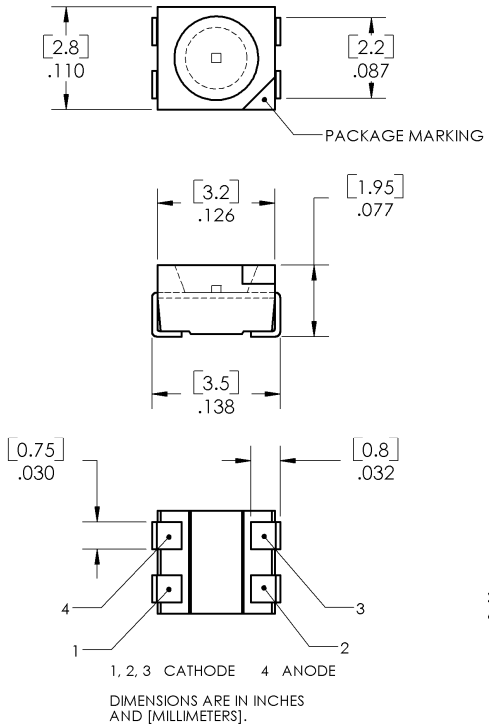
- High intensity with low power consumption
- White PLCC4 packaged in 8 mm tape on 7” diameter reel
- Compatible with automatic placement equipment
- Dimensions: 3.5 x 2.8 x 1.95 mm
- 120° viewing angle

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



RoHS Moisture

ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

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

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

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]	350°C/W
Junction/Solder Point	200°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 mm^2)

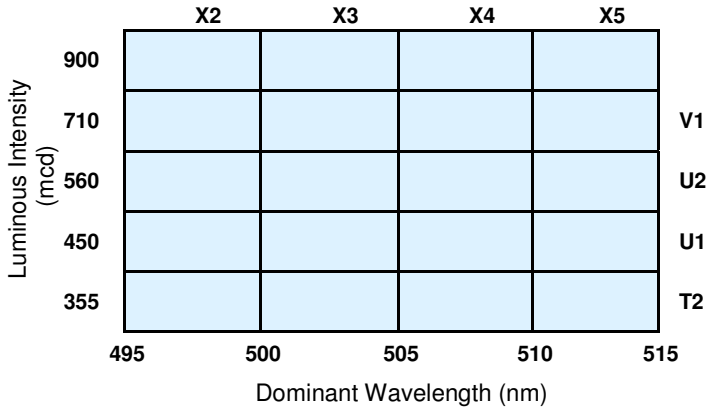
Electrical Characteristics

T_A = 25° C unless otherwise noted

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I_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 Θ½	50% Power Angle	----	120	----	deg	I_F = 30 mA

Standard Bins (I_F = 30 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.



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.

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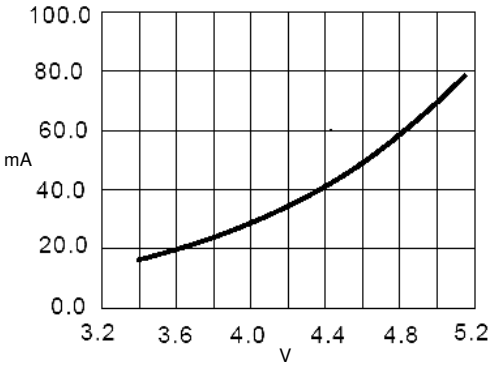
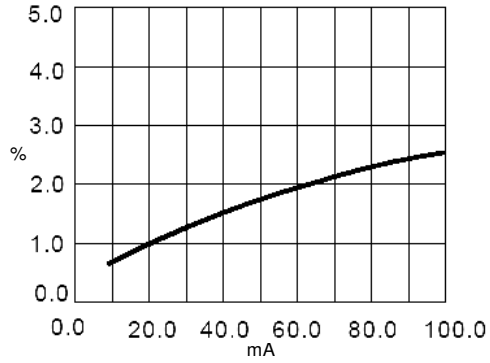
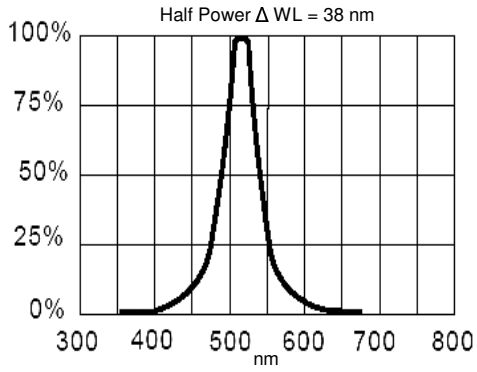
Typical Electro-Optical Characteristics Curves



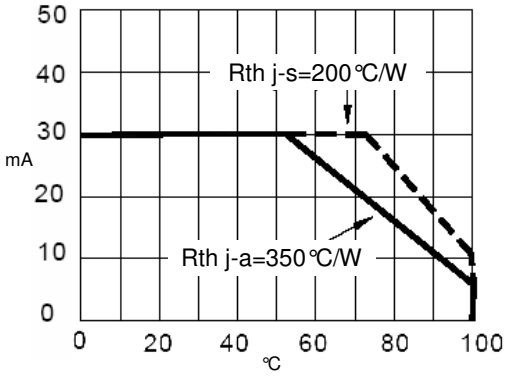
Forward Current vs Forward Voltage



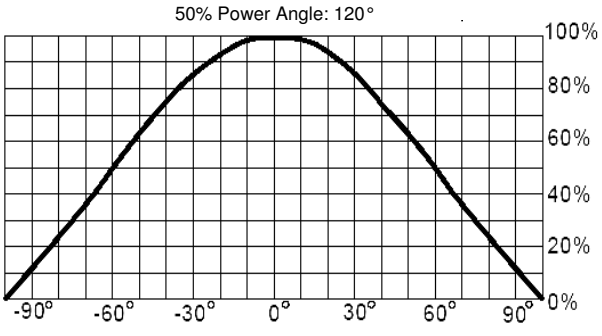
Relative Luminous Intensity vs Forward Current



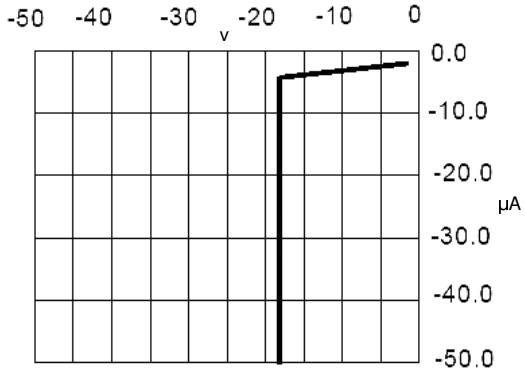
Relative Luminous Intensity vs Wavelength



Maximum Forward DC Current vs Ambient Temperature

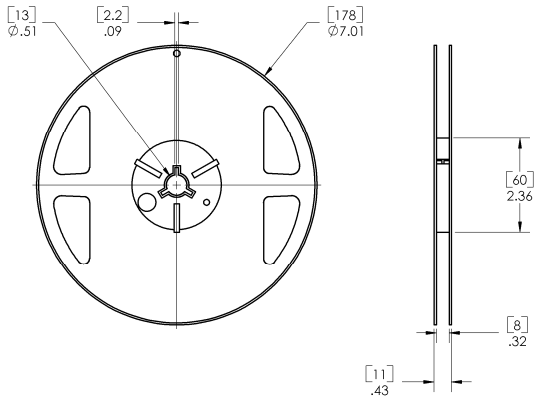


Spatial Distribution

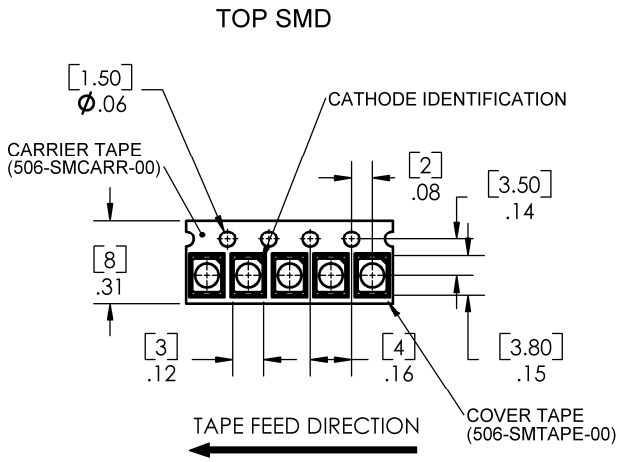


Reverse Current vs Reverse Voltage

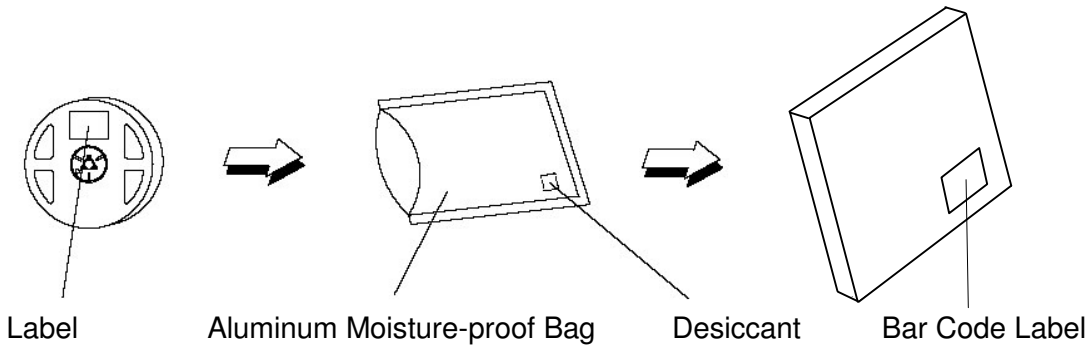
Reel Dimensions: 7-inch reel



Carrier Tape Dimensions: Loaded quantity 2000 pieces per reel



Moisture Resistant Packaging



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