White High-Intensity LED Lamp

(5 mm, 15º Viewing Angle)

OVLEW1CB9

Features:

- Narrow beam angle
- High luminous intensity
- Water clear plastic package
- InGaN White
- Pb-free

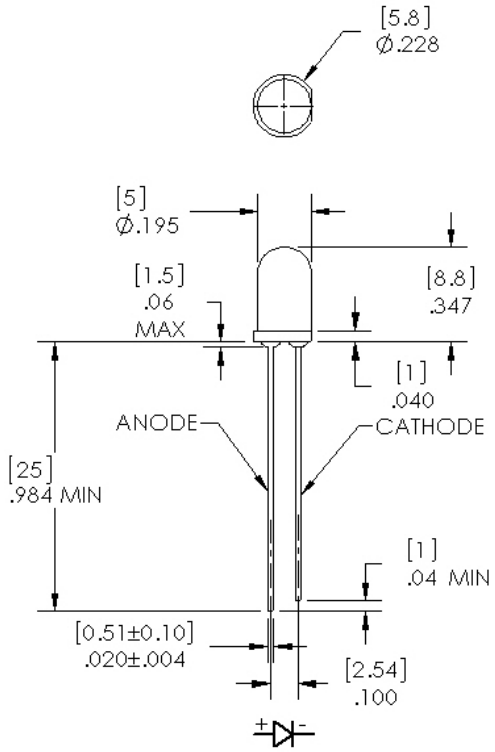
Description:

The round **OVLEW1CB9** is designed for applications that require a focused high luminous output, such as indoor and outdoor displays, marker lights and optical indicators. The phosphor used in the reflector converts the blue emission of the InGaN chip to the ideal white light.

Applications:

- Indoor/outdoor displays and applications
- Message boards
- Store front signage
- Indicators

Part Number	Material	Emitted Color	Intensity Typ. mcd	Lens Color
OVLEW1CB9	InGaN	White	35,000	Clear



ALL DIMENSIONS ARE IN INCHES [MM].

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE ±.010 [.25].

RoHS

ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

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

OPTEK Technology, Inc.
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www.ttelectronics.com/optek-technology

Electrical Specifications

Absolute Maximum Ratings (T_A = 25° C unless otherwise noted)	
Storage Temperature Range	-40 ~ +100 ° C
Operating Temperature Range	-40 ~ +95 ° C
Reverse Voltage	5 V
Continuous Forward Current	30 mA
Peak Forward Current (10% Duty Cycle, 1 KHz)	100 mA
Power Dissipation	120 mW
Lead Soldering Temperature (3 mm from the base of the epoxy bulb / 3 seconds max).	260° C
Electrostatic Discharge Classification (JEDEC-JESD22-A114F)	Class 2

Electrical Characteristics (T_A = 25° C unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
I_V	Luminous Intensity	20,150	35,000	46,100	mcd	I_F = 20 mA
V_F	Forward Voltage	----	3.2	4.0	V	I_F = 20 mA
I_R	Reverse Current	----	----	100	µA	V_R = 5 V
2 Θ½	50% Power Angle	----	15	----	deg	I_F = 20 mA
x	Chromaticity Coordinates	----	0.2895	----	----	I_F = 20 mA
y		----	0.2905	----	----	I_F = 20 mA

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Performance

Typical Electro-Optical Characteristics Curves

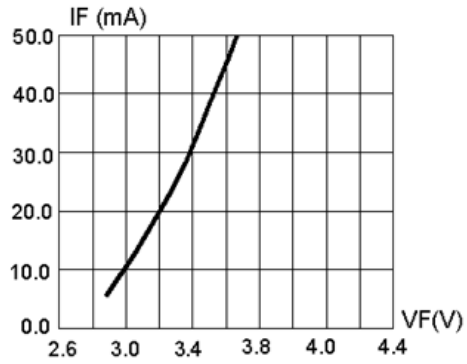

FIG.1 FORWARD CURRENT VS. FORWARD VOLTAGE.

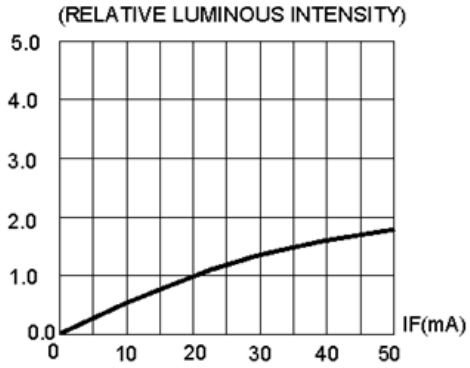

FIG.2 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

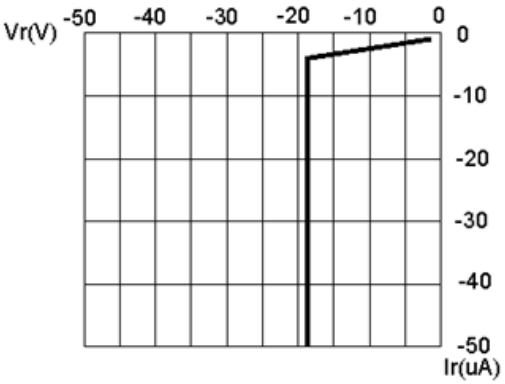

FIG.3 REVERSE CURRENT VS. REVERSE VOLTAGE.

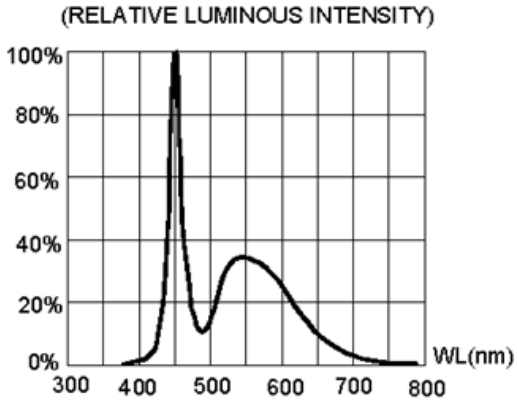

FIG.4 RELATIVE LUMINOUS INTENSITY VS. WAVELENGTH.

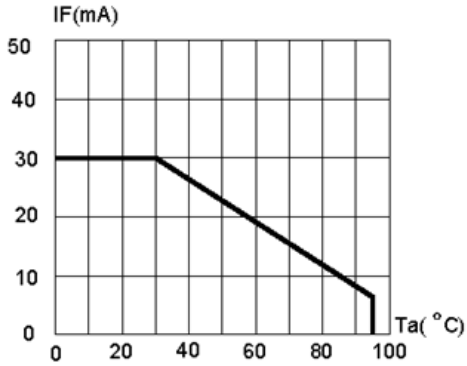

FIG.5 MAXIMUM FORWARD DC CURRENT VS AMBIENT TEMPERATURE (Tjmax=105 °C)

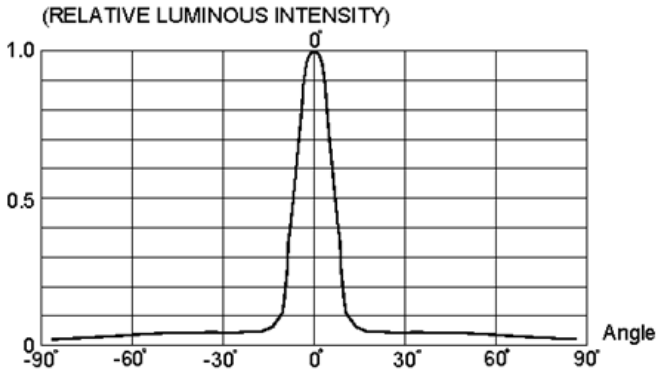

FIG.6 FAR FIELD PATTERN

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Packaging

Packaging: 500 pcs per anti-static bag with desiccant