

4-Pin Blue LED Lamp (7.6 mm)

OVFSB6C8

- Packaged in tubes
- Compatible with automatic placement equipment
- Compatible with infrared and vapor phase reflow solder process
- Mono-color type
- Pb-free

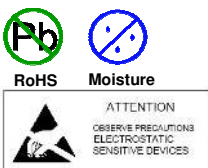
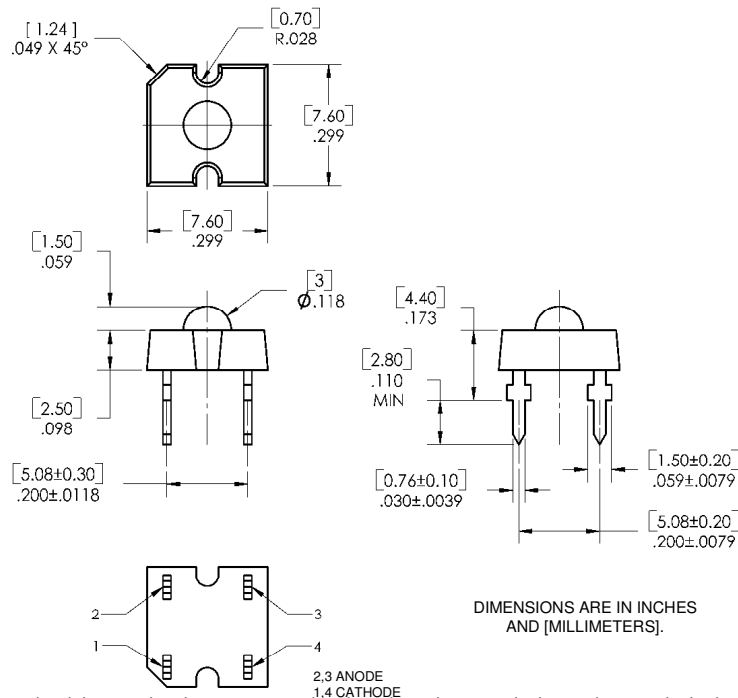


The **OVFSB6C8** is designed with higher forward voltage to maximize brightness and incorporates a low-profile lens to enhance efficient light distribution. Response time is fast and it consumes less power resulting in low current requirements from circuit power supply. Tubular arrays replace neon in outdoor and indoor signs. This square package allows high-density arrays to form light engines.

Applications

- Automotive: Rear stop/turn signal lamps/truck marker lamps
- Mood-setting Decoration and landscape lighting
 - Special decorative interior/exterior lighting
 - Special effects stage lighting
- Illumination for signs and channel letters

Part Number	Material	Emitted Color	Flux Typ. mlm	Lens Color
OVFSB6C8	InGaN	Blue	850	Water Clear



DIMENSIONS ARE IN INCHES
AND [MILLIMETERS].

**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.

4-Pin Blue LED Lamp

OVFSB6C8



Absolute Maximum Ratings

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

Storage Temperature Range	-40 ~ +100 °C
Operating Temperature Range	-40 ~ +100 °C
Lead Soldering Temperature (3 mm from the base of the epoxy bulb) ¹	260 °C
Reverse Voltage	5 V
Continuous Forward Current ²	30 mA
Peak Forward Current (10% Duty Cycle, PW ≤ 100 μsec)	100 mA
Power Dissipation	140 mW

Notes:

1. Solder time less than 3 seconds at temperature extreme.

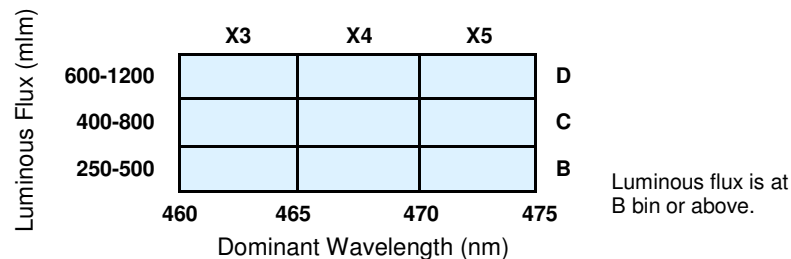
Electrical Characteristics

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

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
lumen	Luminous Flux	250	850	----	lm	$I_F = 30\text{ mA}$
V_F	Forward Voltage	----	4.0	4.6	V	$I_F = 30\text{ mA}$
I_R	Reverse Current	----	----	100	μA	$V_R = 5\text{ V}$
λ_D	Dominant Wavelength	462	470	475	nm	$I_F = 30\text{ mA}$
$2\theta_{1/2}$	50% Power Angle	----	60	----	deg	$I_F = 30\text{ mA}$

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

Lamps are sorted to luminous flux (Φ_V), forward voltage (V_F), and dominant wavelength (λ_D) bins shown. Orders for OVFSB6C8 may be filled with any or all bins contained as below.



Forward Voltage (V_F)

Rank	V9	V10	V11	V12	V13	V14	V15
Voltage (V)	3.2–3.4	3.4–3.6	3.6–3.8	3.8–4.0	4.0–4.2	4.2–4.4	4.4–4.6

Important Notes:

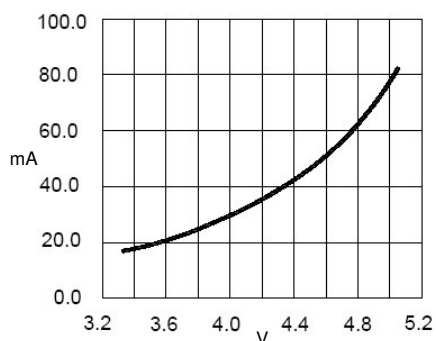
1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
2. To designate luminous intensity ranks, please contact OPTeK.

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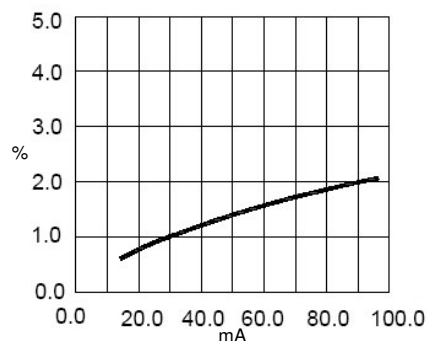
4-Pin Blue LED Lamp

OVFSB6C8

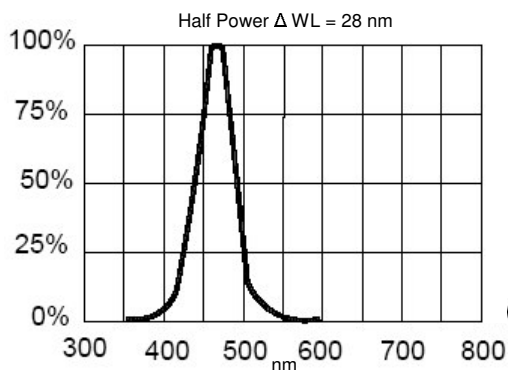
Typical Electro-Optical Characteristics Curves



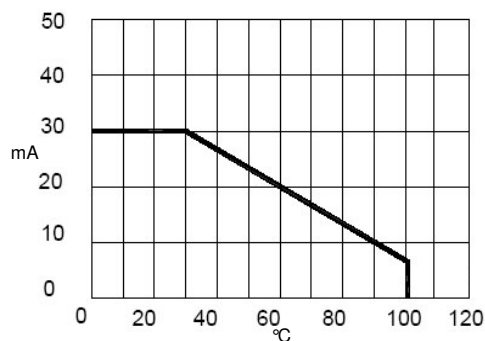
Forward Current vs. Forward Voltage



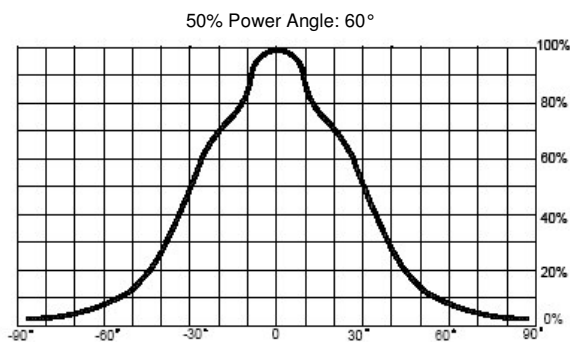
Relative Luminous Flux vs. Forward Current



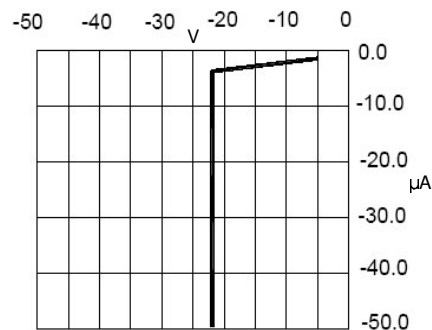
Relative Luminous Flux vs. Wavelength



Maximum Forward DC Current vs. Ambient Temperature



Far Field Pattern

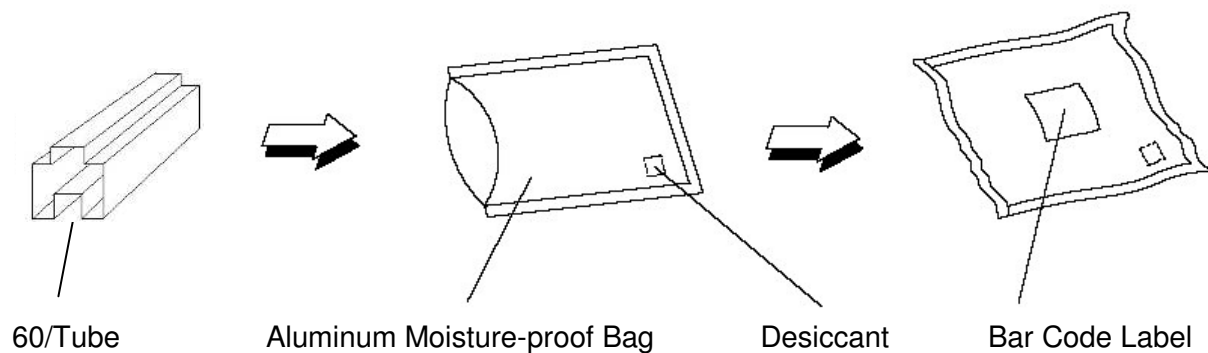


Reverse Current vs. Reverse Voltage

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4-Pin Blue LED Lamp OVFSB6C8

Moisture Resistant Packaging



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