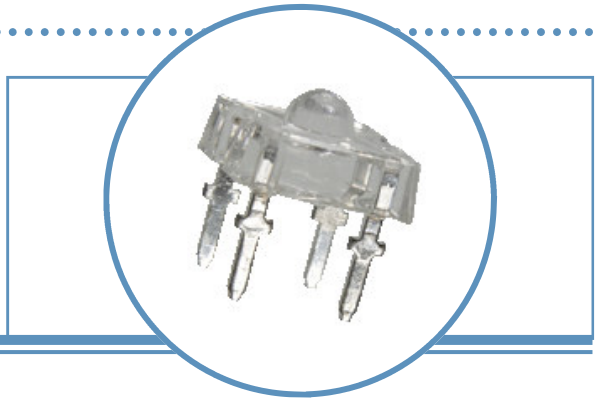
4-Pin White LED Lamp (7.6 mm)

TT electronics
OPTEK Technology

OVFSW6C8

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

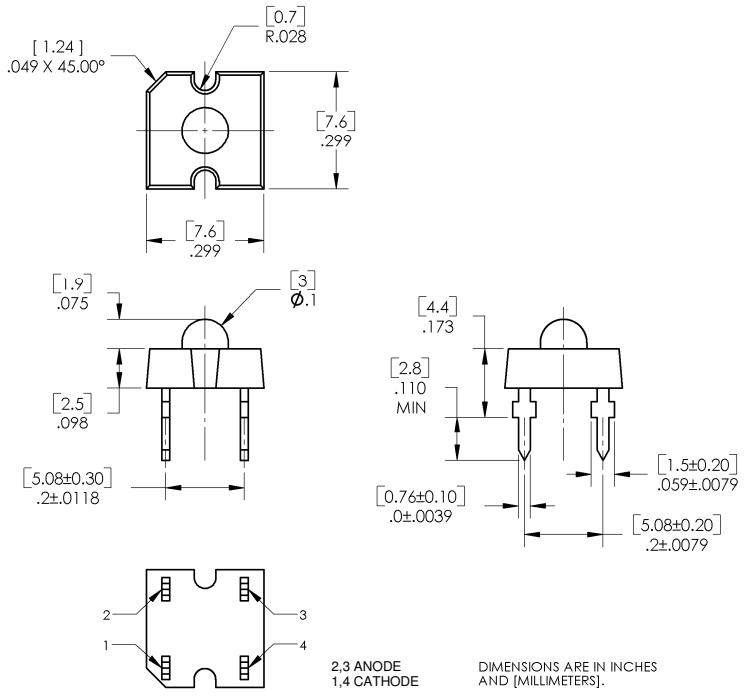


The **OVFSW6C8** is designed with higher forward voltage to maximize brightness and incorporates a low-profile lens to enhance efficient light distribution. Response time is fast and consumes less power, resulting in low current requirements from circuit power supply. Tubular arrays replace neon in outdoor 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	Intensity Typ. mcd	Lens Color
OVFSW6C8	InGaN	White	1200	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

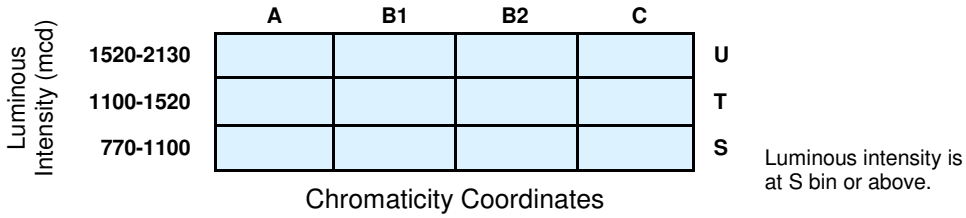
Storage Temperature Range	-30 ~ +80° C
Operating Temperature Range	-20 ~ +75° C
Lead Soldering Temperature (3 mm from the base of the epoxy bulb)[1]	260° C
Reverse Voltage	5 V
Continuous Forward Current	30 mA
Peak Forward Current (10% Duty Cycle, PW ≤ 100 µsec)	100 mA
Power Dissipation	140 mW

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

Electrical Characteristics
T_A = 25° C unless otherwise noted

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I_V	Luminous Intensity	770	1200	----	mcd	I_F = 30 mA
V_F	Forward Voltage	----	4.0	4.6	V	I_F = 30 mA
I_R	Reverse Current	----	----	100	µA	V_R = 5 V
x	Chromaticity Coordinates	----	0.31	----	----	I_F = 30 mA
y		----	0.32	----	----	I_F = 30 mA
2 Θ½	50% Power Angle	----	60	----	deg	I_F = 30 mA

Standard Bins (I_F = 30 mA)
Lamps are sorted to luminous intensity (I_V), forward voltage (V_F), and dominant wavelength (λ_D) bins shown. Orders for OVFSW6C8 may be filled with any or all bins contained as below.



Luminous intensity is at S bin or above.

Rank		A				B1				B2				C			
Chromaticity Coordinates	x	0.280	0.264	0.283	0.296	0.287	0.283	0.330	0.330	0.296	0.287	0.330	0.330	0.330	0.330	0.361	0.356
	y	0.248	0.267	0.305	0.276	0.295	0.305	0.360	0.339	0.276	0.295	0.339	0.318	0.318	0.360	0.385	0.351

Forward Voltage (V_F)

Rank	V10	V11	V12	V13	V14	V15
Voltage (V)	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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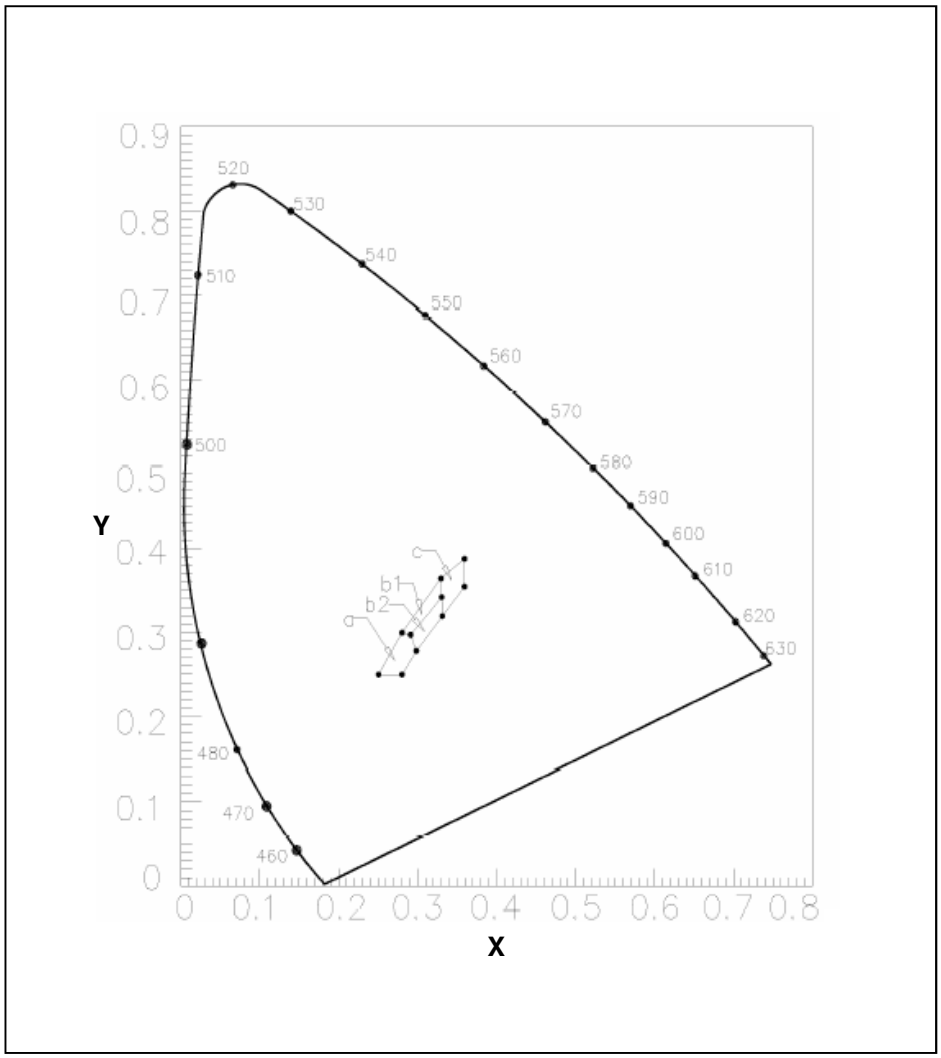
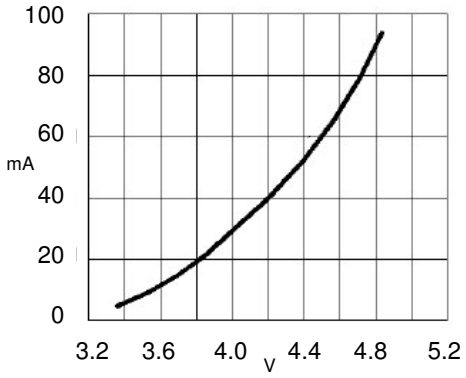
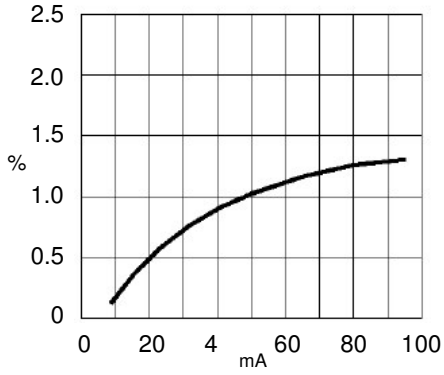
CIE Chromaticity Diagram



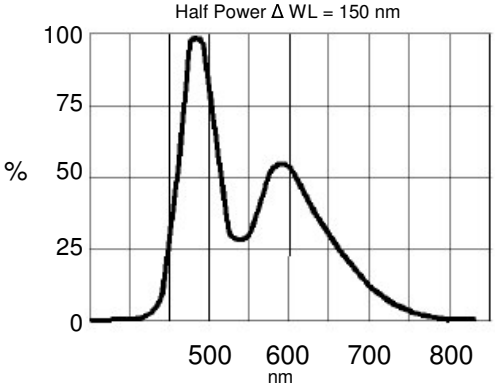
Typical Electro-Optical Characteristics Curves



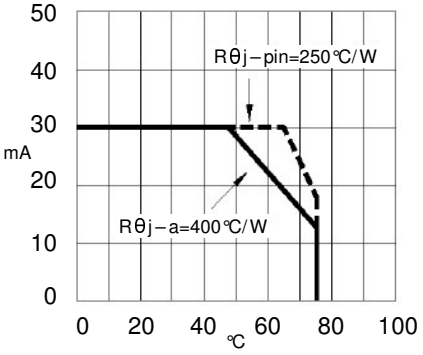
Forward Current vs Forward Voltage



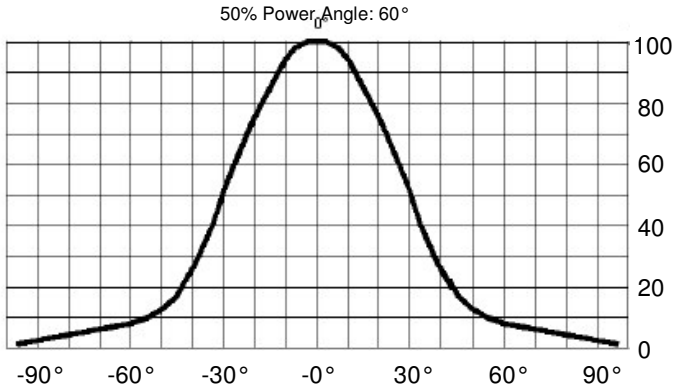
Relative Luminous Intensity vs Forward Current



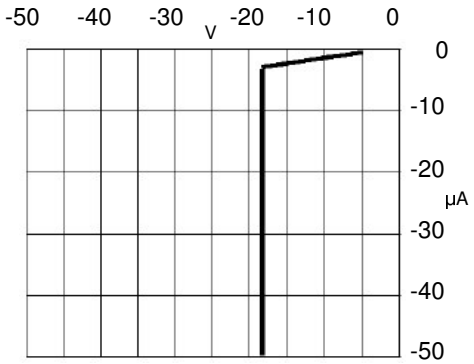
Relative Luminous Intensity vs Wavelength



Maximum Forward DC Current vs Ambient Temperature



Far Field Pattern



Reverse Current vs Reverse Voltage

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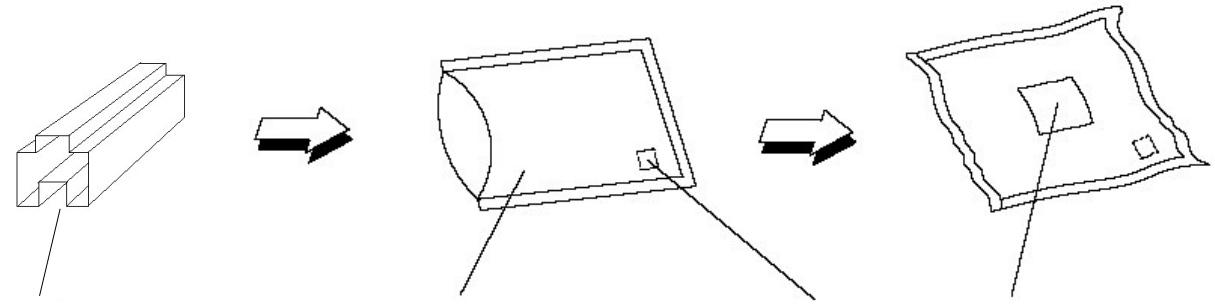
Moisture Resistant Packaging



60/Tube Aluminum Moisture-proof Bag Desiccant Bar Code Label