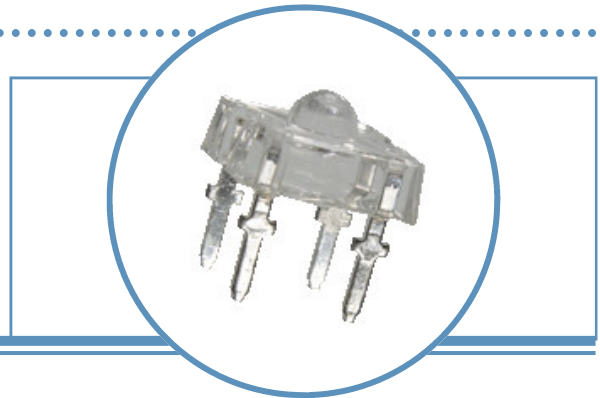


# 4-Pin White LED Lamp (7.6 mm)

## OVFSW6C8

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

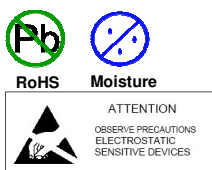
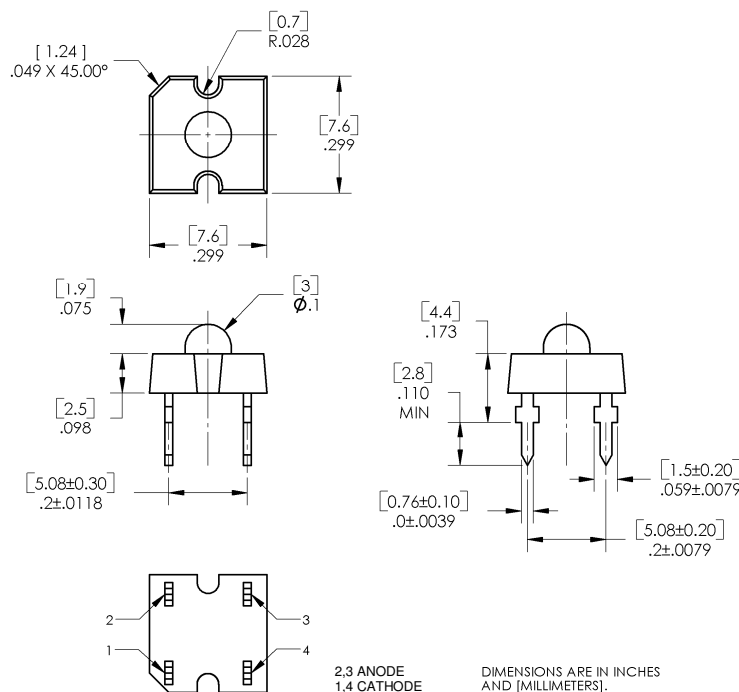


The **OVFSW6C8** is designed with higher forward voltage to maximize brightness and incorporates a low-profile lens to enhance efficient light distribution. Response time is fast and consumes less power, resulting in low current requirements from circuit power supply. Tubular arrays replace neon in outdoor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



**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 White LED Lamp

## OVFSW6C8



### Absolute Maximum Ratings

T<sub>A</sub> = 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) <sup>1</sup> | 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:

- Solder time less than 3 seconds at temperature extreme.

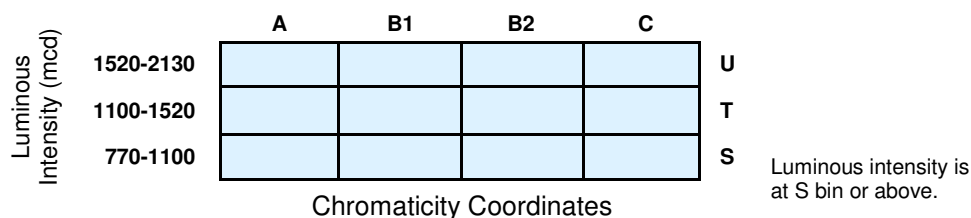
### Electrical Characteristics

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

| SYMBOL             | PARAMETER                | MIN  | TYP  | MAX  | UNITS | CONDITIONS             |
|--------------------|--------------------------|------|------|------|-------|------------------------|
| I <sub>V</sub>     | Luminous Intensity       | 770  | 1200 | ---- | mcd   | I <sub>F</sub> = 30 mA |
| V <sub>F</sub>     | Forward Voltage          | ---- | 4.0  | 4.6  | V     | I <sub>F</sub> = 30 mA |
| I <sub>R</sub>     | Reverse Current          | ---- | ---- | 100  | μA    | V <sub>R</sub> = 5 V   |
| x                  | Chromaticity Coordinates | ---- | 0.31 | ---- | ----  | I <sub>F</sub> = 30 mA |
| y                  |                          | ---- | 0.32 | ---- | ----  | I <sub>F</sub> = 30 mA |
| 2 Θ <sub>1/2</sub> | 50% Power Angle          | ---- | 60   | ---- | deg   | I <sub>F</sub> = 30 mA |

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

Lamps are sorted to luminous intensity (I<sub>V</sub>), forward voltage (V<sub>F</sub>), and dominant wavelength (λ<sub>D</sub>) bins shown. Orders for OVFSW6C8 may be filled with any or all bins contained as below.



| 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<sub>F</sub>)

| 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:

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

OPTEK reserves the right to make changes at any time in order to improve design and to supply the best product possible.