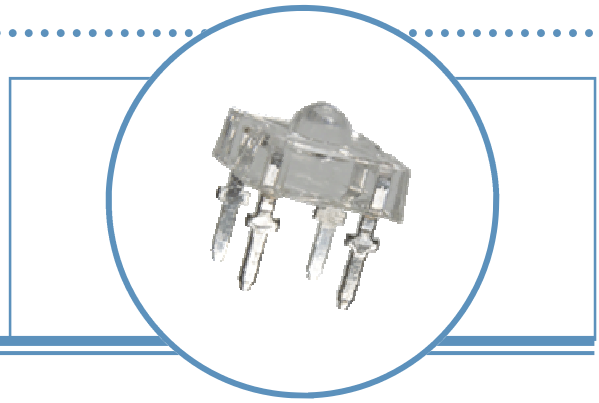
4-Pin Red-Orange LED Lamp (7.6 mm)

TT electronics
OPTEK Technology

OVFSQ4C8

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

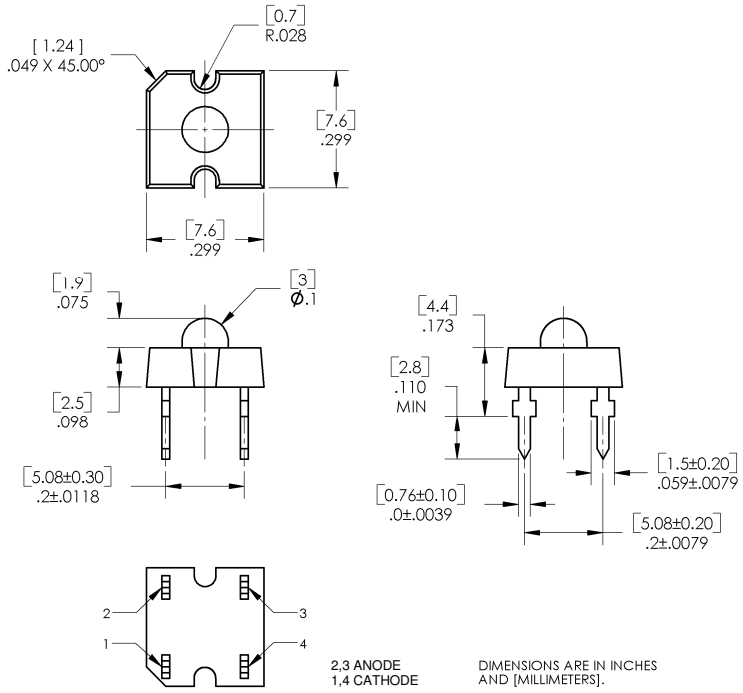


The **OVFSQ4C8** is designed with higher forward voltage to maximize brightness and incorporates a low-profile lens to enhance efficient light distribution. Response time is fast and it consumes less power resulting in low current requirements from circuit power supply. Tubular arrays replace neon in 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
- Traffic signals, pedestrian and walkway signs

Part Number	Material	Emitted Color	Flux Typ. mlm	Lens Color
OVFSQ4C8	AlInGaP	Red-Orange	4500	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.

Absolute Maximum Ratings

T_A = 25° 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]	70 mA
Peak Forward Current (10% Duty Cycle, PW ≤ 100 µsec)	200 mA
Power Dissipation	220 mW

Notes:
1. Solder time less than 5 seconds at temperature extreme.
2. Heat sink is adequate if the device is operated at ambient temperature higher than 25°C. For long term performance the drive currents between 10 mA and 50 mA are recommended. Please contact an Optek sales representative for more information on recommended drive conditions.

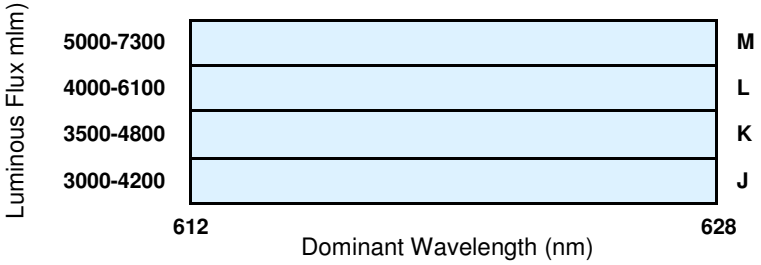
Electrical Characteristics

T_A = 25° C unless otherwise noted

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
lumen	Luminous Flux	3000	4500	----	mlm	I_F = 70 mA
V_F	Forward Voltage	----	2.6	3.2	V	I_F = 70 mA
I_R	Reverse Current	----	----	100	µA	V_R = 5 V
λ_D	Dominant Wavelength	612	618	628	nm	I_F = 70 mA
2 Θ½	50% Power Angle	----	40	----	deg	I_F = 70 mA

Standard Bins (I_F = 70 mA)

Lamps are sorted to luminous flux (Φ_V), forward voltage (V_F), and dominant wavelength (λ_D) bins shown.
Orders for OVFSQ4C8 may be filled with any or all bins contained as below.



Luminous flux is at J bin or above.

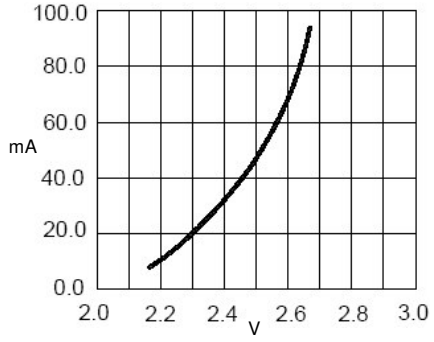
Forward Voltage (V_F)

Rank	V4	V5	V6	V7	V8
Voltage (V)	2.2–2.4	2.4–2.6	2.6–2.8	2.8–3.0	3.0–3.2

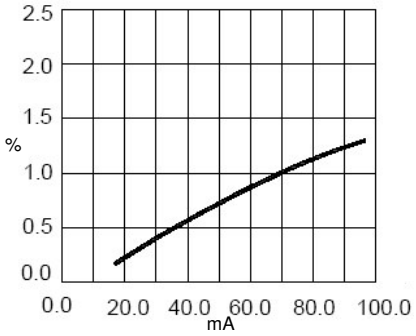
Important Notes:
1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
2. To designate luminous intensity ranks, please contact OPTEK.

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

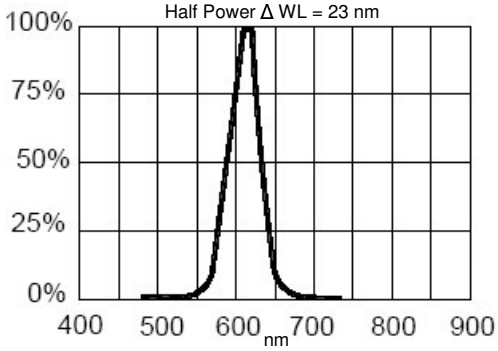
Typical Electro-Optical Characteristics Curves



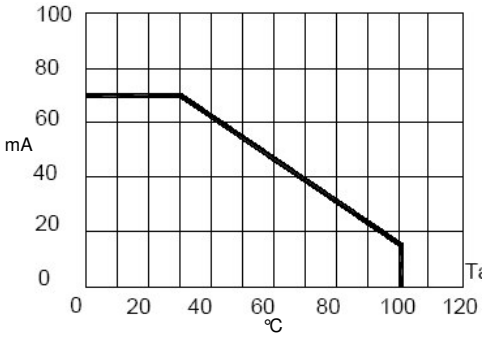
Forward Current vs Forward Voltage



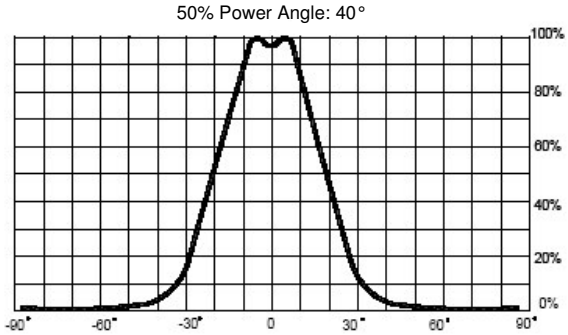
Relative Luminous Flux vs Forward Current



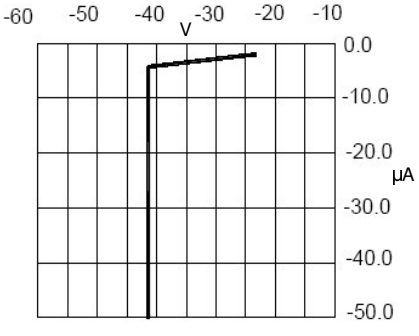
Relative Luminous Flux vs Wavelength



Maximum Forward DC Current vs Ambient Temperature

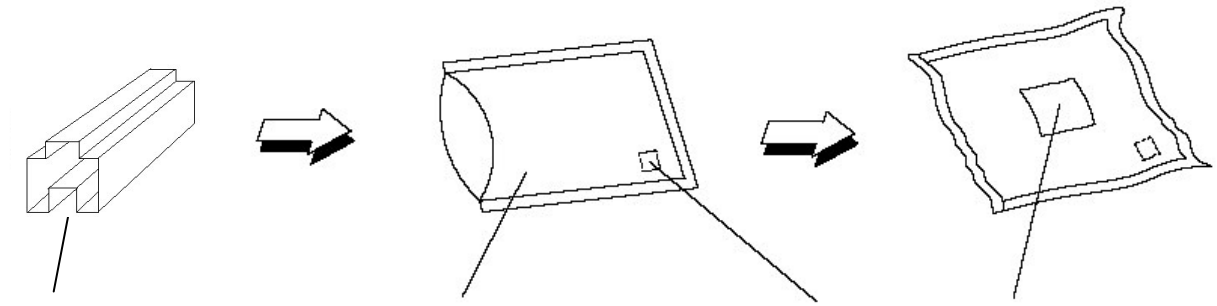


Far Field Pattern



Reverse Current vs Reverse Voltage

Moisture Resistant Packaging



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

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