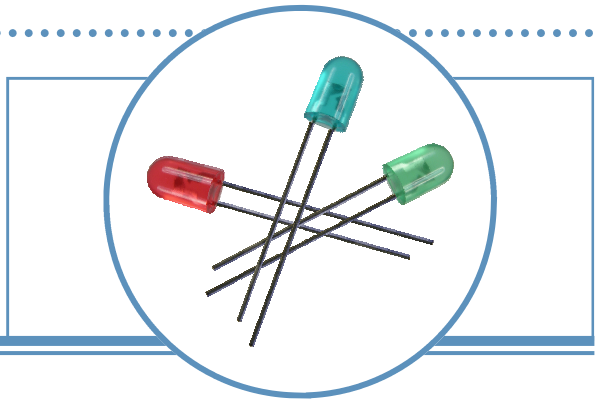
Round Red Through-hole LED Lamp (5 mm)

TT electronics
OPTEK Technology



OVLFR3C7

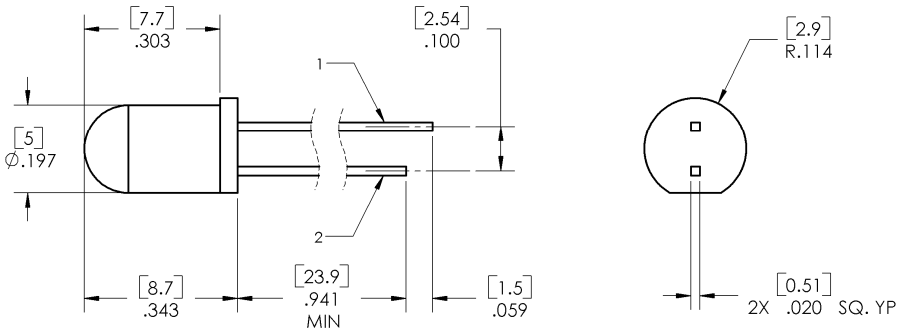
- High brightness with well-defined spatial radiation patterns
- UV-resistant epoxy lens
- Red (624 nm)

The **OVLFR3C7** is a high-intensity AlInGaP LED mounted in a clear plastic T-1¾ package. Its UV-resistant epoxy lens makes this device an optimal solution for outdoor applications. This LED provides a well-defined and even emission pattern.

Applications

- Traffic and pedestrian signals
- Signage and architectural lighting
- Backlighting
- Automotive

Part Number	Material	Emitted Color	Intensity Typ. (mcd)	Lens Color
OVLFR3C7	AlInGaP	Red	5000	Water Clear



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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 ~ +85° C
Reverse Voltage	5 V
Continuous Forward Current[2]	30 mA
Peak Forward Current (10% Duty Cycle, 1KHz)	100 mA
Power Dissipation	100 mW
Lead Soldering Temperature (3mm from the base of the epoxy bulb)[1]	260° C
Current Linearity vs. Ambient Temperature	-0.5 mA/° C
LED Junction Temperature	125° C

Notes:
1. Solder time less than 5 seconds at temperature extreme.
2. Design of heat dissipation should be considered.

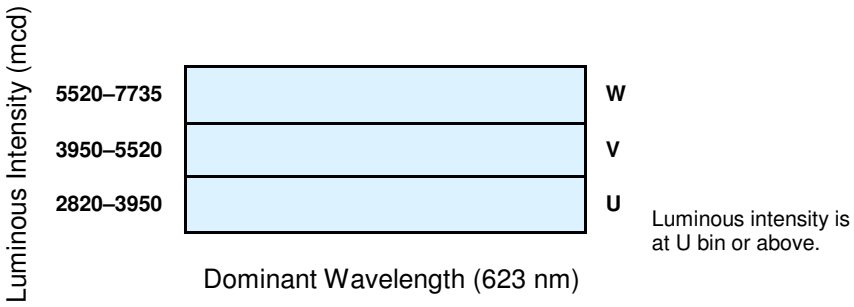
Electrical Characteristics

T_A = 25°C unless otherwise noted

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	CONDITIONS
I_v	Luminous Intensity	2820	5000	----	mcd	I_F = 20 mA
V_F	Forward Voltage	----	2.2	2.6	V	I_F = 20 mA
I_R	Reverse Current	----	----	10	µA	V_R = V
λ_P	Peak Wavelength	----	633	----	nm	I_F = 20 mA
λ_D	Dominant Wavelength	619	623	630	nm	I_F = 20 mA
Δλ	Spectra Half Width	----	25	----		
2Θ½	50% Power Angle	----	30	----	deg	I_F = 20 mA

Standard Bins (I_F = 20mA)

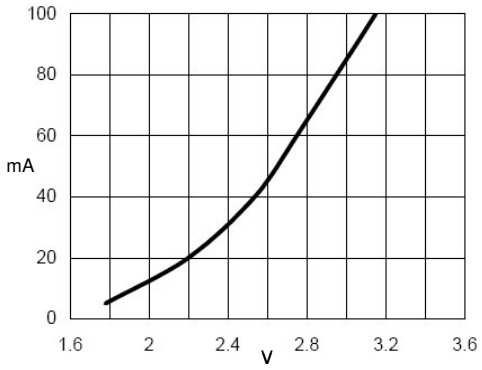
Lamps are sorted to luminous intensity (I_V) and dominant wavelength (λ_D) bins shown.
Orders for OVLFR3C7 may be filled with any or all bins contained as below.



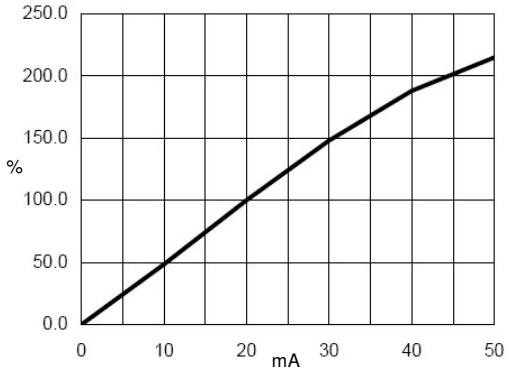
Notes:
1. All ranks will be included per delivery, rank ratio will be based on the chip distribution.
2. To designate luminous intensity ranks, please contact OPTEK.
3. Pb content <1000 PPM.

OPTEK Technology Inc. — 1645 Wallace Drive, Carrollton, Texas 75006
Phone: (972) 323-2200 or (800) 341-4747 FAX: (972) 323-2396 sensors@optekinc.com www.optekinc.com

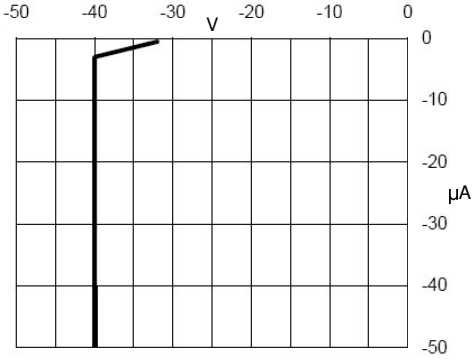
Typical Electro-Optical Characteristics Curves



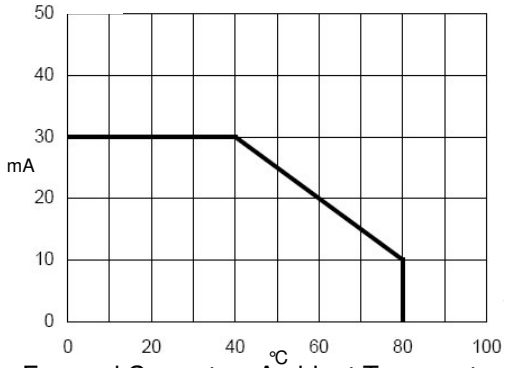
Forward Current vs Forward Voltage



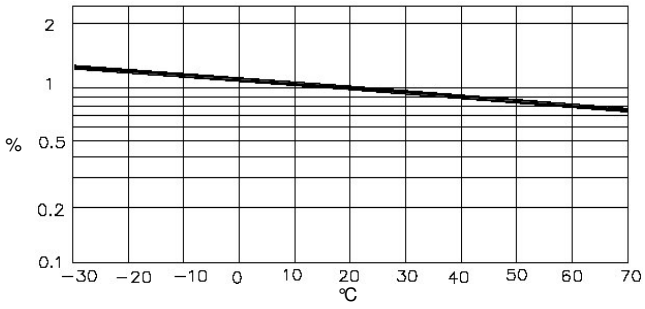
Relative Luminous Intensity vs Forward Current



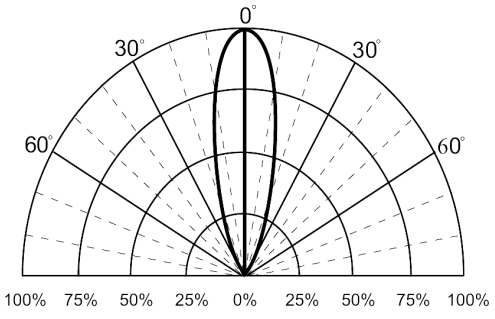
Reverse Current vs Reverse Voltage



Forward Current vs Ambient Temperature

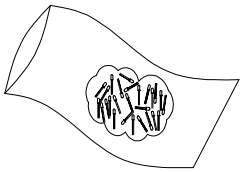


Relative Luminous Intensity vs Ambient Temperature

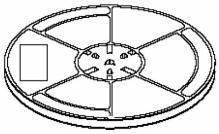


Beam Pattern

Packing Information: Available in bulk or reel

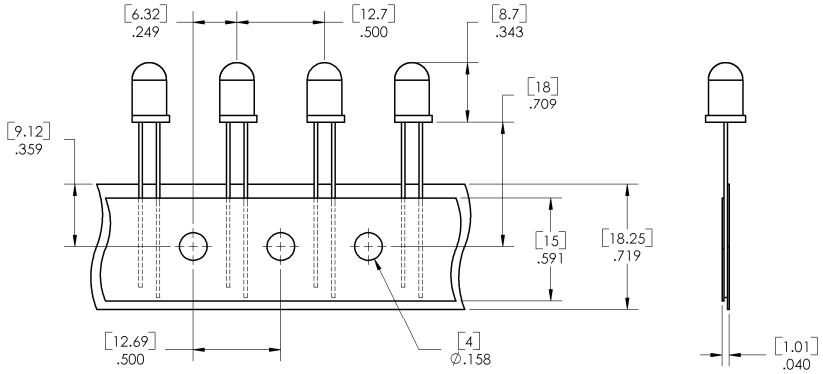


Bulk: 500 pcs/bag



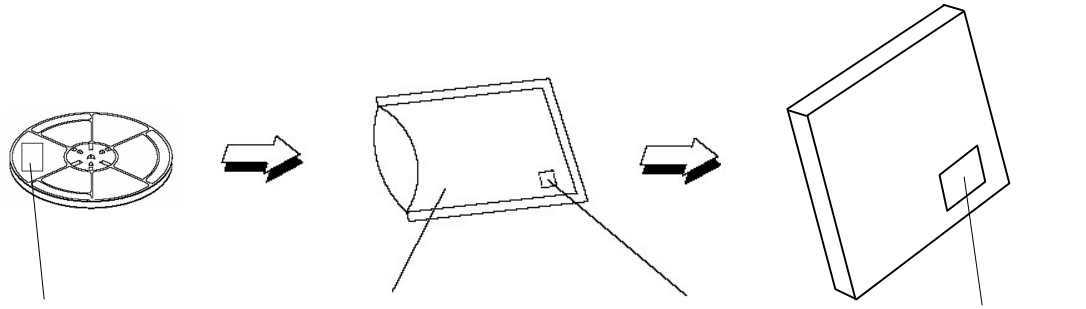
13-inch reel: 1000 pcs/reel

Carrier Tape Dimensions: Loaded quantity 1000 pieces per reel



DIMENSIONS ARE IN INCHES AND [MILLIMETERS].

Moisture Resistant Packaging



Label — Aluminum Moisture-proof Bag — Desiccant — Bar Code Label

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