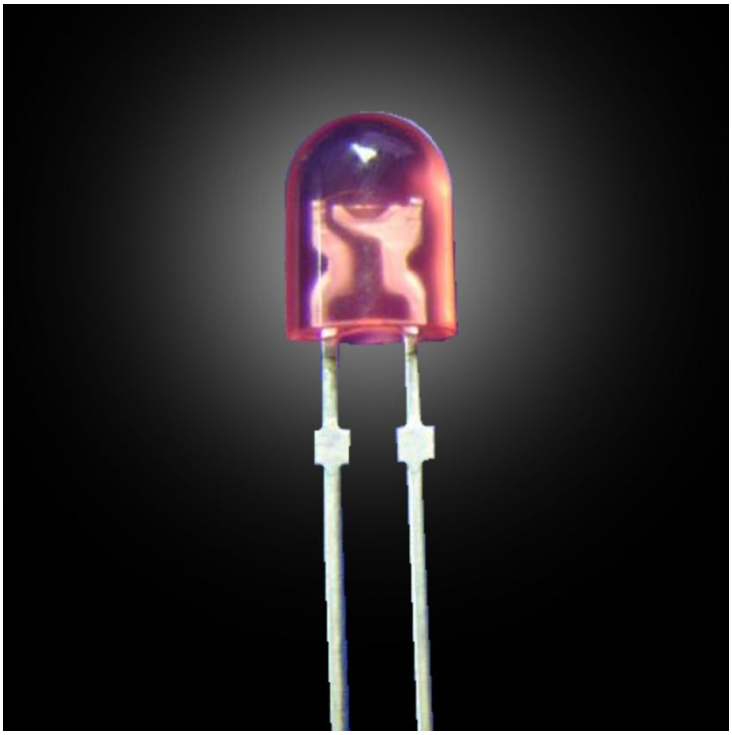
Data Sheet
5mm Oval LED
Hi-LED



RoHS

ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

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General Informations:

Features:

- High intensity
- Reliable and rugged
- Low current requirement
- IC compatible

Application :

- Reading light
- Portable flashlight
- Up-lighters and Down-lighters
- LCD backlights
- General lighting
- Contour lights
- Ceiling lights
- Garden lighting
- Decoration lights
- Architectural lighting
- Beacon lights

Electrical and Flux Characteristics:

Table 1: Flux Characteristics

Code	Size(mm)	Case	Color	Wavelenght	Angle
2704	5	Dip LED	Red	620-630 nm	45°-90°
2742	5	Dip LED	Yellow	587-595 nm	45°-90°
2706	5	Dip LED	Blue	464-475 nm	45°-90°
2705	5	Dip LED	Green	515-525 nm	45°-90°
2740	5	Dip LED	Cold White	7800 K	45°-90°
2741	5	Dip LED	Warm White	3500 K	45°-90°

Notes for Table 1:

1. Parts are tested in pulsed conditions, Tj = 25°C. Pulse width is 10 ms at rated test current.
2. İlker Elektronik maintains a ± 10% tolerance on flux measurements.
3. Typical R9 value for 80CRI can be change with 90CRı.
4. Center beam candle power is a calculated value based on Lambertian radiation pattern at nominal test current.

Table 2: Electrical Characteristics

Code	Color	Typical Forward Current (mA)	Min Input Voltage (CV)	Max Input Voltage (CV)	Typical Lm	Max Lm
2704	Red	20mA	1.8V	2.4V	350 mcd	800 mcd
2742	Yellow	20mA	1.8V	2.4V	500 mcd	800 mcd
2706	Blue	20mA	3V	3.4V	1500 mcd	2500 mcd
2705	Green	20mA	3V	3.4V	5000 mcd	8000 mcd
2740	Cold White	20mA	3V	3.4V	4000 mcd	6000 mcd
2741	Warm White	20mA	3V	3.4V	4000 mcd	6000 mcd

Notes for Table 2:

1. Parts are tested in pulsed conditions, Tj = 25°C. Pulse width is 10 ms at rated test current.
2. İlker Elektronik maintains a ± 10% tolerance on Current values.
3. Typical stabilized DC performance values are provided as reference only and are not a guarantee of performance.

Absolute Maximum Ratings (T_A = 25° C unless otherwise noted)

Table 3: Maximum Ratings

Parameter	Maximum Performance
Storage Temperature Range	-40 ~ +80° C
Operating Temperature Range	-30 ~ +80° C
Mounting Surface Temperature	60° C
LED Junction Temperature[1]	125° C
Electrostatic Discharge Classification (JEDEC-JESD22-A114F)	Class 1C
Reverse Voltage[2,3]	-5V
UL Recognition	UL recognized

Notes for Table 3:
1. Proper current de-rating must be observed to maintain junction temperature below the maximum.
2. LEDs are not designed to be driven in reverse bias.
3. At maximum reverse current of 10µA/LED.

Application Notes:

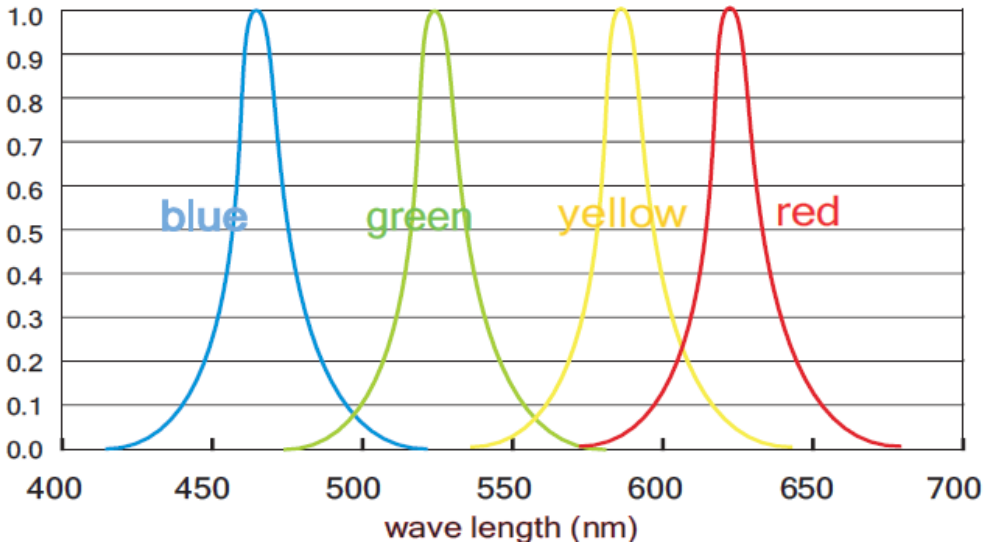
- The Anode side of the device is denoted by a hole in the lead frame.
- Electrical insulation between the case and the board is required. Do not electrically connect either the anode or cathode to the slug.
- Drawing not to scale.
- All dimensions are in millimeters.
- Unless otherwise indicated, tolerances are ± 0.20mm.
- Please do not bend the leads of the LED, otherwise it will damage the LED.

Precautions:

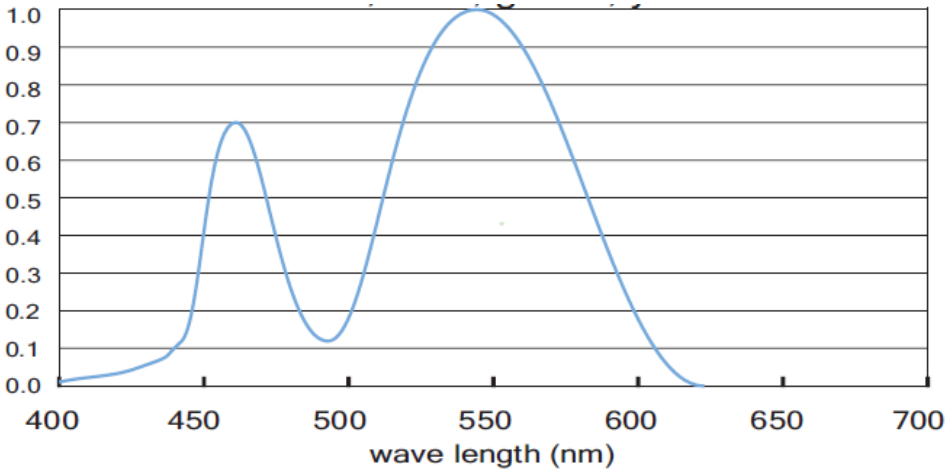
- Current should be derated in order to keep junction temperature below maximum by reducing power dissipation.
- Current spikes should be avoided especially during power up. It is good practice to initially connect PCB to inactivated supply, then gradually ramp up voltage to desired value.
- Proper management of the thermal path should be observed. Adequate heatsinking of strip should be provided in order to maintain junction temperature below maximum. Proper thermal conduction layers should be introduced at all interfaces to prevent insulating air gaps in the thermal path.
- As with all semiconductor devices, it is good practice to avoid electrostatic discharge (ESD).

Color Wavelength Diagram:

LED Color Spectrum for Red, Green, Blue, Yellow:



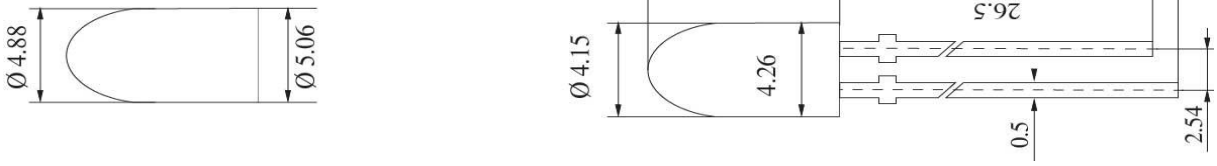
LED Color Spectrum for White (80 CRI) :



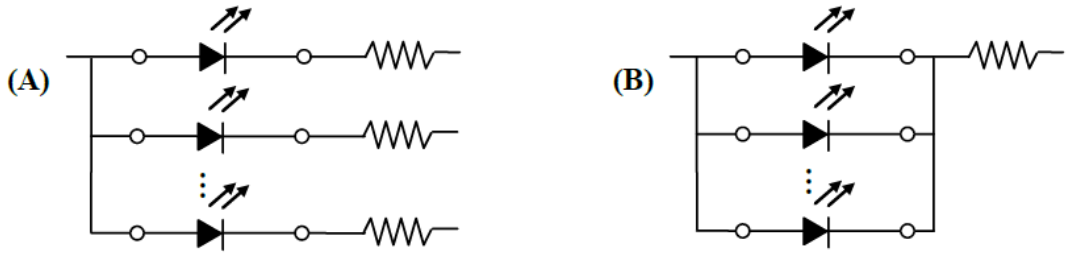
DO NOT LOOK DIRECTLY AT LED WITH UNSHIELDED EYES OR DAMAGE TO RETINA MAY OCCUR.

Mechanical Dimensions:

Technical Drawing:
2704-2741

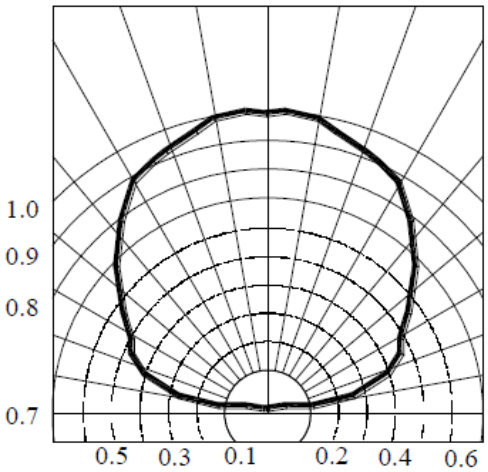


Electrical Connection:
Circuit Diagram:



Optical Characteristics:

Light Disturbition of LED:



Packing:



- Items per Carton: 80 Bags / Carton
- Package Measurements: 44X40X28 CM
- Gross Weight: 18.00 KG
- Package Type: Antistatic bag,carton box; usually 1000pcs per bag