

Kingbright 10mm Orange LED

Order Code	Manufacturers Part No	Description
520-019	L-813ED	10mm Orange LED

The enclosed information is believed to be correct. Information may change without notice due to product improvement. Check to ensure that the product is suitable for the intended application. E. and O.E

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L-813ED

ORANGE

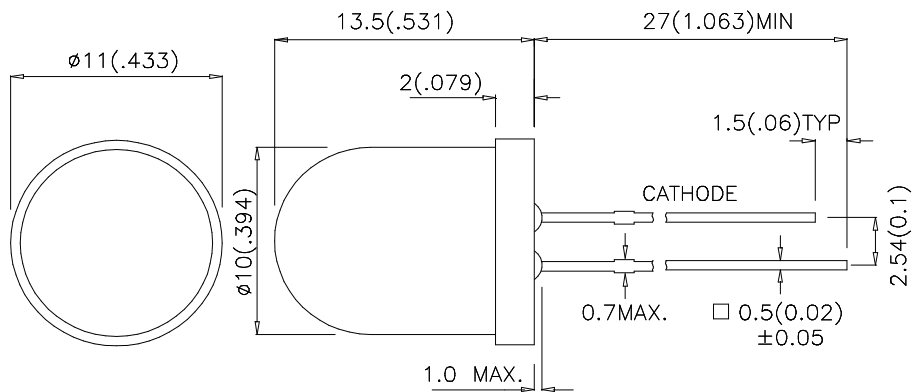
Features

- 10mm DIAMETER BIG LAMP.
- I.C. COMPATIBLE.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- RoHS COMPLIANT.

Description

The Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
L-813ED	ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	36	100	60°

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

Electrical / Optical Characteristics at TA=25°C

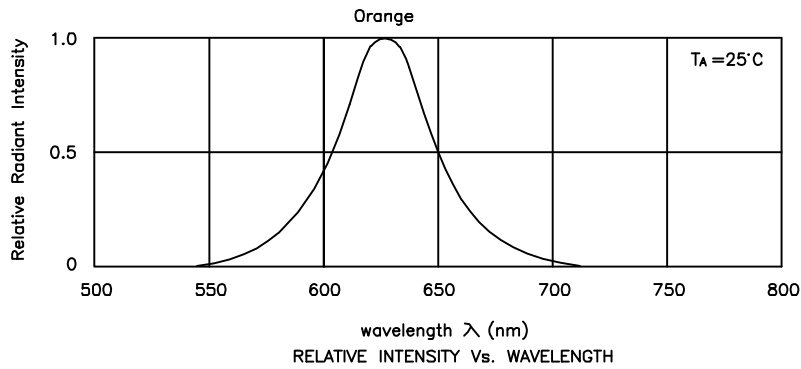
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Orange	627		nm	IF=20mA
λ_D	Dominant Wavelength	Orange	625		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Half-width	Orange	45		nm	IF=20mA
C	Capacitance	Orange	15		pF	VF=0V;f=1MHz
VF	Forward Voltage	Orange	2.0	2.5	V	IF=20mA
IR	Reverse Current	Orange		10	uA	VR = 5V

Absolute Maximum Ratings at TA=25°C

Parameter	Orange	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

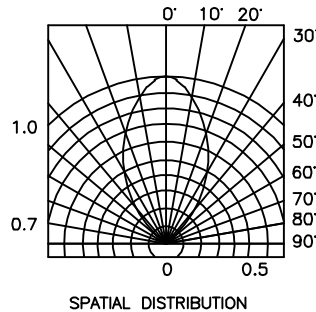
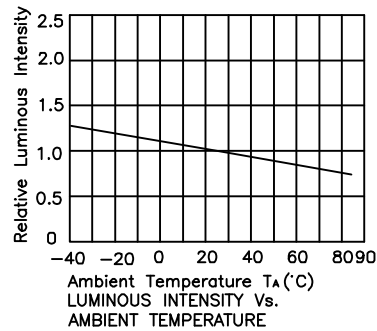
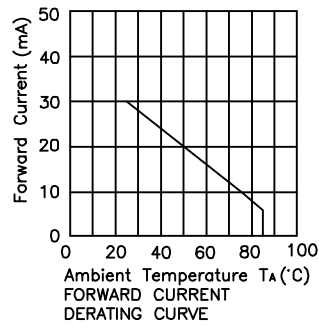
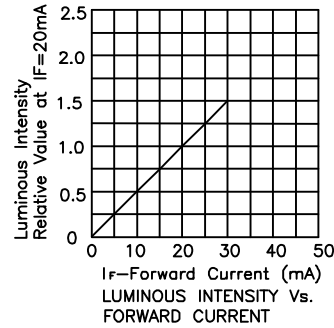
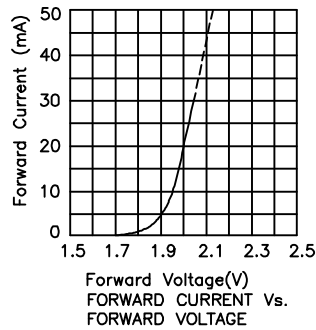
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



Orange

L-813ED



Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
2. Luminous Intensity: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.