Kingbright

L-793YD   YELLOW

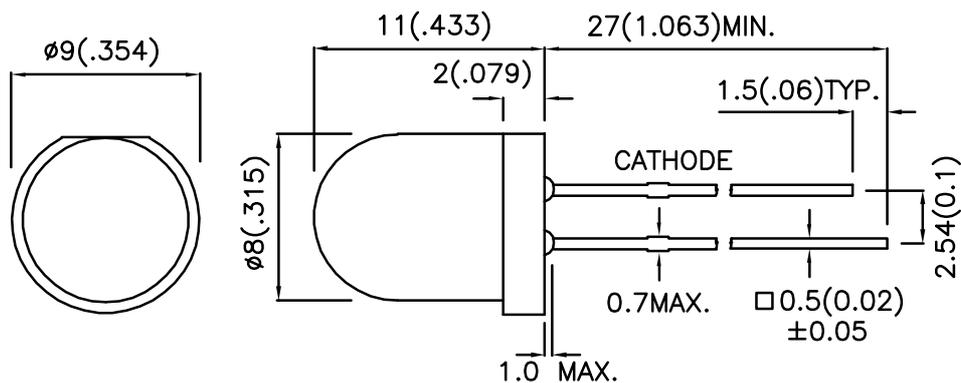## Features

●8mm DIAMETER BIG LAMP.

●WIDE VIEWING ANGLE.

●I.C.COMPATIBLE.

●RELIABLE AND RUGGED.

●LONG LIFE-SOLID STATE RELIABILITY.

●RoHS COMPLIANT.

Description

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

Package Dimensions

Ø9(.354)

11(.433)   27(1.063)MIN.

2(.079)

1.5(.06)TYP.

Ø8(.315)

CATHODE

2.54(0.1)

0.7MAX.   □0.5(0.02) ±0.05

1.0 MAX.

Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±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.

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Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20mA | | Viewing Angle |
			Min.	Typ.	2θ1/2
L-793YD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	18	50	60°

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

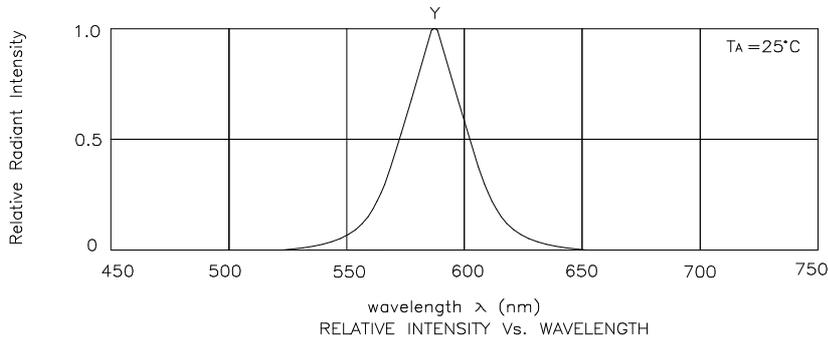## Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Yellow	590		nm	I_F=20mA
λD	Dominant Wavelength	Yellow	588		nm	I_F=20mA
$\Delta\lambda$1/2	Spectral Line Half-width	Yellow	35		nm	I_F=20mA
C	Capacitance	Yellow	20		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Yellow	2.1	2.5	V	I_F=20mA
I_R	Reverse Current	Yellow		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

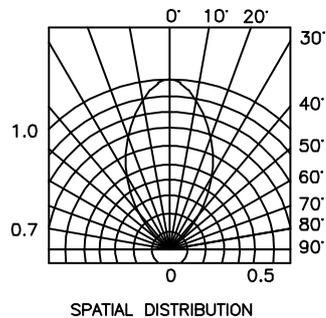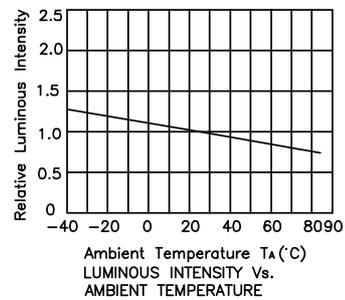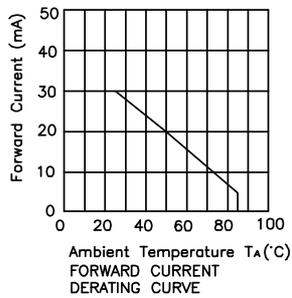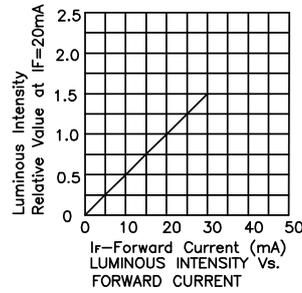| Parameter	Yellow	Units
Power dissipation	105	mW
DC Forward Current	30	mA
Peak Forward Current [1]	140	mA
Reverse Voltage	5	V
Operating / Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

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

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RELATIVE INTENSITY Vs. WAVELENGTH

Yellow   **L-793YD**

FORWARD CURRENT Vs.
FORWARD VOLTAGE

LUMINOUS INTENSITY Vs.
FORWARD CURRENT

FORWARD CURRENT
DERATING CURVE

LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

SPATIAL DISTRIBUTION
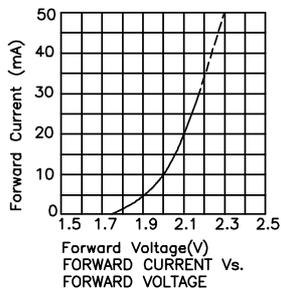
Remarks:
If special sorting is required (e.g. binning based on forward voltage,luminous intensity, or wavelength),
the typical accuracy of the sorting process is as follows:
1. Wavelength: +/-1nm
2. Luminous Intensity: +/-15%
3. Forward Voltage: +/-0.1V
Note: Accuracy may depend on the sorting parameters.