

L1773HD BRIGHT RED	L1773GD GREEN
L1773ID HIGH EFFICIENCY RED	L1773YD YELLOW
L1773ND PURE ORANGE	L1773ED ORANGE

### Features

- LOW POWER CONSUMPTION.
- I.C. COMPATIBLE.
- ROUNDED END RECTANGULAR SHAPE.
- LONG LIFE-SOLID STATE RELIABILITY.

### Description

The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.

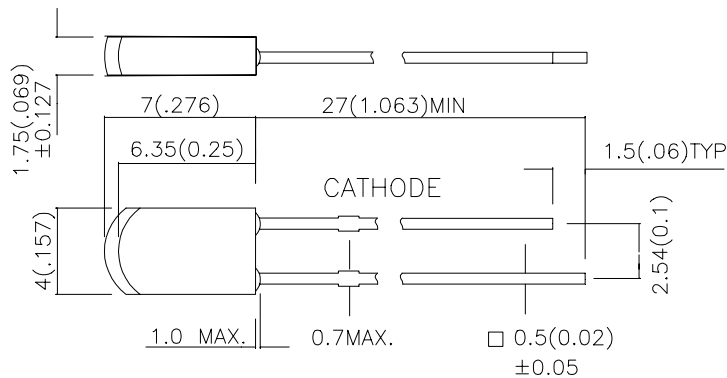
The High Efficiency Red and Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

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

The Pure Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Pure 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 lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10 mA		Viewing Angle
			Min.	Typ.	θ1/2
L1773HD	BRIGHT RED (GaP)	RED DIFFUSED	0.8	2	100°
L1773ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	5	10	100°
L1773ED	ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	5	10	100°
L1773GD	GREEN (GaP)	GREEN DIFFUSED	3	10	100°
L1773YD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	3	8	100°
L1773ND	PURE ORANGE (GaAsP/ GaP)	ORANGE DIFFUSED	5	8	100°

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<sub>A</sub>=25°C

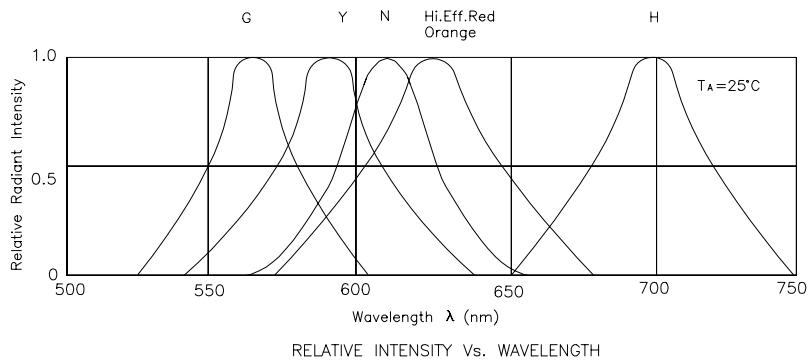
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Bright Red High Efficiency Red Orange Green Yellow Pure Orange	700 627 627 565 590 607		nm	IF=20mA
λ <sub>D</sub>	Dominate Wavelength	Bright Red High Efficiency Red Orange Green Yellow Pure Orange	660 625 625 568 588 610		nm	IF=20mA
Δλ <sub>1/2</sub>	Spectral Line Halfwidth	Bright Red High Efficiency Red Orange Green Yellow Pure Orange	45 45 45 30 35 35		nm	IF=20mA
C	Capacitance	Bright Red High Efficiency Red Orange Green Yellow Pure Orange	40 15 15 15 20 15		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Bright Red High Efficiency Red Orange Green Yellow Pure Orange	2.25 2.0 2.0 2.2 2.1 2.05	2.5 2.5 2.5 2.5 2.5 2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V

## Absolute Maximum Ratings at $T_A=25^\circ\text{C}$

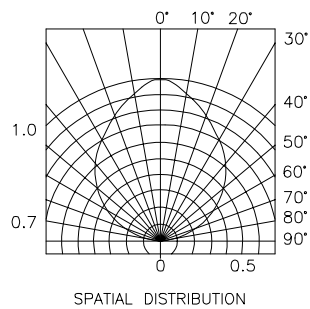
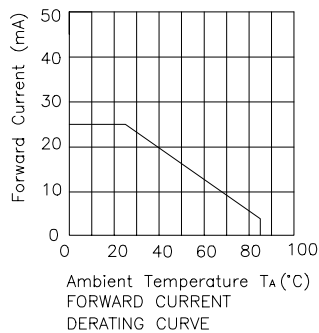
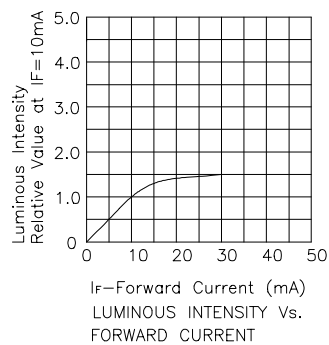
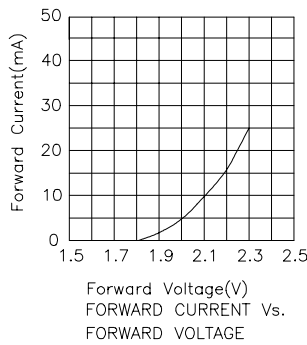
Parameter	Bright Red	High Efficiency Red	Orange	Green	Yellow	Pure Orange	Units
Power dissipation	120	105	105	105	105	105	mW
DC Forward Current	25	30	30	25	30	30	mA
Peak Forward Current [1]	120	160	160	140	140	145	mA
Reverse Voltage	5	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C						
Lead Solder Temperature [2]	260°C For 5 Seconds						

### Notes:

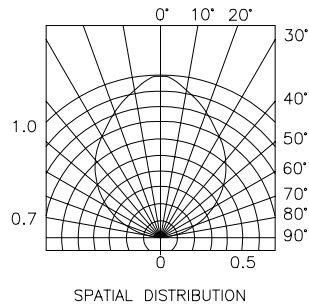
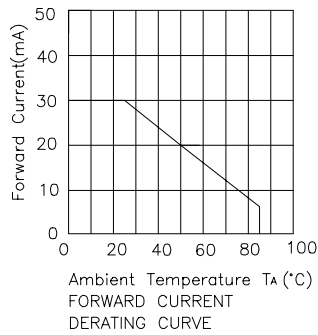
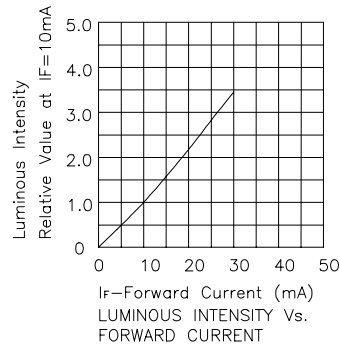
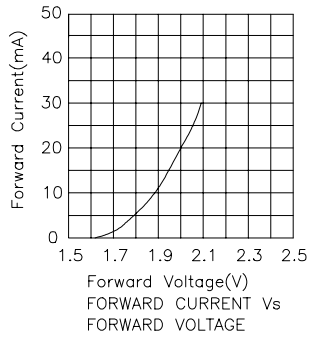
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 2.4mm below package base.



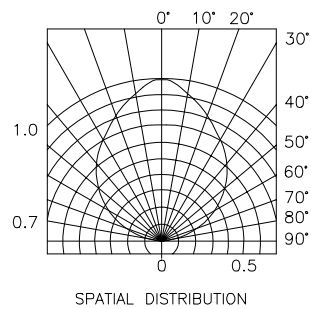
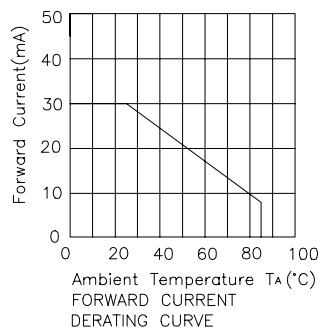
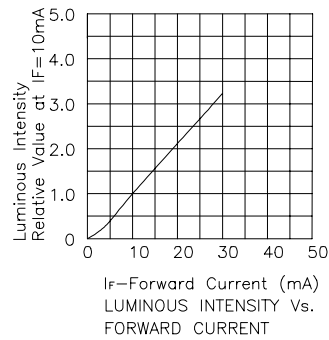
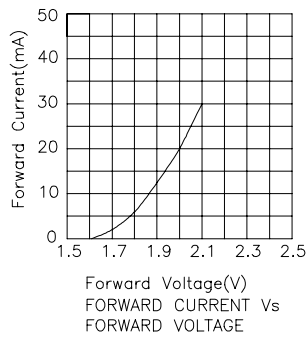
## Bright Red L1773HD



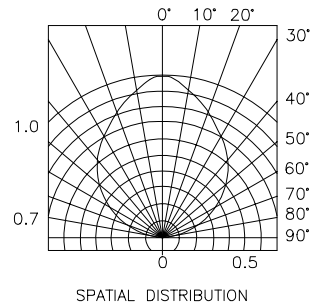
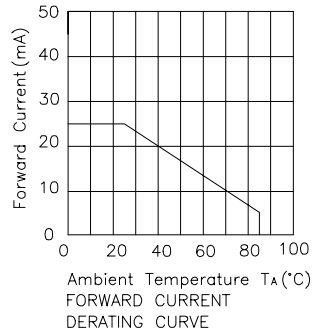
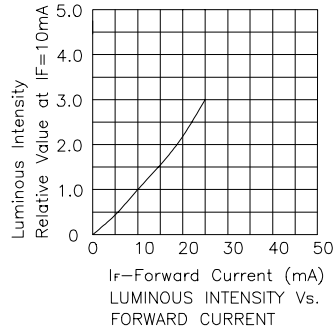
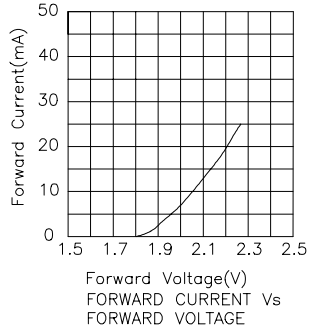
## High Efficiency Red L1773ID



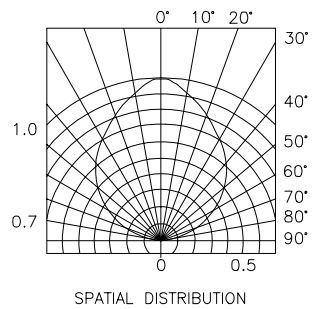
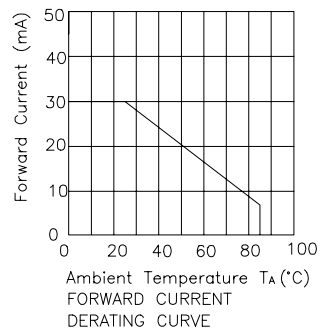
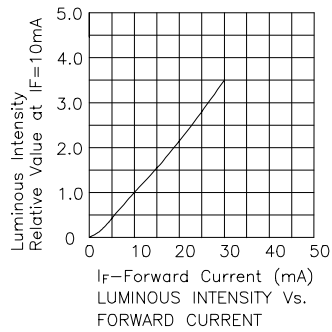
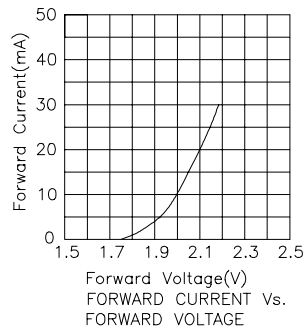
## Orange L1773ED



## Green L1773GD



## Yellow L1773YD



## Pure Orange L1773ND

