

L-1773HD BRIGHT RED	L-1773GD GREEN
L-1773ID HIGH EFFICIENCY RED	L-1773YD YELLOW
L-1773ND PURE ORANGE	L-1773ED 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.

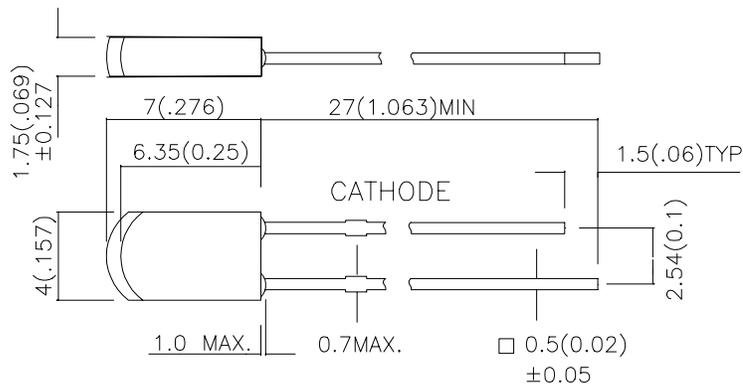
The High Efficiency Red and Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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.	2θ1/2
L-1773HD	BRIGHT RED (GaP)	RED DIFFUSED	0.8	2	100°
L-1773ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	5	10	100°
L-1773ED	ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	5	10	100°
L-1773GD	GREEN (GaP)	GREEN DIFFUSED	3	10	100°
L-1773YD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	3	8	100°
L-1773ND	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_A=25°C

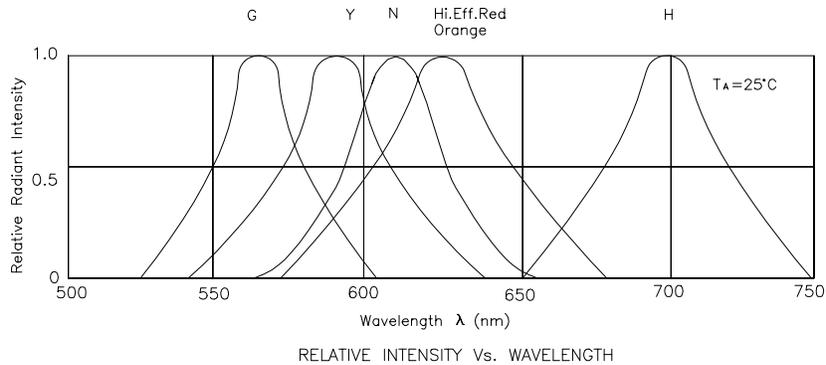
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Bright Red High Efficiency Red Orange Green Yellow Pure Orange	700 627 627 565 590 607		nm	IF=20mA
λ _D	Dominate Wavelength	Bright Red High Efficiency Red Orange Green Yellow Pure Orange	660 625 625 568 588 610		nm	IF=20mA
Δλ _{1/2}	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	V _F =0V;f=1MHz
V _F	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 _R	Reverse Current	All		10	μA	V _R = 5V

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

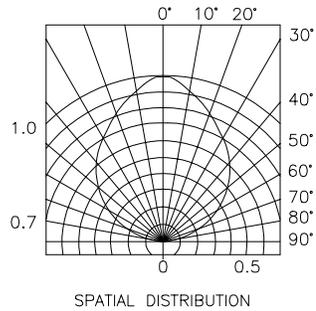
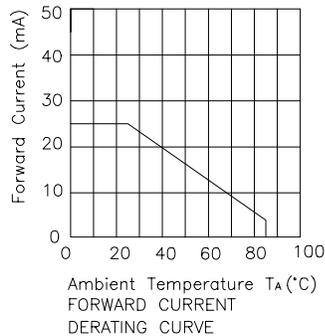
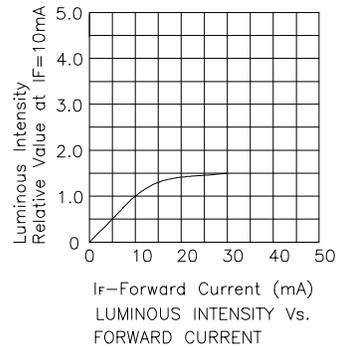
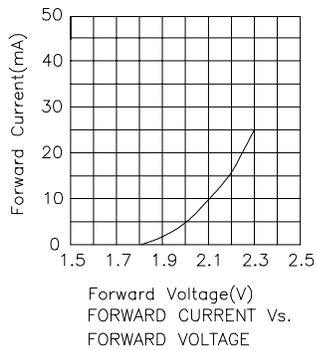
Parameter	Bright Red	High Efficiency Red	Orange	Green	Yellow	Pure Orange	Units
Power dissipation	120	105	105	105	105	105	mW
DC Forward Current	25	30	30	25	30	30	mA
Peak Forward Current [1]	120	160	160	140	140	145	mA
Reverse Voltage	5	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C						
Lead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

Notes:

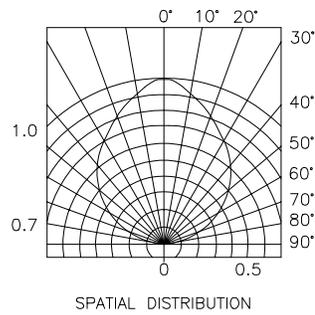
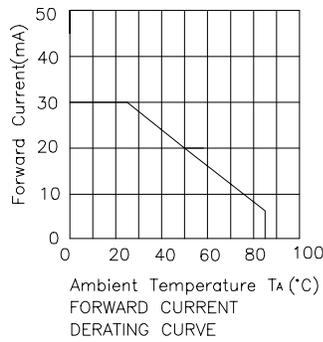
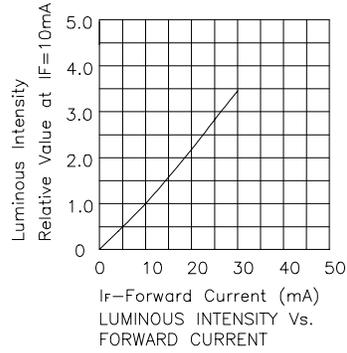
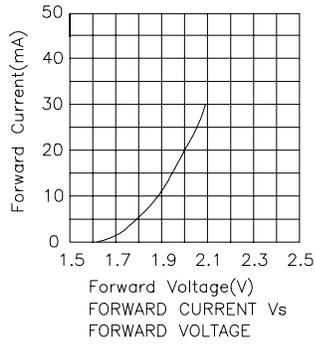
- 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



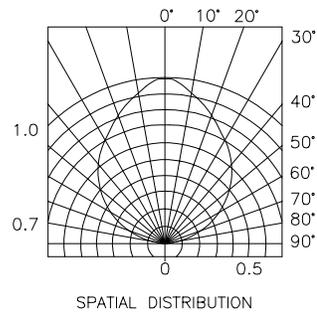
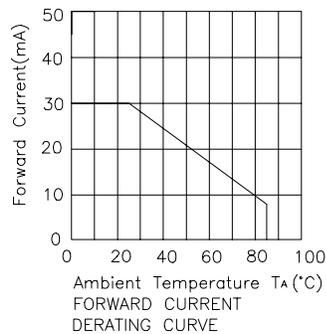
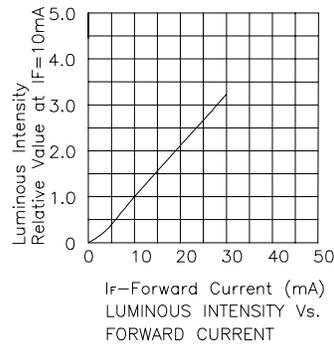
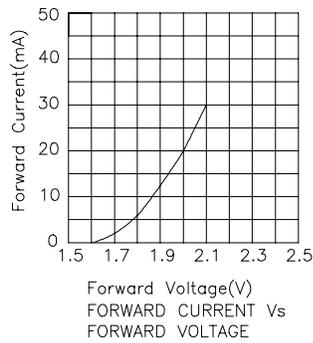
Bright Red L-1773HD



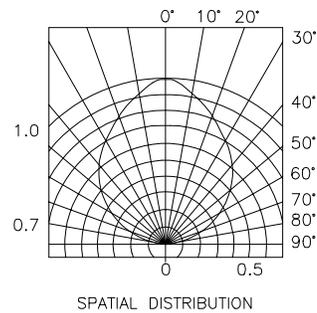
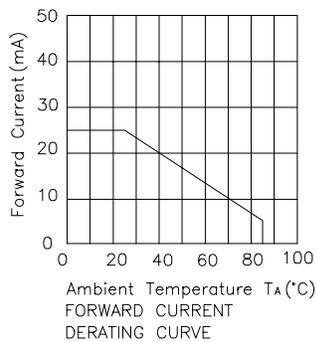
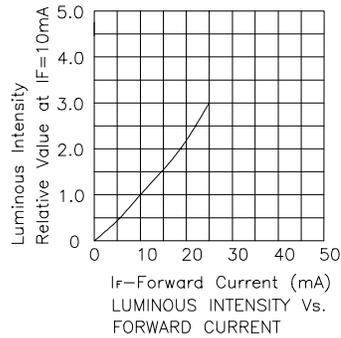
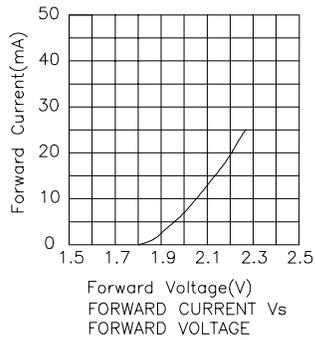
High Efficiency Red L-1773ID



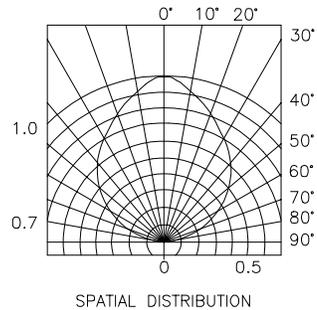
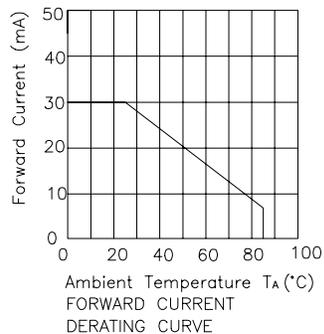
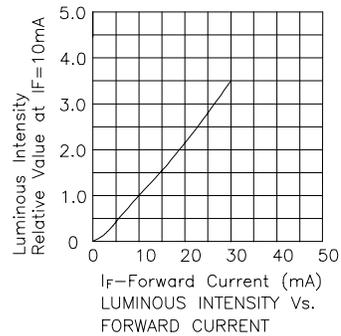
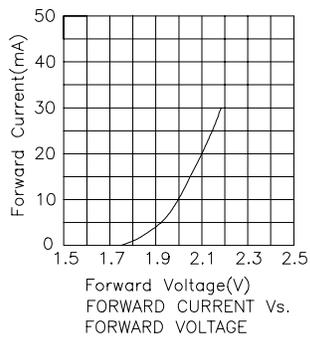
Orange L-1773ED



Green L-1773GD



Yellow L-1773YD



Pure Orange L-1773ND

