

L-1503lx HIGH EFFICIENCY RED
 L-1503EC HIGH EFFICIENCY RED
 L-1503Yx YELLOW
 L-1503Gx GREEN

Features

- HIGH INTENSITY.
- LOW POWER CONSUMPTION.
- VERSATILE MOUNTING ON P.C. BOARD OR PANEL.
- T-1 3/4 DIAMETER FLANGELESS PACKAGE.
- RELIABLE AND RUGGED.
- DIFFUSED, TRANSPARENT AND WATER CLEAR TYPE.

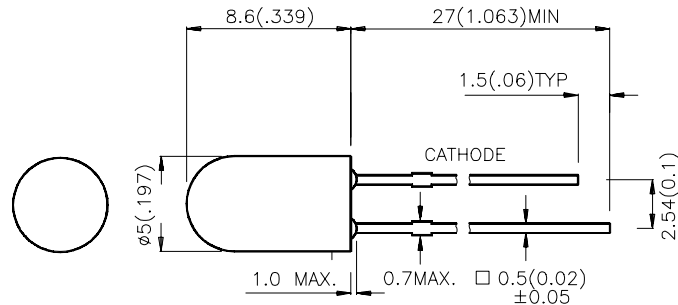
Description

The High Efficiency Red 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.

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-1503ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	30	60°
L-1503IT		RED TRANSPARENT	30	80	30°
L-1503EC		WATER CLEAR	30	80	30°
L-1503GD	GREEN (GaP)	GREEN DIFFUSED	5	20	60°
L-1503GT		GREEN TRANSPARENT	20	60	30°
L-1503GC		WATER CLEAR	20	60	30°
L-1503YD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	5	20	60°
L-1503YT		YELLOW TRANSPARENT	20	40	30°
L-1503YC		WATER CLEAR	20	40	30°

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

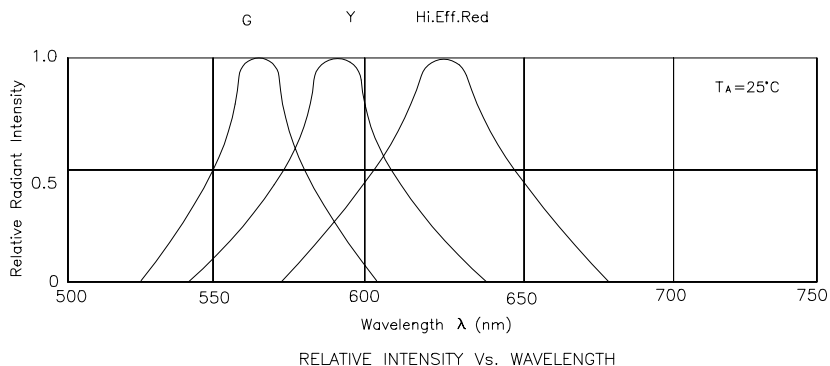
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	High Efficiency Red Green Yellow	627 565 590		nm	IF=20mA
λ _D	Dominate Wavelength	High Efficiency Red Green Yellow	625 568 588		nm	IF=20mA
Δλ _{1/2}	Spectral Line Halfwidth	High Efficiency Red Green Yellow	45 30 35		nm	IF=20mA
C	Capacitance	High Efficiency Red Green Yellow	15 15 20		pF	VF=0V;f=1MHz
V _F	Forward Voltage	High Efficiency Red Green Yellow	2.0 2.2 2.1	2.5 2.5 2.5	V	IF=20mA
I _R	Reverse Current	All		10	μA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

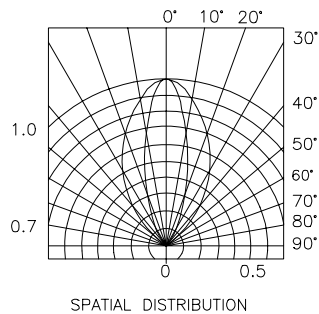
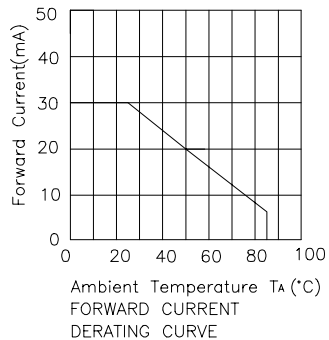
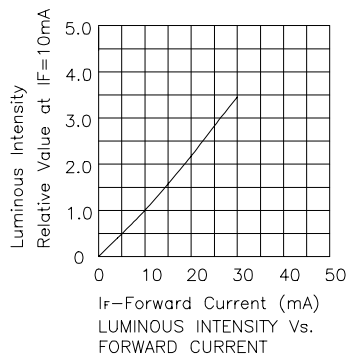
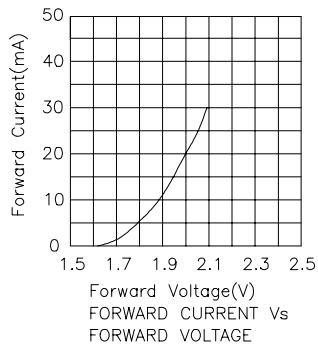
Parameter	High Efficiency Red	Green	Yellow	Units
Power dissipation	105	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	160	140	140	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C			
Lead Solder Temperature [2]	260°C For 5 Seconds			

Notes:

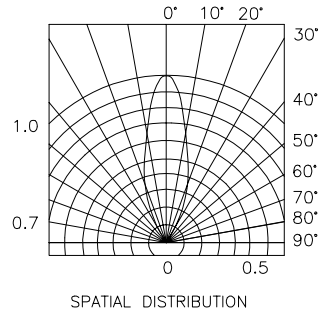
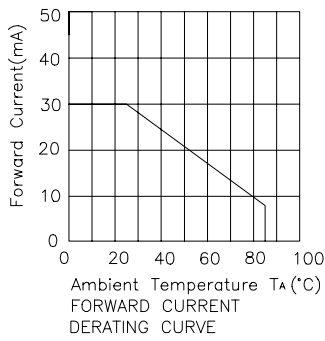
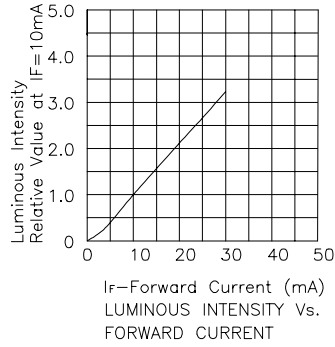
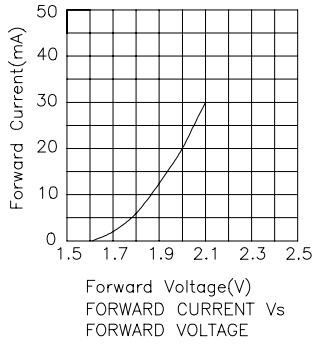
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



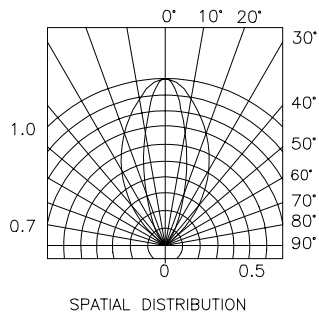
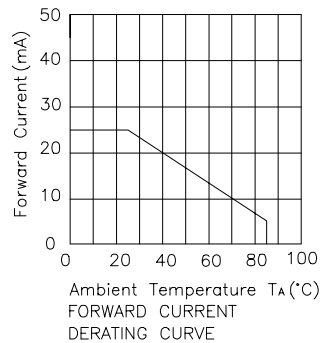
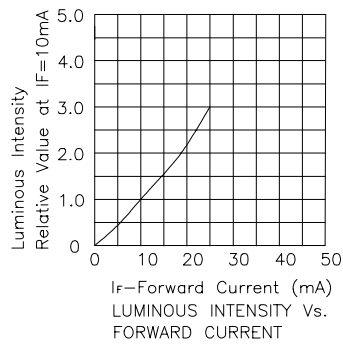
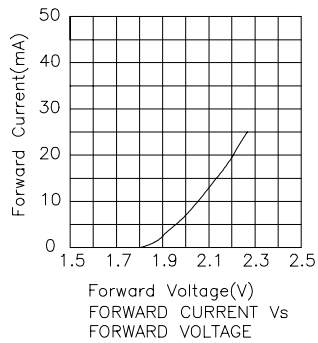
High Efficiency Red L-1503ID, L-1503IT



High Efficiency Red L-1503EC



Green L-1503GD,L-1503GC,L-1503GT



Yellow L-1503YD,L-1503YC,L-1503YT

