

L323HD BRIGHT RED L323GD GREEN
 L323ID HIGH EFFICIENCY RED L323YD YELLOW
 L323ED ORANGE

Features

- LOW POWER CONSUMPTION.
- RELIABLE AND RUGGED.
- SUITABLE FOR DIRECTION INDICATOR.
- I.C. COMPATIBLE.

Description

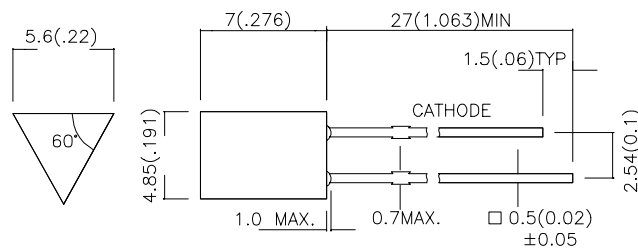
The Bright Red source color devices are made with Gallium Phosphide Red Light Emitting Diode.

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.

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
L323HD	BRIGHT RED (GaP)	RED DIFFUSED	0.5	1	100°
L323ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	3	8	100°
L323ED	ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	3	8	100°
L323GD	GREEN (GaP)	GREEN DIFFUSED	2	4	100°
L323YD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	2	4	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

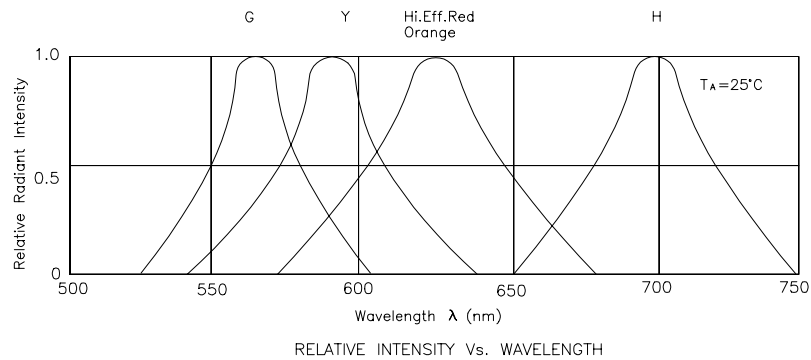
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Bright Red High Efficiency Red Orange Green Yellow	700 627 627 565 590		nm	IF=20mA
λ _D	Dominate Wavelength	Bright Red High Efficiency Red Orange Green Yellow	660 625 625 568 588		nm	IF=20mA
Δλ _{1/2}	Spectral Line Halfwidth	Bright Red High Efficiency Red Orange Green Yellow	45 45 45 30 35		nm	IF=20mA
C	Capacitance	Bright Red High Efficiency Red Orange Green Yellow	40 15 15 15 20		pF	VF=0V;f=1MHz
V _F	Forward Voltage	Bright Red High Efficiency Red Orange Green Yellow	2.25 2.0 2.0 2.2 2.1	2.5 2.5 2.5 2.5 2.5	V	IF=20mA
I _R	Reverse Current	All		10	μA	VR = 5V

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

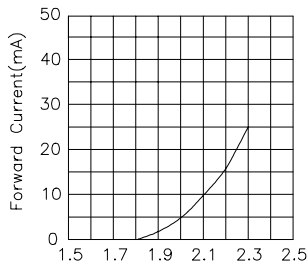
Parameter	Bright Red	High Efficiency Red	Orange	Green	Yellow	Units
Power dissipation	120	105	105	105	105	mW
DC Forward Current	25	30	30	25	30	mA
Peak Forward Current [1]	120	160	160	140	140	mA
Reverse Voltage	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C					
Lead Solder Temperature [2]	260°C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

Notes:

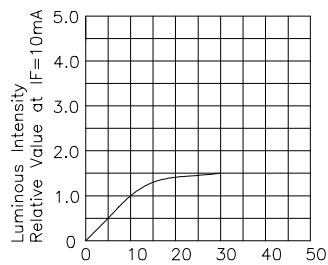
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



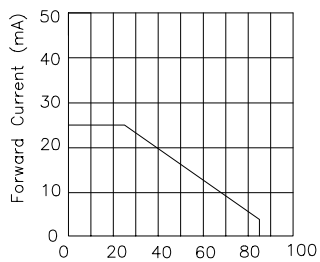
Bright Red L323HD



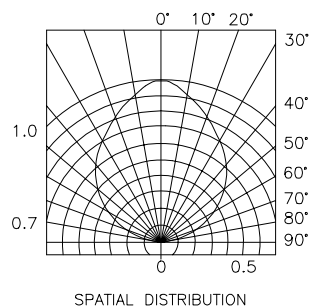
FORWARD CURRENT Vs. FORWARD VOLTAGE



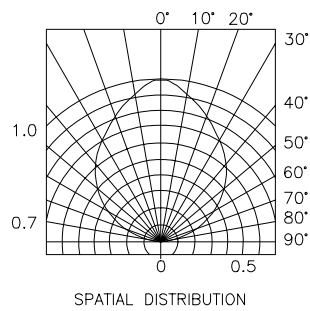
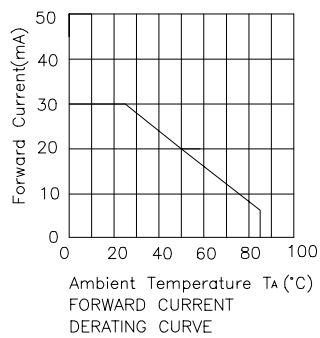
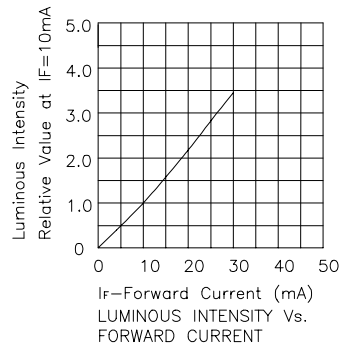
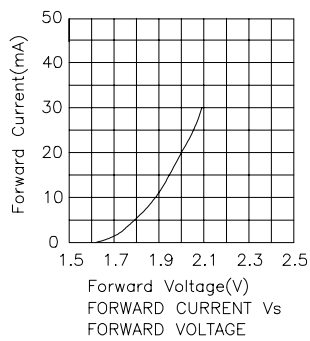
LUMINOUS INTENSITY Vs. FORWARD CURRENT



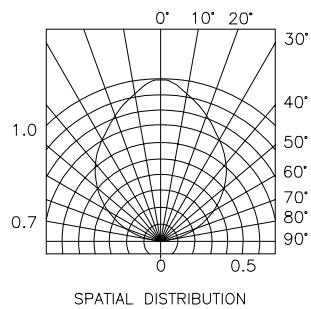
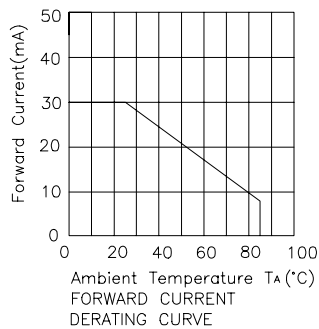
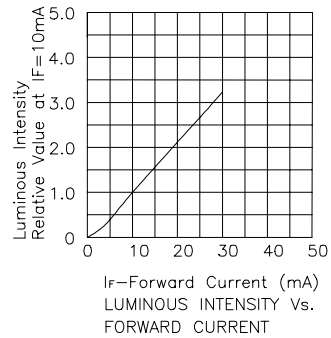
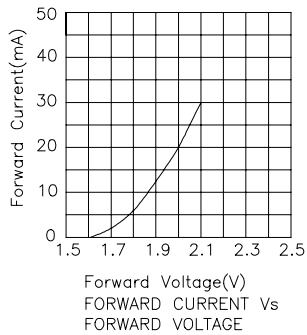
FORWARD CURRENT DERATING CURVE



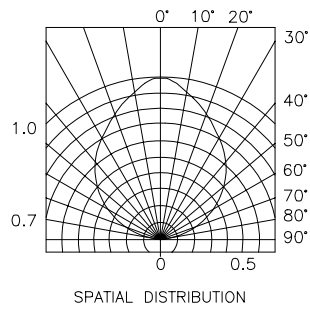
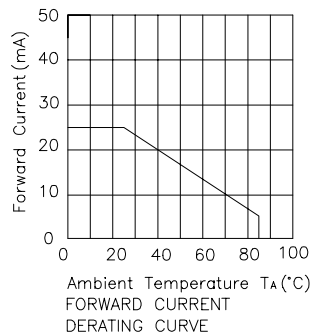
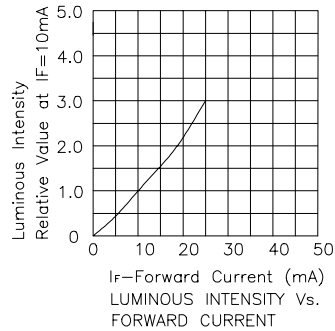
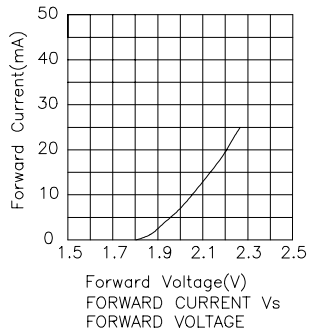
High Efficiency Red L323ID



Orange L323ED



Green L323GD



Yellow L323YD

