

L-132XH BRIGHT RED	L-132XG GREEN
L-132XI HIGH EFFICIENCY RED	L-132XY YELLOW
L-132XN PURE ORANGE	L-132XPG PURE GREEN

Features

- HIGH INTENSITY.
- LOW POWER CONSUMPTION.
- POPULAR T-1 DIAMETER PACKAGE.
- GENERAL PURPOSE LEADS.
- RELIABLE AND RUGGED.
- LONG LIFE - SOLID STATE RELIABILITY.
- AVAILABLE ON TAPE AND REEL.

Description

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

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

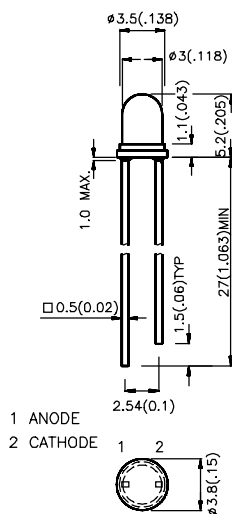
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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.

The Pure Green source color devices are made with Gallium Phosphide Pure Green 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 subjected to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10 mA		Viewing Angle
			Min.	Typ.	2θ1/2
L-132XHD	BRIGHT RED (GaP)	RED DIFFUSED	1.3	3	60°
L-132XHT		RED TRANS.	2	5	50°
L-132XID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	8	20	60°
L-132XIT		RED TRANS.	20	80	50°
L-132XGD	GREEN (GaP)	GREEN DIFFUSED	8	15	60°
L-132XGT		GREEN TRANS.	20	40	50°
L-132XGC		WATER CLEAR	20	40	50°
L-132XYD	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	8	15	60°
L-132XYT		YELLOW TRANS.	10	20	50°
L-132XYC		WATER CLEAR	10	20	50°
L-132XND	PURE ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	8	30	60°
L-132XNT		ORANGE TRANS.	20	50	50°
L-132XNC		WATER CLEAR	20	50	50°
L-132XPGD	PURE GREEN (GaP)	GREEN DIFFUSED	2	5	60°
L-132XPGT		GREEN TRANS.	3	10	50°
L-132XPGC		WATER CLEAR	3	10	50°

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

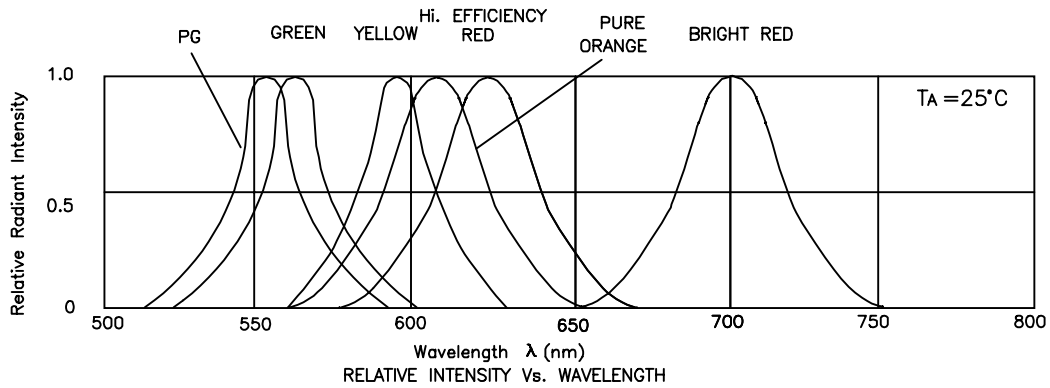
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Bright Red High Efficiency Red Green Yellow Pure Orange Pure Green	700 625 565 590 610 555		nm	IF=20mA
Δλ _{1/2}	Spectral Line Halfwidth	Bright Red High Efficiency Red Green Yellow Pure Orange Pure Green	45 45 30 35 35 30		nm	IF=20mA
C	Capacitance	Bright Red High Efficiency Red Green Yellow Pure Orange Pure Green	40 12 45 10 15 45		pF	VF=0V;f=1MHz
V _F	Forward Voltage	Bright Red High Efficiency Red Green Yellow Pure Orange Pure Green	2.0 2.0 2.2 2.1 2.0 2.25	2.5 2.5 2.5 2.5 2.6 2.6	V	IF=20mA
I _R	Reverse Current	All		10	uA	VR = 5V

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

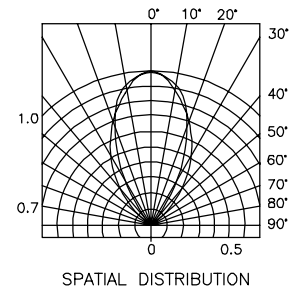
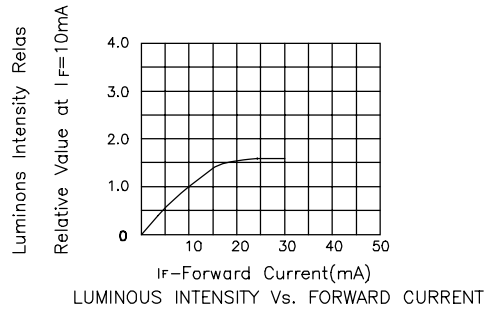
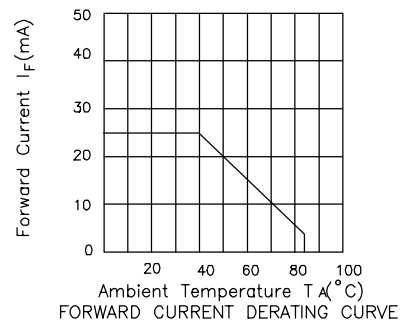
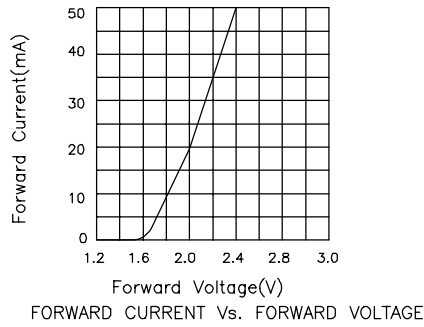
Parameter	Bright Red	High Efficiency Red	Green	Yellow	Pure Orange	Pure Green	Units
Power dissipation	120	105	105	105	105	105	mW
DC Forward Current	25	30	25	30	30	25	mA
Peak Forward Current [1]	150	150	150	150	150	150	mA
Reverse Voltage	5	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C						
Lead Soldering Temperature [2]	260°C For 5 Seconds						

Notes:

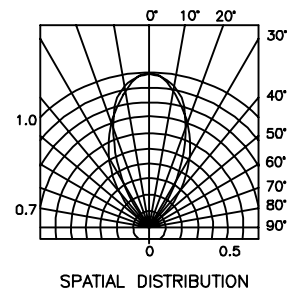
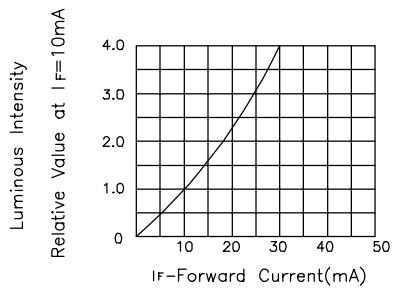
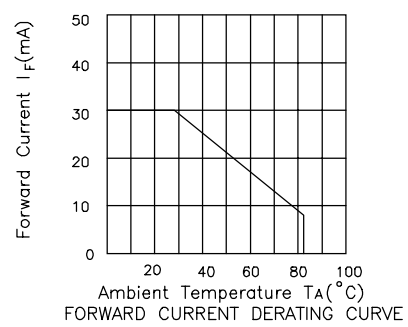
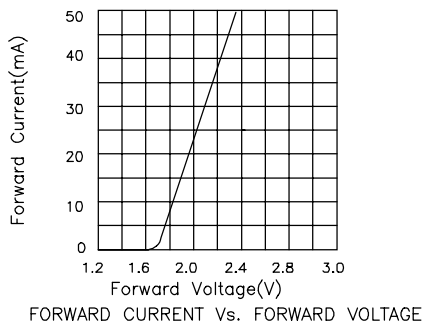
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



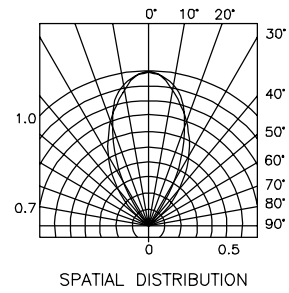
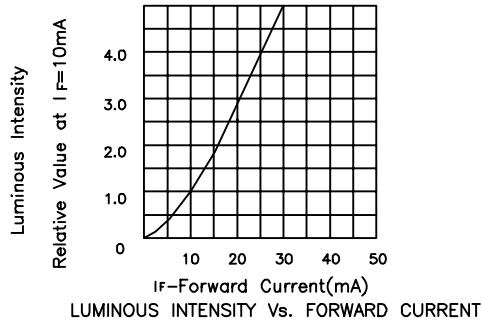
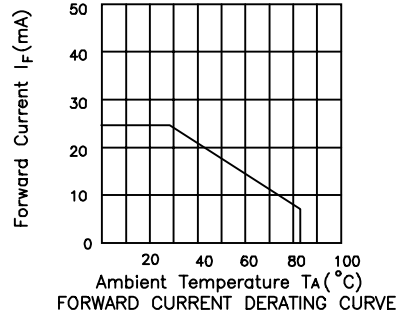
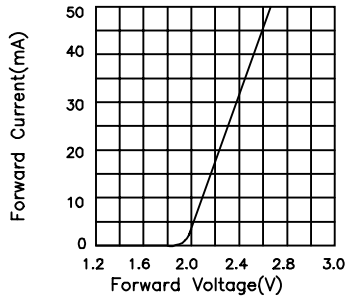
Bright Red L-132XHD,L-132XHT



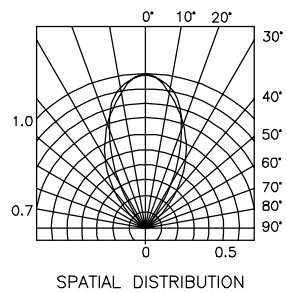
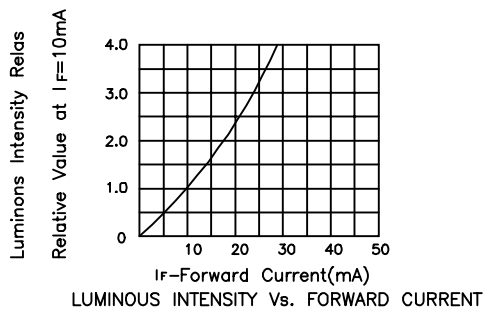
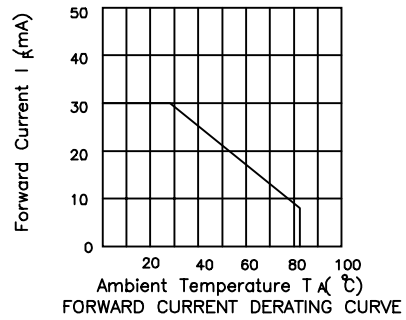
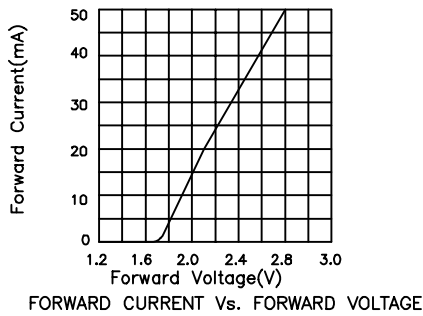
High Efficiency Red L-132XID,L-132XIT



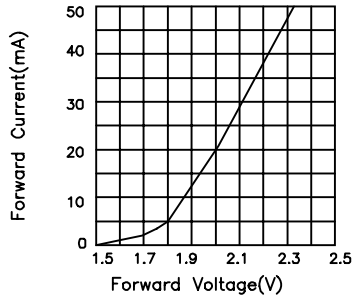
Green L-132XGD,L-132XGC,L-132XGT



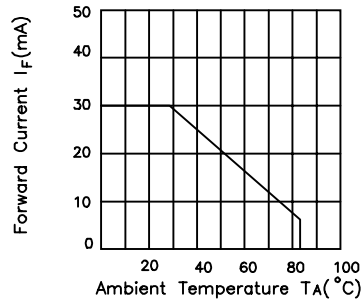
Yellow L-132XYD,L-132XYC,L-132XYT



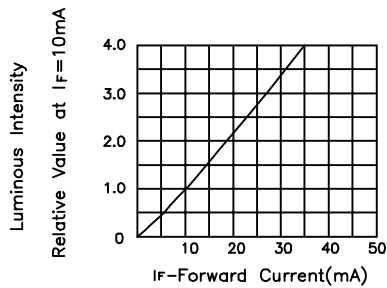
Pure Orange L-132XND,L-132XNC,L-132XNT



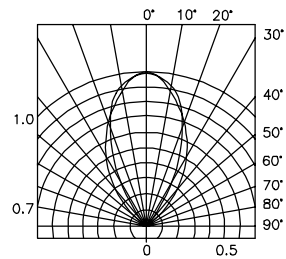
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

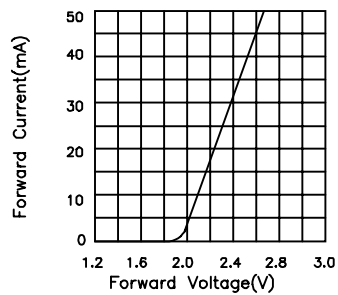


LUMINOUS INTENSITY Vs. FORWARD CURRENT

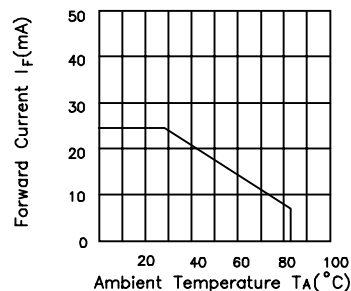


SPATIAL DISTRIBUTION

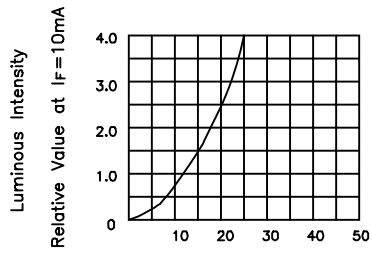
Pure Green L-132XPGD,L-132XPGC,L-132XPGT



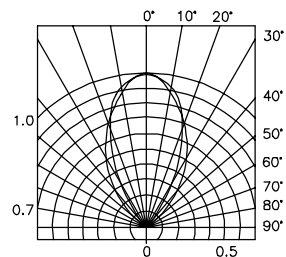
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION