T-1 (3mm) RIGHT ANGLE LED INDICATORS

L-130WDT/1EGW HIGH EFFICIENCY RED / GREEN
L-130WDT/1EYW HIGH EFFICIENCY RED / YELLOW
L-130WDT/1GYW GREEN / YELLOW

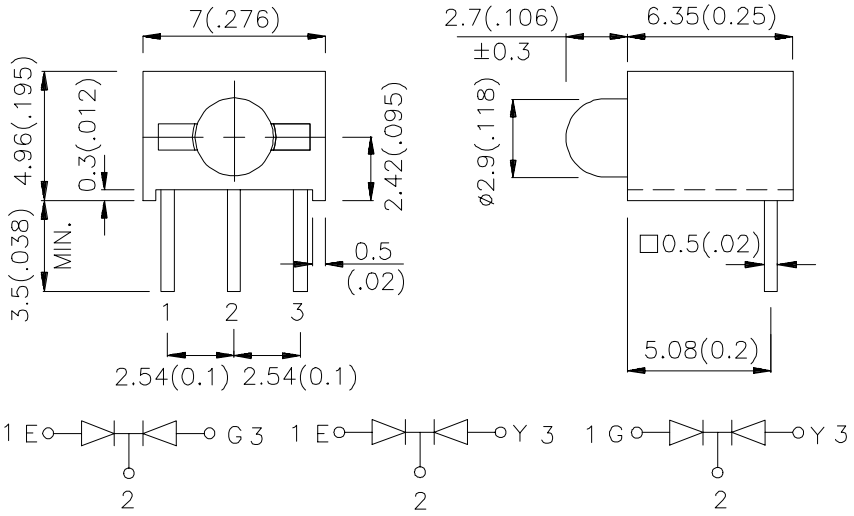
Features

- PRE-TRIMMED LEADS FOR PC BOARD MOUNTING.
- 3 LEADS WITH COMMON CATHODE.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- HIGH RELIABILITY.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.

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 ±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) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
L-130WDT/1EGW	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	7	30	60°
	GREEN (GaP)		7	25	
L-130WDT/1EYW	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	7	30	60°
	YELLOW (GaAsP/GaP)		7	20	
L-130WDT/1GYW	GREEN (GaP)	WHITE DIFFUSED	7	25	60°
	YELLOW (GaAsP/GaP)		7	20	

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

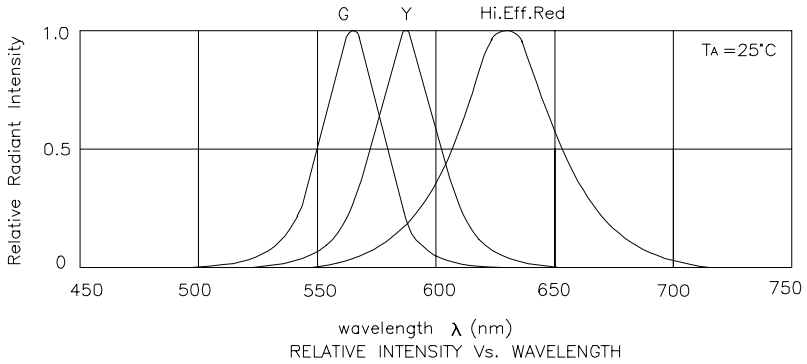
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Green Yellow	627 565 590		nm	I_F=20mA
λD	Dominate Wavelength	High Efficiency Red Green Yellow	625 568 588		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Green Yellow	45 30 35		nm	I_F=20mA
C	Capacitance	High Efficiency Red Green Yellow	15 15 20		pF	V_F=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	I_F=20mA
I_R	Reverse Current	All		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

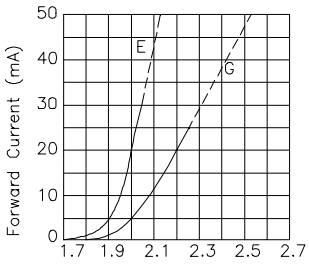
Parameter	High Efficiency Red	Green	Yellow	Units
Power dissipation	105	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	160	140	140	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C			
Lead Solder Temperature [2]	260°C For 5 Seconds			

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

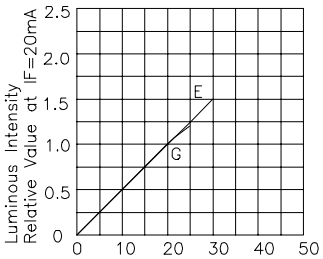


RELATIVE INTENSITY Vs. WAVELENGTH

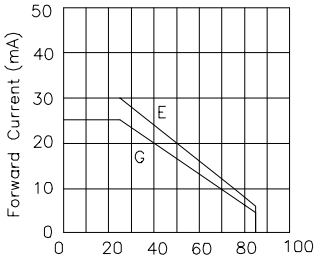
High Efficiency Red / Green L-130WDT/1EGW



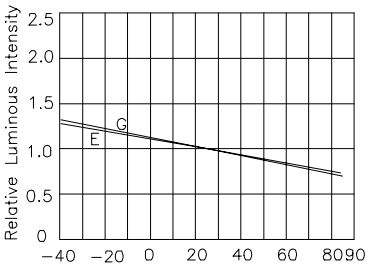
FORWARD CURRENT Vs.
FORWARD VOLTAGE



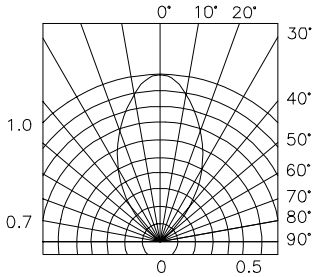
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE

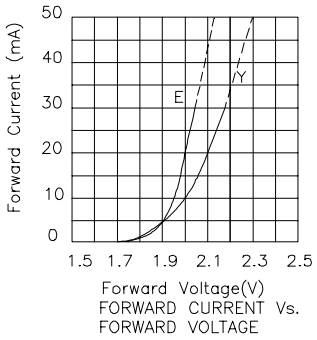


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

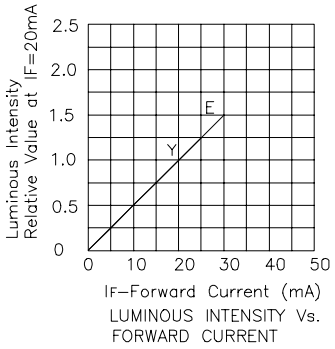


SPATIAL DISTRIBUTION

High Efficiency Red / Yellow L-130WDT/1EYW



FORWARD CURRENT Vs.
FORWARD VOLTAGE



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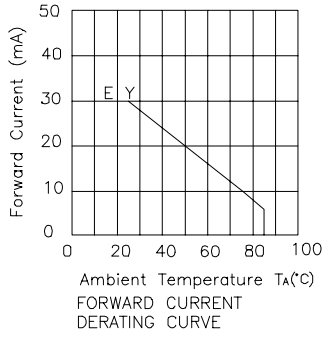
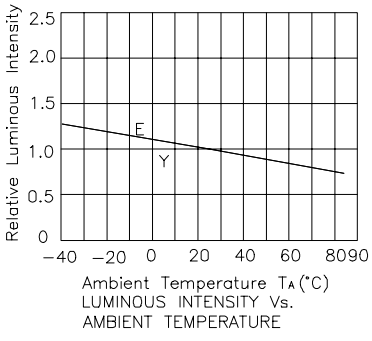


FORWARD CURRENT
DERATING CURVE



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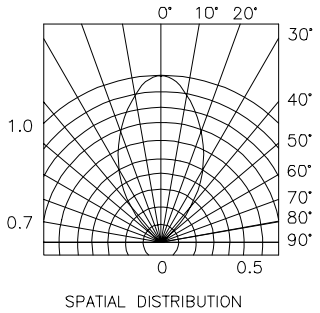
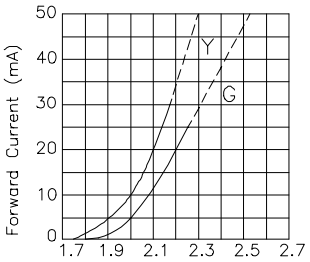
AMBIENT TEMPERATURE

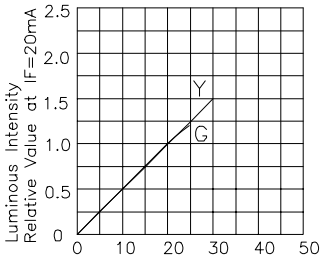


SPATIAL DISTRIBUTION

Green / Yellow L-130WDT/1GYW



FORWARD CURRENT Vs.
FORWARD VOLTAGE



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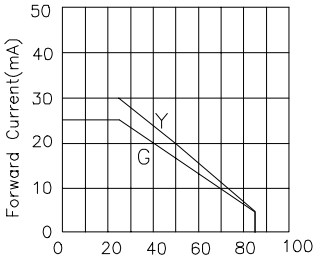

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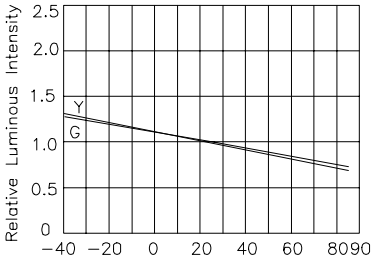

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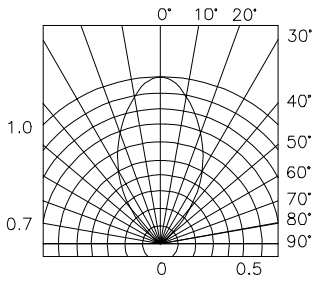

SPATIAL DISTRIBUTION