

L-59BL/1EYW

HIGH EFFICIENCY RED
YELLOW

Features

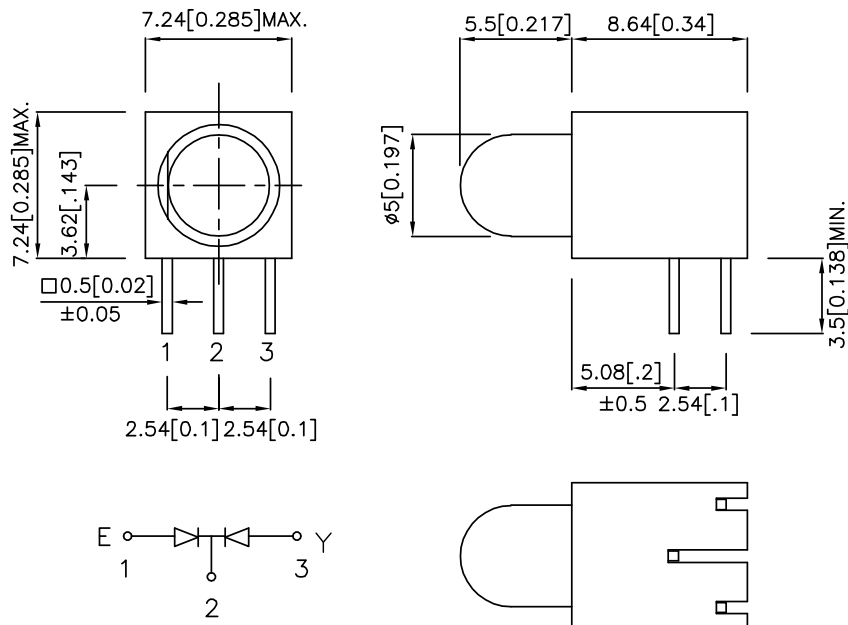
- PRE-TRIMMED LEADS FOR PC BOARD MOUNTING.
- 3 LEADS WITH COMMON CATHODE LEAD.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST RATIO.
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY - LIFE MEASURED IN YEARS.
- UL RATING : 94V-0.
- HOUSING MATERIAL: TYPE 66 NYLON.
- RoHS COMPLIANT.

Description

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.

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 leads emerge from the package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
L-59BL/1EYW	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	18	60	60°
	YELLOW (GaAsP/GaP)		18	40	

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 TA=25°C

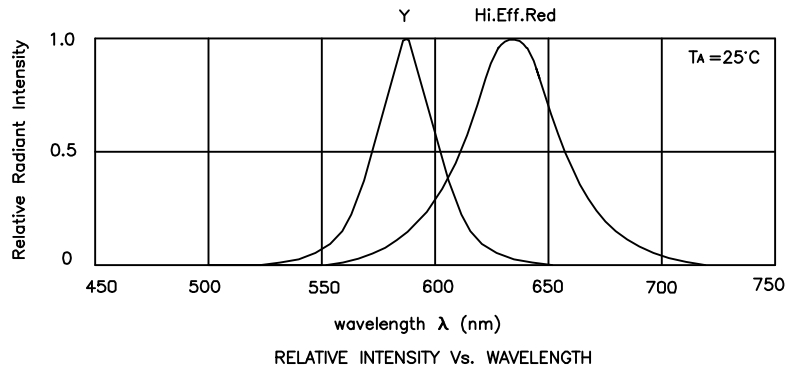
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Yellow	627 590		nm	IF=20mA
λD	Dominant Wavelength	High Efficiency Red Yellow	625 588		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Yellow	45 35		nm	IF=20mA
C	Capacitance	High Efficiency Red Yellow	15 20		pF	VF=0V;f=1MHz
VF	Forward Voltage	High Efficiency Red Yellow	2.0 2.1	2.5 2.5	V	IF=20mA
IR	Reverse Current	All		10	uA	VR = 5V

Absolute Maximum Ratings at TA=25°C

Parameter	High Efficiency Red	Yellow	Units
Power dissipation	105	105	mW
DC Forward Current	30	30	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5		V
Operating/storage Temperature	-40°C To +85°C		
Lead Solder Temperature [2]	260°C For 3 Seconds		
Lead Solder Temperature [3]	260°C For 5 Seconds		

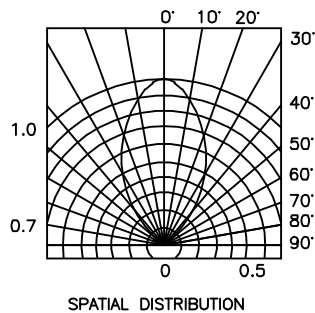
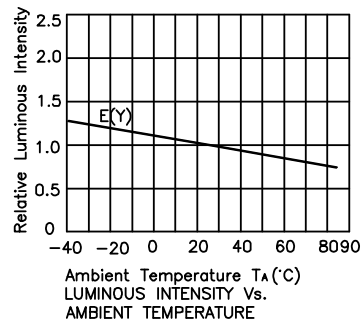
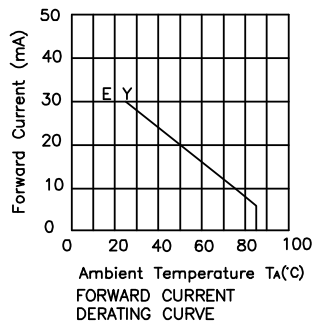
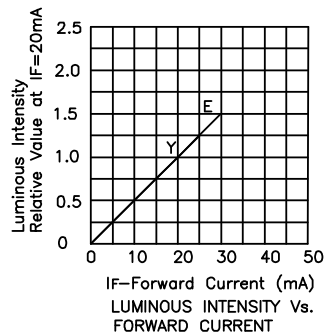
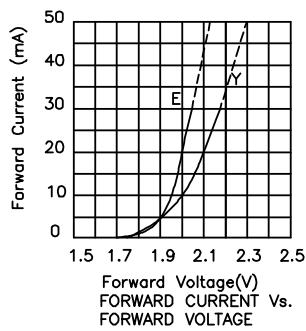
Notes:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.



High Efficiency Red / Yellow

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Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: $\pm 1\text{nm}$
2. Luminous Intensity: $\pm 15\%$
3. Forward Voltage: $\pm 0.1\text{V}$

Note: Accuracy may depend on the sorting parameters.