

L73CB/ SERIES

L73CB/4 SERIES

L73CB/2 SERIES

L73HB/ SERIES

L73CB/3 SERIES

L73JB/ SERIES

### Features

- PRE-TRIMMED LEADS FOR PC MOUNTING.
- 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.

### Description

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

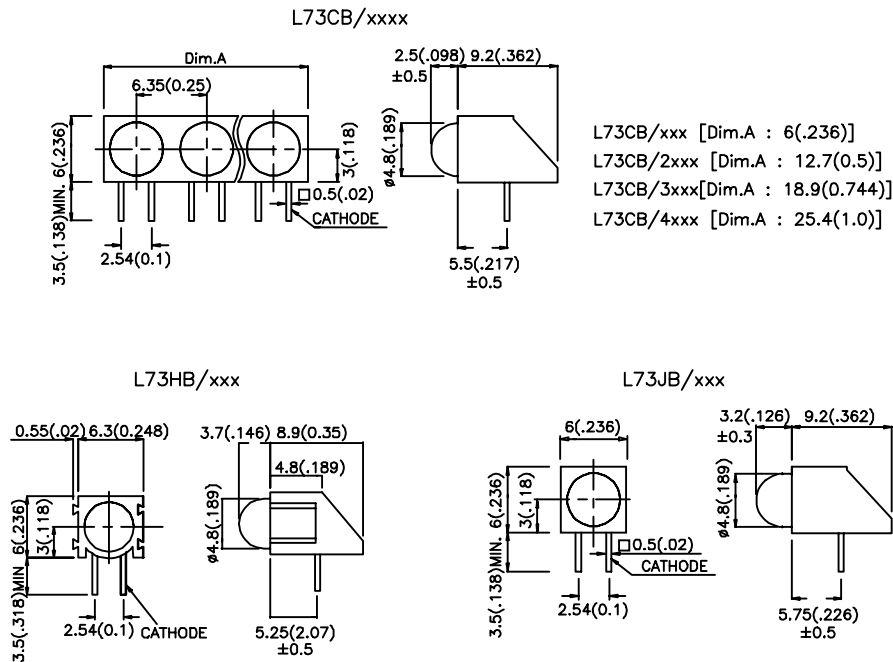
The High Efficiency Red source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Orange Light Emitting Diode.

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.

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red 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.	θ1/2
L73CB/HDA L73CB/2HDA L73CB/3HDA L73CB/4HDA L73HB/HDA L73JB/HDA	BRIGHT RED (GaP)	RED DIFFUSED	1.2	3	60°
L73CB/IDA L73CB/2IDA L73CB/3IDA L73CB/4IDA L73HB/IDA L73JB/IDA	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	5	20	60°
L73CB/GDA L73CB/2GDA L73CB/3GDA L73CB/4GDA L73HB/GDA L73JB/GDA	GREEN (GaP)	GREEN DIFFUSED	8	20	60°
L73CB/YDA L73CB/2YDA L73CB/3YDA L73CB/4YDA L73HB/YDA L73JB/YDA	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	5	20	60°
L73CB/SRDA L73CB/2SRDA L73CB/3SRDA L73CB/4SRDA L73HB/SRDA L73JB/SRDA	SUPER BRIGHT RED (GaAlAs)	RED DIFFUSED	*100	*300	60°

Notes:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.
2. \* Luminous intensity with asterisk is measured at 20mA.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

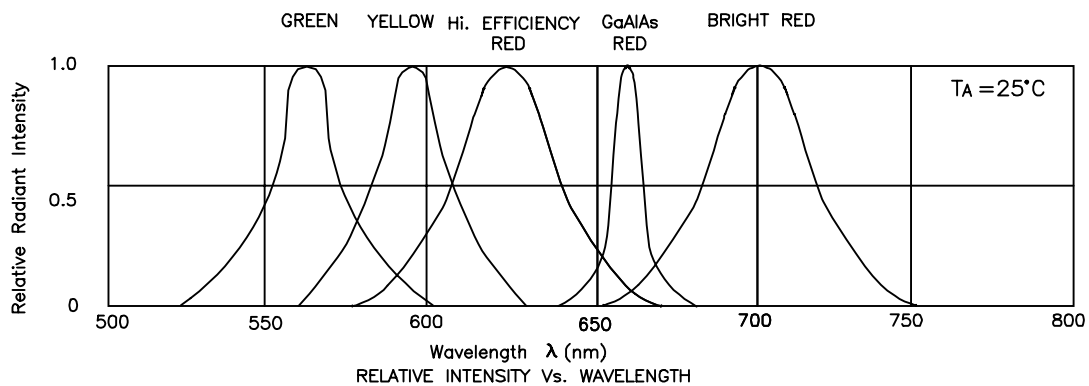
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Bright Red High Efficiency Red Green Yellow Super Bright Red	700 625 565 590 660		nm	IF=20mA
Δλ <sub>1/2</sub>	Spectral Line Halfwidth	Bright Red High Efficiency Red Green Yellow Super Bright Red	45 45 30 35 20		nm	IF=20mA
C	Capacitance	Bright Red High Efficiency Red Green Yellow Super Bright Red	40 12 45 10 95		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Bright Red High Efficiency Red Green Yellow Super Bright Red	2.0 2.0 2.2 2.1 1.85	2.5 2.5 2.5 2.5 2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	All		10	μA	VR = 5V

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

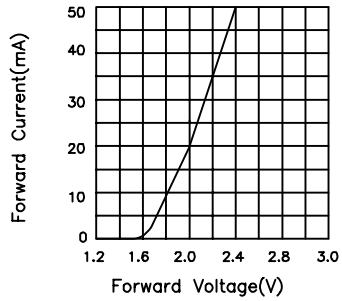
Parameter	Bright Red	High Efficiency Red	Green	Yellow	Super Bright Red	Units
Power dissipation	120	105	105	105	100	mW
DC Forward Current	25	30	25	30	30	mA
Peak Forward Current [1]	150	150	150	150	150	mA
Reverse Voltage	5	5	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C					
Lead Soldering Temperature [2]	260°C For 5 Seconds					

Notes:

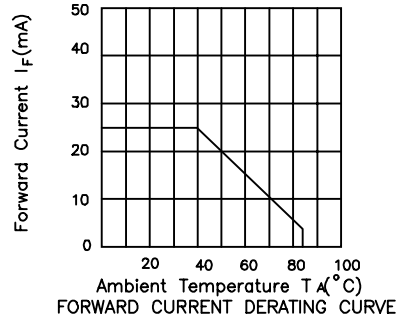
- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



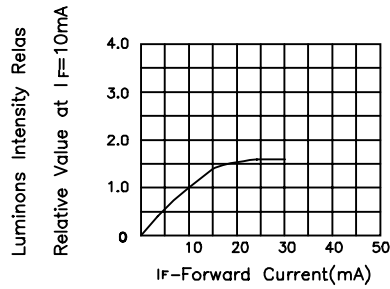
## Bright Red



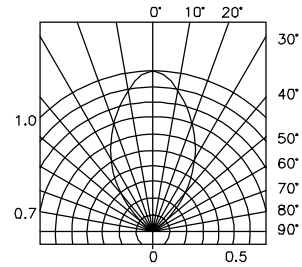
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

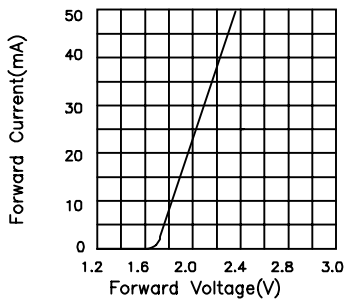


LUMINOUS INTENSITY Vs. FORWARD CURRENT

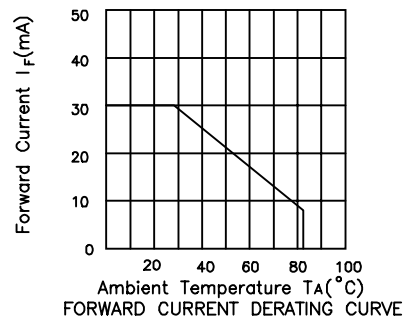


SPATIAL DISTRIBUTION

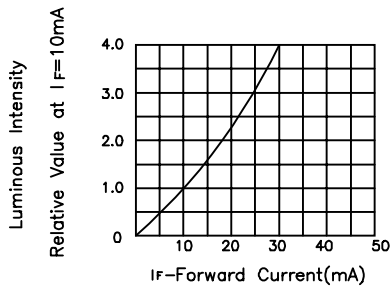
## High Efficiency Red



FORWARD CURRENT Vs. FORWARD VOLTAGE

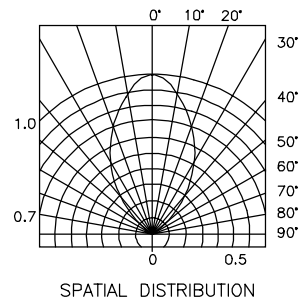
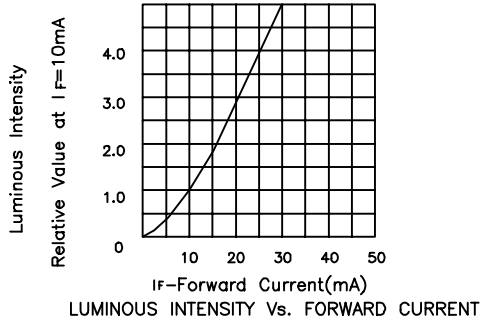
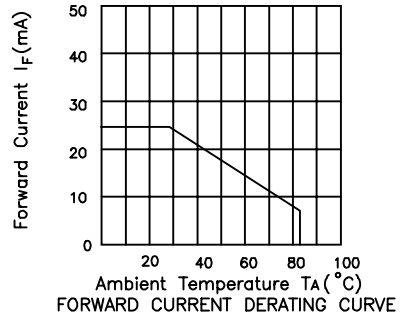
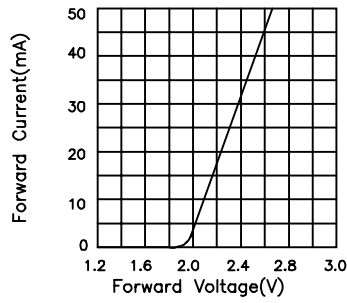


FORWARD CURRENT DERATING CURVE

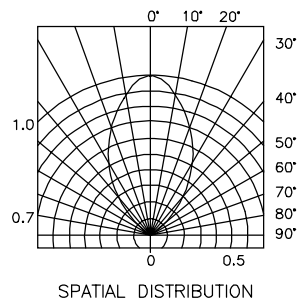
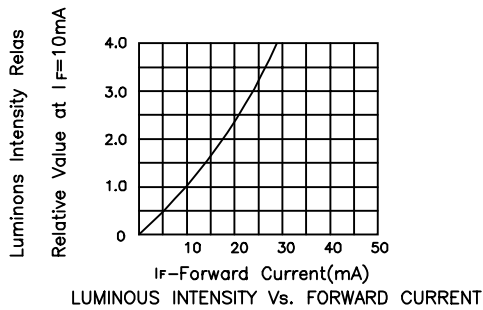
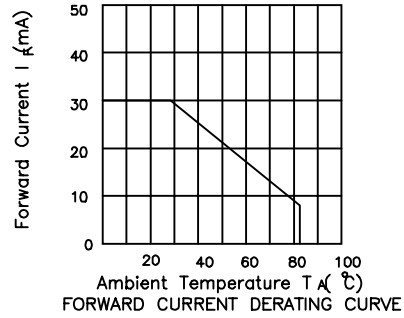
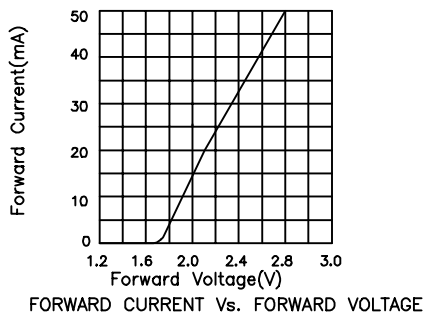


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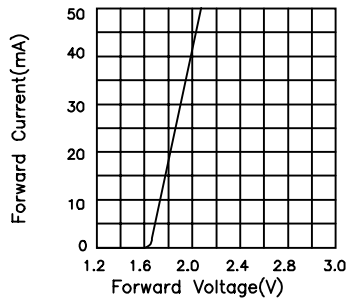
## Green



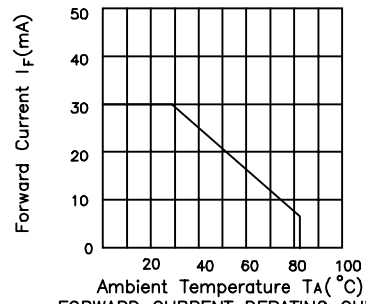
## Yellow



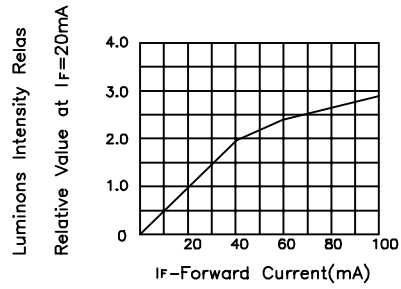
## Super Bright Red



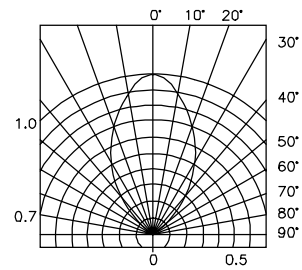
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION