Light Bars and Bargraphs

Order code	Manufacturer code	Description
56-1750	L-875/4IDT	10 X 10MM HE RED LIGHT BAR LED
56-1755	L-875/4GDT	10 X 10MM GREEN LIGHT BAR LED (RC)
56-1760	L-875/4YDT	10X10MM YELLOW LIGHT BAR LED (RC)
56-1800	L-895/8IDT	10 X 22MM HE RED LIGHT BAR LED
56-1805	L-895/8GDT	10 X 22MM GREEN LIGHT BAR LED
56-1810	L-895/8YDT	10 X 22MM YELLOW LIGHT BAR LED (RC)

Sales: 01206 751166 **Technical: 01206 835555** **Fax: 01206 7551188**
Sales@rapidelec.co.uk **Tech@rapidelec.co.uk** **www.rapidelectronics.co.uk**

Kingbright®

LIGHT BARS

L-835/2	5x10mm	L-875/4	10x10mm
L-845/3	5x16mm	L-885/6	10x16mm
L-865/4	5x22mm	L-895/8	10x22mm

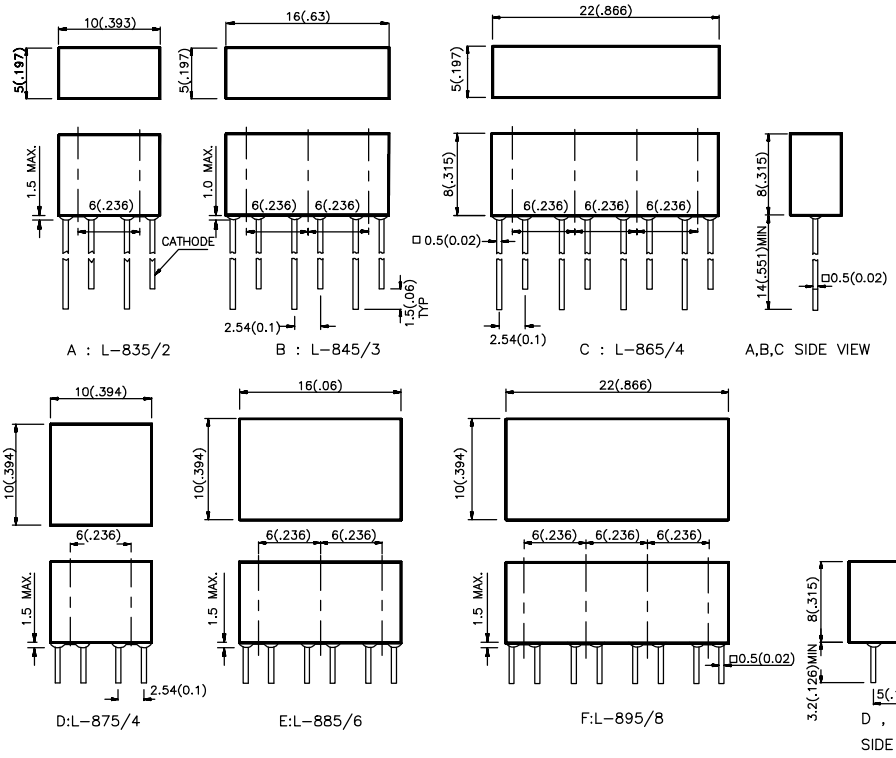
Features

- •UNIFORM LIGHT EMITTING AREA.
- •EASILY MOUNTED ON P.C. BOARDS OR INDUSTRY STANDARD SOCKETS.
- •FLUSH MOUNTABLE.
- •EXCELLENT ON/OFF CONTRAST.
- •CAN BE USED WITH PANELS AND LEGEND MOUNTS.
- •MECHANICALLY RUGGED.
- •I.C. COMPATIBLE.
- •SUPER BRIGHT RED AVAILABLE.
- •BOTTOM SURFACE OF EPOXY IS NOT FLAT.

Description

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 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), Tolerance is ±0.25(0.01") unless oth erwise noted.
2. Specifications are subjected to change without notice.

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10 mA		Viewing Angle
			Min.	Max.	2θ1/2
L-835/2IDT L-845/3IDT L-865/4IDT L-875/4IDT L-885/6IDT L-895/8IDT	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	5	20	120°
L-835/2GDT L-845/3GDT L-865/4GDT L-875/4GDT L-885/6GDT L-895/8GDT	Green (GaP)	GREEN DIFFUSED	5	20	120°
L-835/2YDT L-845/3YDT L-865/4YDT L-875/4YDT L-885/6YDT L-895/8YDT	Yellow (GaAsP/GaP)	YELLOW DIFFUSED	5	20	120°
L-835/2SRDT L-845/3SRDT L-865/4SRDT L-875/4SRDT L-885/6SRDT L-895/8SRDT	Super Bright RED (GaAlAs)	RED DIFFUSED	*20	*100	120°

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 20 mA.

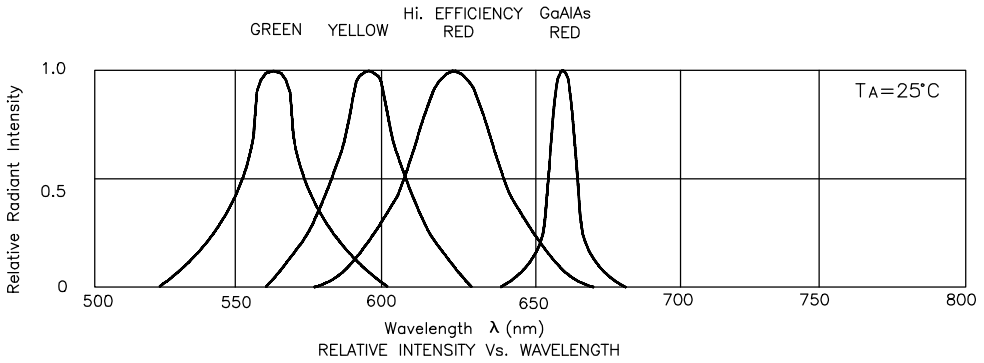
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	High Efficiency Red Green Yellow Super Bright Red	625 565 590 660		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	High Efficiency Red Green Yellow Super Bright Red	45 30 35 20		nm	IF=20mA
C	Capacitance	High Efficiency Red Green Yellow Super Bright Red	12 45 10 95		pF	VF=0V;f=1MHz
V_F	Forward Voltage	High Efficiency Red Green Yellow Super Bright Red	2.0 2.2 2.1 1.85	2.5 2.5 2.5 2.5	V	IF=20mA
I_R	Reverse Current	All	10		uA	VR = 5V

Absolute Maximum Ratings at T_A=25°C

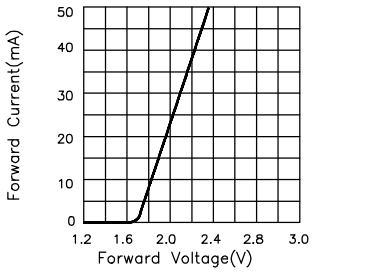
Parameter	High Efficiency Red	Green	Yellow	Super Bright Red	Units
Power dissipation	105	105	105	100	mW
DC Forward Current	30	25	30	30	mA
Peak Forward Current [1]	150	150	150	150	mA
Reverse Voltage	5	5	5	5	V
Operating/Storage Temperature	-40 °C To +85 °C				
Lead Soldering Temperature [2]	260 °C For 5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

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

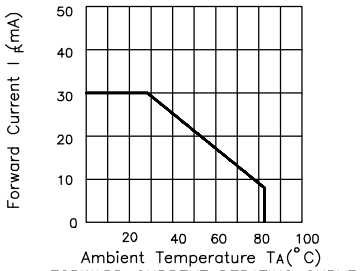


RELATIVE INTENSITY Vs. WAVELENGTH

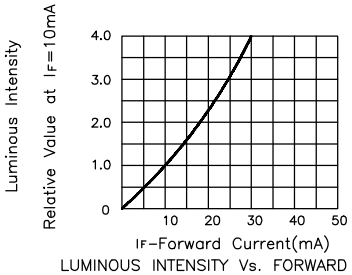
High Efficiency Red L-835/2IDT,L-845/3IDT,L-865/4IDT,L-875/4IDT,L-885/6IDT, L-895/8IDT



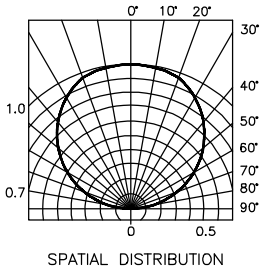
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION

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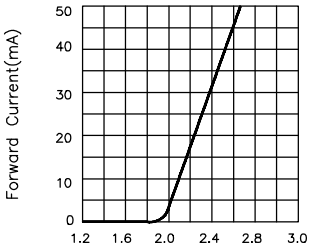
Green L-835/2GDT,L-845/3GDT,L-865/4GDT,L-875/4GDT,L-885/6GDT,L-895/8GDT



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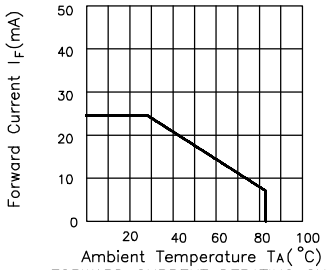

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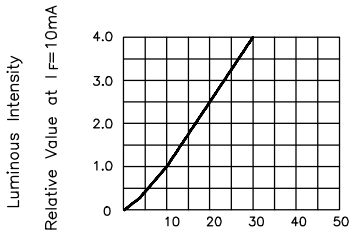
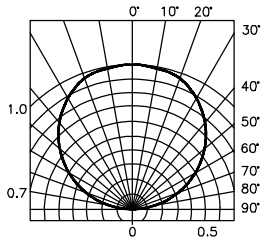
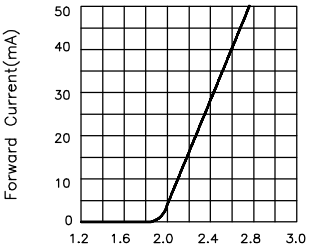


LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION

Yellow L-835/2YDT,L-845/3YDT,L-865/4YDT,L-875/4YDT,L-885/6YDT, L-895/8YDT



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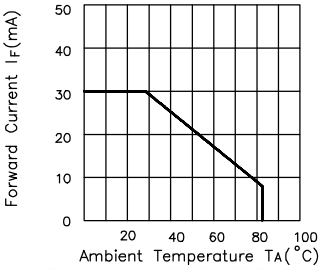
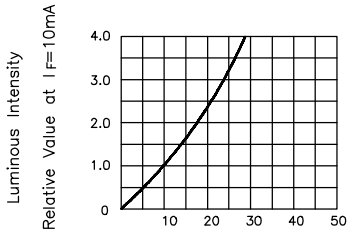
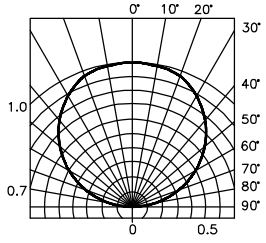


FORWARD CURRENT DERATING CURVE

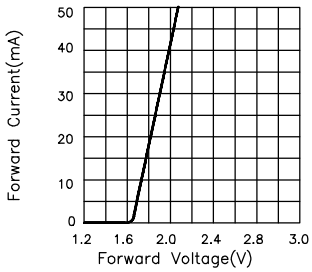


LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION

Super Bright Red L-835/2SRDT,L-845/3SRDT,L-865/4SRDT,L-875/4SRDT, L-885/6SRDT,L-895/8SRDT



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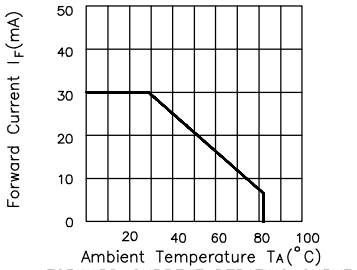

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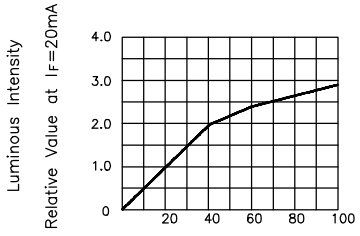
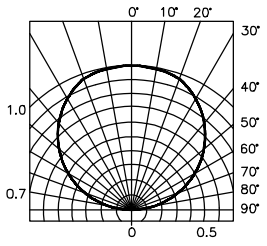


LUMINOUS INTENSITY Vs. FORWARD CURRENT



SPATIAL DISTRIBUTION

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