Kingbright

20mm BIG LAMP

Part Number: DLC2/6ID HIGH EFFICIENCY RED

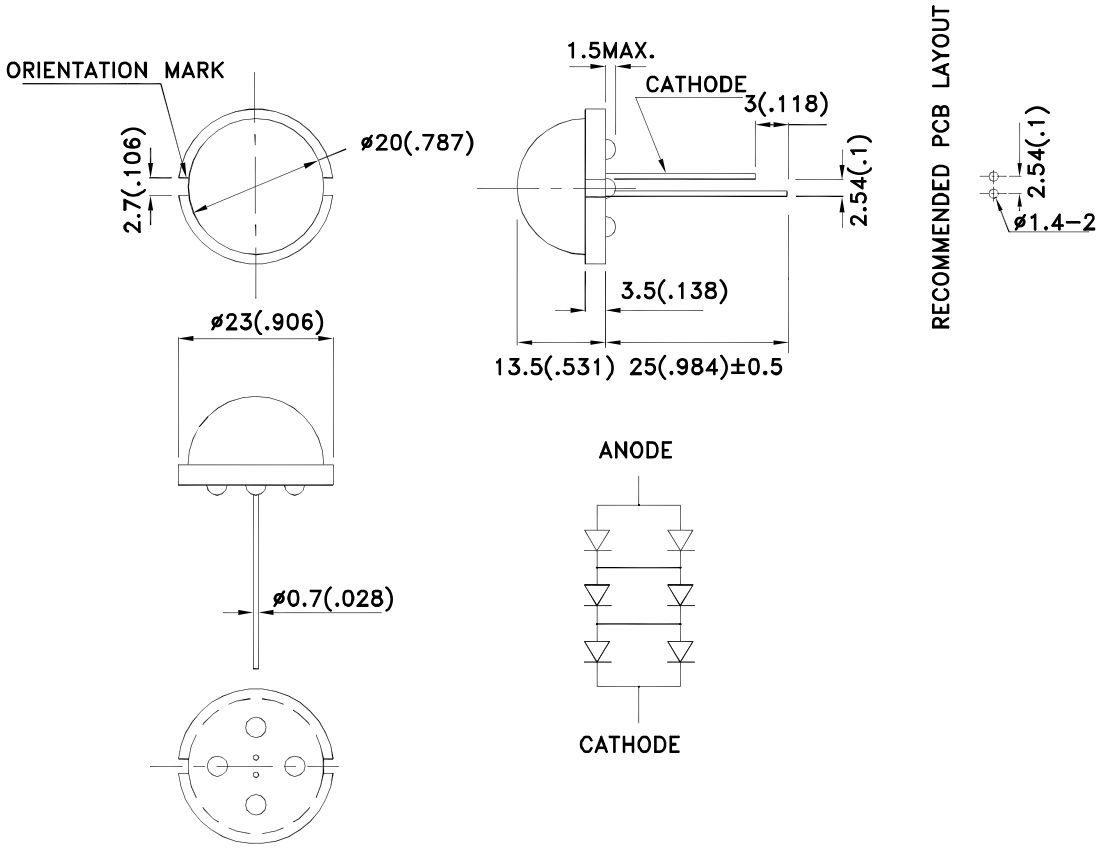
Features

- 2 pins.
- High luminous intensity.
- Low power consumption.
- Wide viewing angle.
- Categorized for luminous intensity.
- Excellent on/off contrast.
- Easy mounting on P.C. board or sockets.
- Solid state reliability.
- RoHS compliant.

Description

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

Package Dimensions & Internal Circuit Diagram



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

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 20 mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
DLC2/6ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	18	60	120°

Notes:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
2.Luminous Intensity / Luminous Flux: +/-15%.

Electrical / Optical Characteristics at T_A=25°C

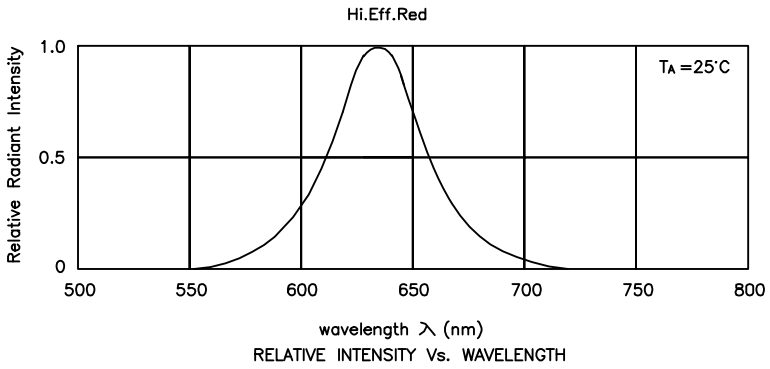
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	I_F=20mA
λD [1]	Dominant Wavelength	High Efficiency Red	625		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45		nm	I_F=20mA
C	Capacitance	High Efficiency Red	15		pF	V_F=0V;f=1MHz
V_F [2]	Forward Voltage	High Efficiency Red	5.7	7.5	V	I_F=20mA
I_R	Reverse Current	High Efficiency Red		20	uA	V_R = 15V

Notes:
1. Wavelength: +/-1nm.
2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at T_A=25°C

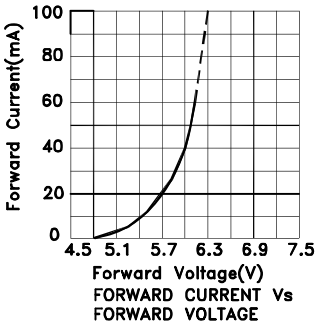
Parameter	Red	Units
Power dissipation	450	mW
Forward Current	60	mA
Reverse Voltage	15	V
Peak Forward Current[1]	320	mA
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3~5 Seconds	

Notes:
1. The chips are three in series and two parallel.
2. 2mm below package base.

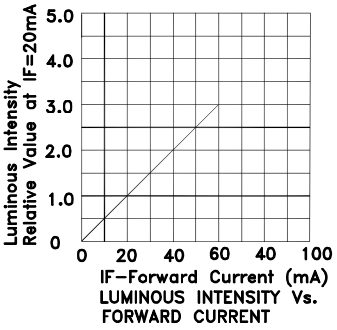


RELATIVE INTENSITY Vs. WAVELENGTH

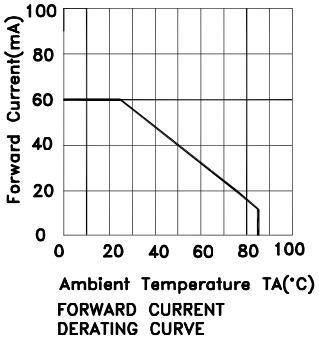
High Efficiency Red **DLC2/6ID**



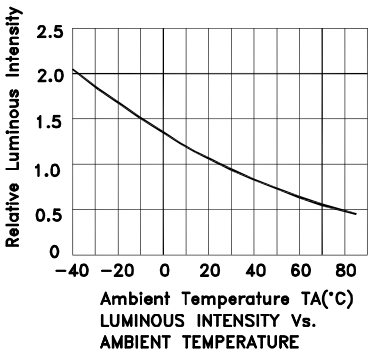
FORWARD CURRENT Vs
FORWARD VOLTAGE



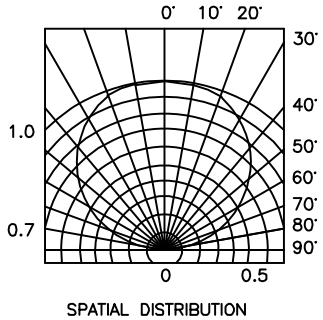
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE

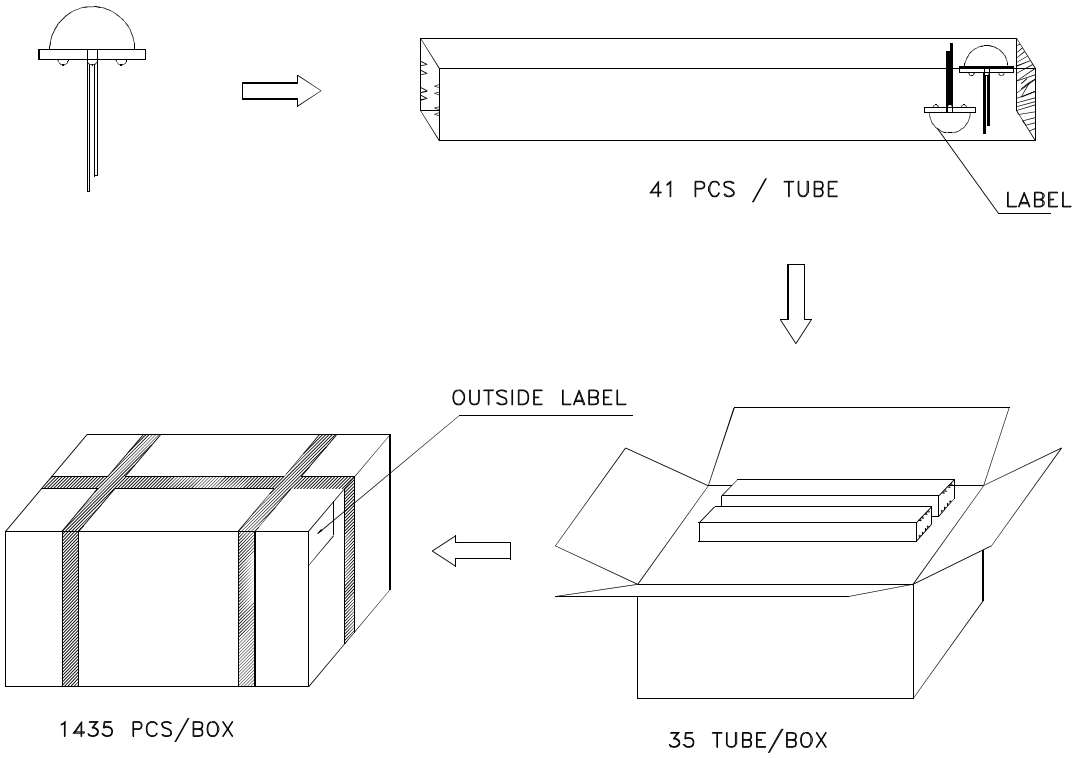


LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

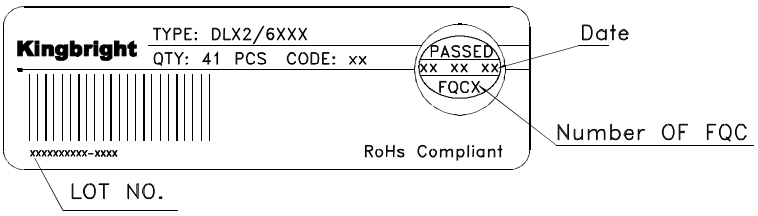


SPATIAL DISTRIBUTION

PACKING & LABEL SPECIFICATIONS **DLC2/6ID**



Inside LABEL Paste On The IC-TUBE



Outside LABEL Paste On The Box