Kingbright

Part Number: WP4060VH/2ID

High Efficiency Red

Features

● PRE-TRIMMED LEADS FOR MOUNTING.

● I.C. COMPLATIBLE.

● BLACK CASE ENHANCES CONTRAST RATIO.

● WIDE VIEWING ANGLE.

● HIGH RELOABLITY LIFE MEASURED IN YEARS.

● UL RATING : 94V-0.
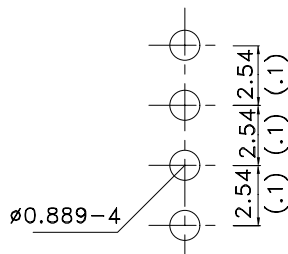
● HOUSING MATERIAL : TYPE 66 NYLON.

● RoHS COMPLIANT.

Description

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

Package Dimensions
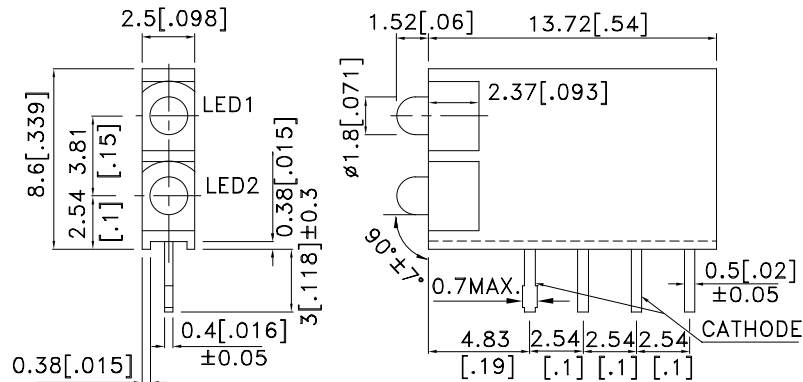
RECOMMENDED PCB LAYOUT

Notes:
1. All dimensions are in millmeters(inches).
2. Tolerance is +/-0.25(+/-0.01")unless otherwise noted.
3. Lead spacing is measued where the leads emerge from the package.
4. Specifications are subject to change without notice.

SPEC NO: DSAE9383   REV NO: V.7   DATE: MAY/19/2007   PAGE: 1 OF 4

APPROVED: WYNEC   CHECKED: Allen Liu   DRAWN: Y.L.LI   ERP: 1102001283

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 10mA		Viewing Angle [1]
			Min.	Typ.	2θ1/2
WP4060VH/2ID	High Efficiency Red (GaAsP/GaP)	RED DIFFUSED	8	15	70°

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

Electrical / Optical Characteristics at TA=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	2	2.5	V	I_F=20mA
I_R	Reverse Current	High Efficiency Red		10	uA	V_R = 5V

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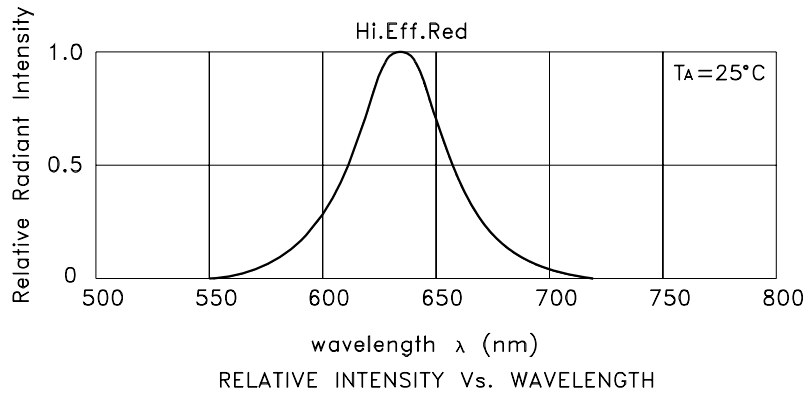1.Wavelength: +/-1nm.
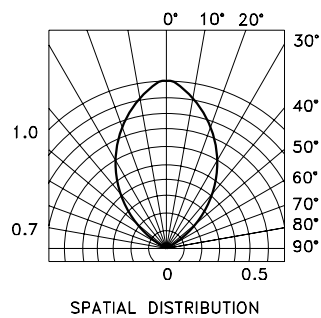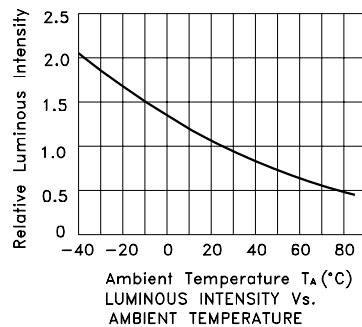2. Forward Voltage: +/-0.1V.

Absolute Maximum Ratings at TA=25°C
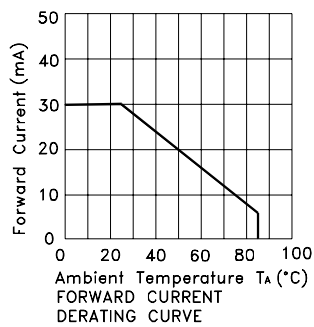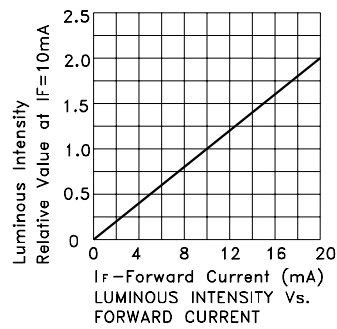
Parameter	High Efficiency Red	Units
Power dissipation	75	mW
DC Forward Current	30	mA
Peak Forward Current [1]	160	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

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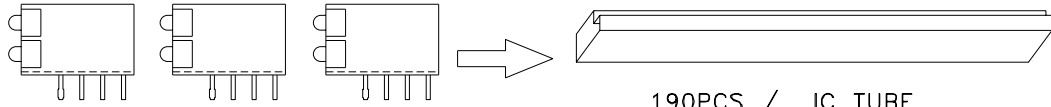2. 2mm below package base.
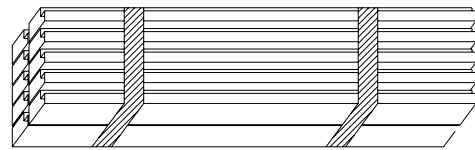3. 5mm below package base.

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Hi.Eff.Red

$T_A = 25°C$

RELATIVE INTENSITY Vs. WAVELENGTH

High Efficiency Red   WP4060VH/2ID

FORWARD CURRENT Vs.
FORWARD VOLTAGE

LUMINOUS INTENSITY Vs.
FORWARD CURRENT

FORWARD CURRENT
DERATING CURVE

LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE

SPATIAL DISTRIBUTION
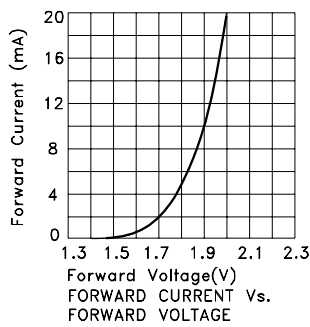
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PACKING & LABEL SPECIFICATIONS   **WP4060VH/2ID**

190PCS / IC TUBE

1,900pcs / 10pcs IC TUBE

OUTSIDE LABEL

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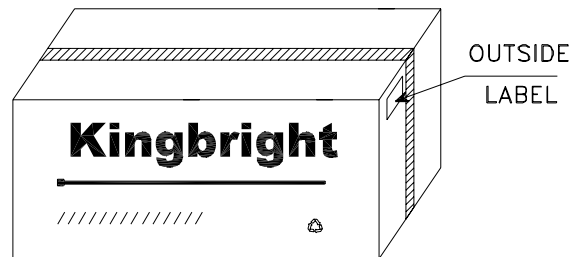
28.5K / 10# BOX

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Q.C.

QC
XX XX XX
PASSED

TYPE NO : WP4060VHxxx

QUANTITY : 1,900 pcs

S/N : XX   CODE: XX

LOT NO : |||||||||||||||||||
xxxxxxxxxxxxx

RoHS Compliant