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8.89mmx3.81mm LED LIGHT BAR

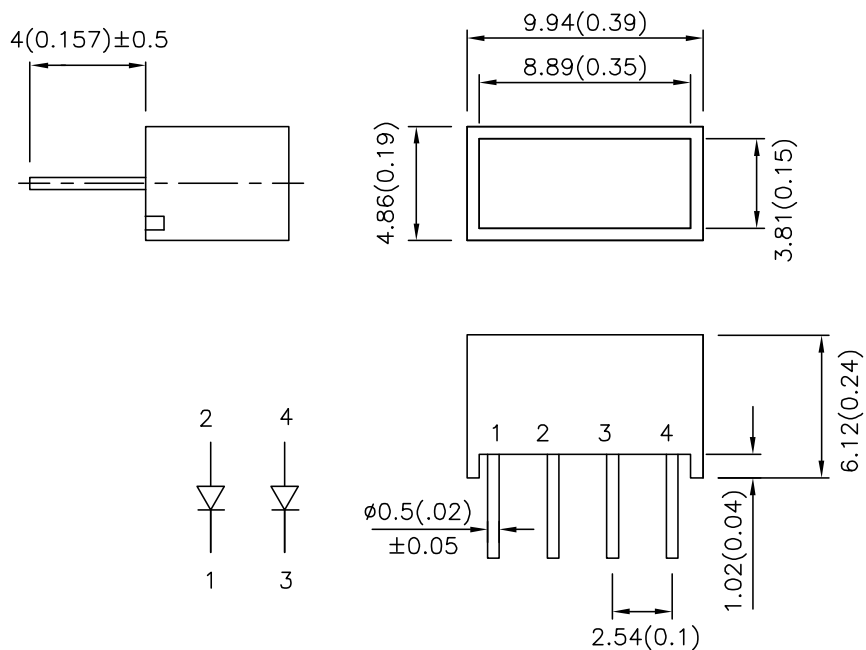P/N: KB-2300EW   HIGH EFFICIENCY RED

Features

- UNIFORM LIGHT EMITTING AREA.
- LOW CURRENT OPERATION.
- EASILY MOUNTED ON P.C. BOARDS.
- FLUSH MOUNTABLE.
- EXCELLENT ON/OFF CONTRAST.
- CAN BE USED WITH PANELS AND LEGEND MOUNTS.
- CATEGORIZED FOR LUMINOUS INTENSITY.
- 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), Tolerance is ±0.25(0.01")unless otherwise noted.
2. Specifications are subject to change without notice.

SPEC NO: DSAA7093   REV NO: V.7   DATE: NOV/19/2005   PAGE: 1 OF 3
APPROVED: J. Lu   CHECKED: Joe Lee   DRAWN: Y.L.LI

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA	
			Min.	Typ.
KB-2300EW	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	7	40

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	Dominant Wavelength	High Efficiency Red	625		nm	I_F=20mA
$\Delta\lambda1/2$	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	Forward Voltage	High Efficiency Red	2.0	2.5	V	I_F=20mA
I_R	Reverse Current	High Efficiency Red		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

Parameter	High Efficiency Red	Units
Power dissipation	105	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 5 Seconds	

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

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Hi.Eff.Red

RELATIVE INTENSITY Vs. WAVELENGTH
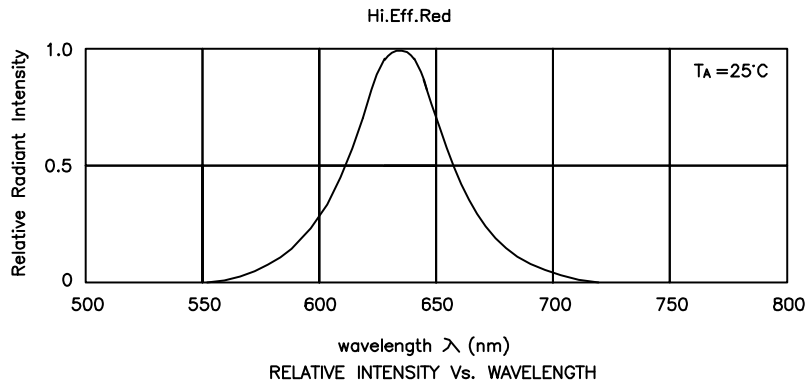
High Efficiency Red   KB-2300EW

FORWARD CURRENT Vs.
FORWARD VOLTAGE

LUMINOUS INTENSITY Vs.
FORWARD CURRENT

FORWARD CURRENT
DERATING CURVE

LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE
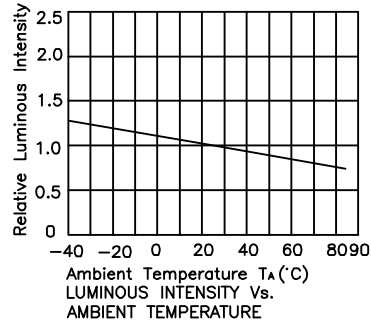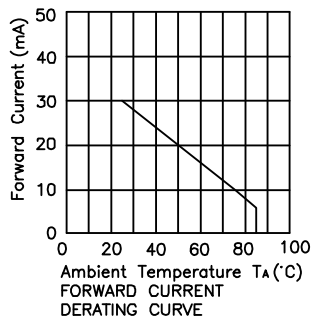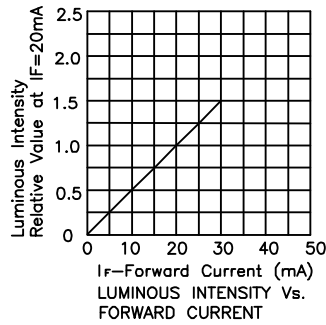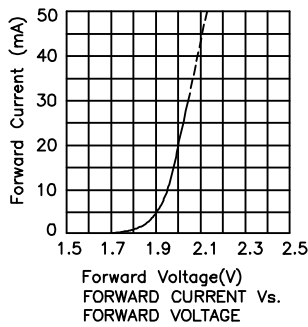
Remarks:

If special sorting is required (e.g. binning based on forward voltage, Luminous intensity/ luminous flux, or wavelength),

the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm

2. Luminous intensity/ luminous flux: +/-15%

3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.