

SUBMINIATURE SOLID STATE LAMP

Part Number: KM2520ID01 High Efficiency Red

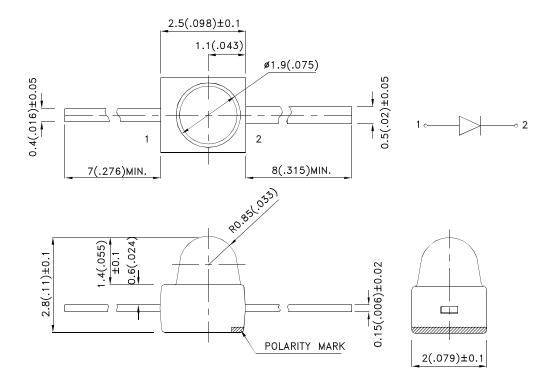
Features

- Subminiature package.
- Long life solid state reliability.
- Low package profile.
- Moisture sensitivity level : level 3.
- 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



- 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 leads emerge from the package.

 4. The specifications, characteristics and technical data described in the datasheet are subject to change without prior notice.

SPEC NO: DSAA8022 **REV NO: V.10A** DATE: MAY/03/2012 PAGE: 1 OF 4 APPROVED: WYNEC **CHECKED: Allen Liu** ERP: 1202000474 DRAWN: C.H.Han

Kingbright

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) [2] @ 20mA		Viewing Angle [1]
			Min.	Тур.	201/2
KM2520ID01	High Efficiency Red (GaAsP/GaP)	Red Diffused	12	20	40°
			*8	*16	

- 1. θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 of the optical peak value.
- Luminous intensity/ luminous Flux: +/-15%.
 * Luminous intensity value is traceable to the CIE127-2007 compliant national standards.

Electrical / Optical Characteristics at TA=25°C

Symbol	Parameter	Device	Тур.		Тур.		Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627	*627		nm	IF=20mA		
λD [1]	Dominant Wavelength	High Efficiency Red	625	*617		nm	IF=20mA		
Δλ1/2	Spectral Line Half-width	High Efficiency Red	45			nm	IF=20mA		
С	Capacitance	High Efficiency Red	15			pF	VF=0V;f=1MHz		
VF [2]	Forward Voltage	High Efficiency Red	2		2.5	V	IF=20mA		
lr	Reverse Current	High Efficiency Red			10	uA	VR = 5V		

Notes:

- 1.Wavelength: +/-1nm. 2. Forward Voltage: +/-0.1V.
- * Wavelength value is traceable to the CIE127-2007 compliant national standards.

Absolute Maximum Ratings at TA=25°C

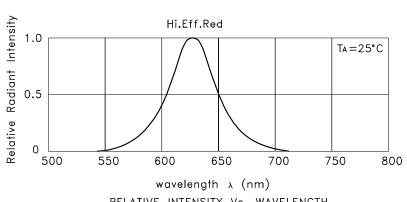
Parameter	High Efficiency Red	Units		
Power dissipation	75	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	160	mA		
Reverse Voltage	5	V		
Operating/Storage Temperature	-40°C To +85°C	1		
Lead Solder Temperature [2]	260°C For 3 Seconds			
Lead Solder Temperature [3]	260°C For 5 Seconds			

Notes:

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

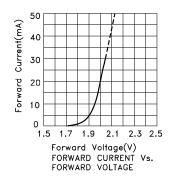
SPEC NO: DSAA8022 **REV NO: V.10A** DATE: MAY/03/2012 PAGE: 2 OF 4 APPROVED: WYNEC **CHECKED: Allen Liu** DRAWN: C.H.Han ERP: 1202000474

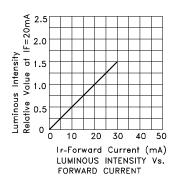
Kingbright

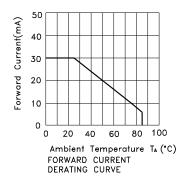


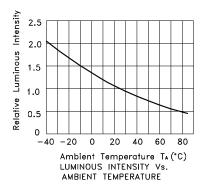
RELATIVE INTENSITY Vs. WAVELENGTH

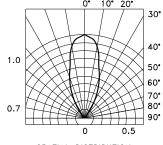
High Efficiency Red KM2520ID01







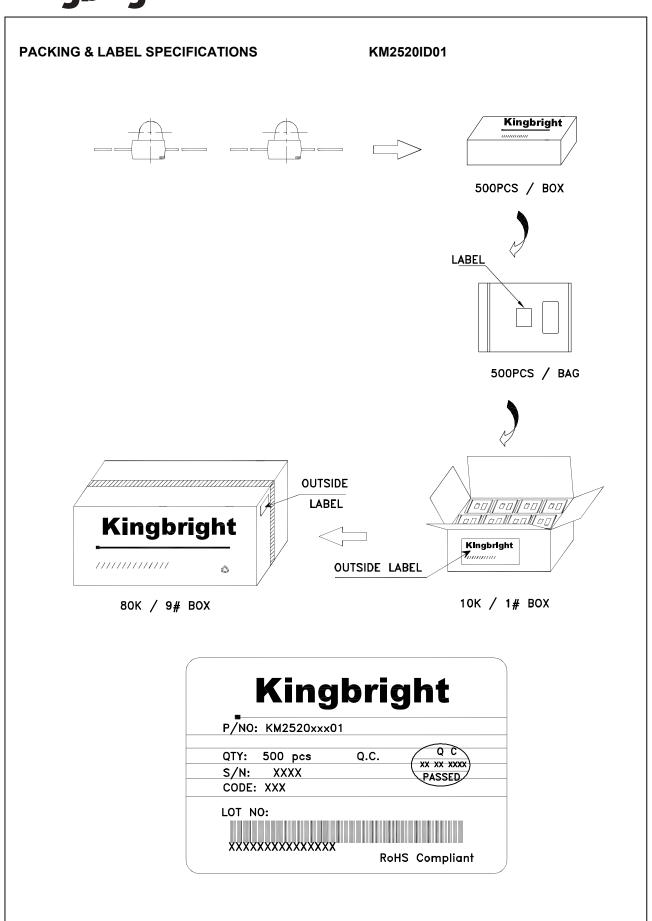




SPATIAL DISTRIBUTION

SPEC NO: DSAA8022 **REV NO: V.10A** DATE: MAY/03/2012 PAGE: 3 OF 4 APPROVED: WYNEC **CHECKED: Allen Liu** ERP: 1202000474 DRAWN: C.H.Han

Kingbright



SPEC NO: DSAA8022 APPROVED: WYNEC REV NO: V.10A CHECKED: Allen Liu DATE: MAY/03/2012 DRAWN: C.H.Han PAGE: 4 OF 4 ERP: 1202000474