

#### SUBMINIATURE SOLID STATE LAMP

KM2520EF/4ID

HIGH EFFICIENCY RED

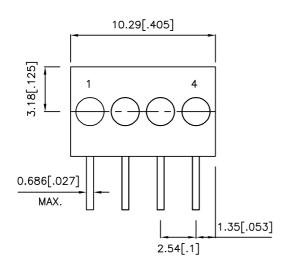
#### **Features**

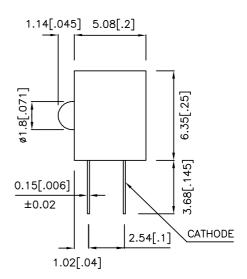
- •BLACK CASE ENHANCES CONTRAST.
- •VIBRATION AND SHOCK RESISTANT.
- •AVAILABLE WITH A VARITY OF LEDs.
- •UL RATING: 94V-0.
- •HOUSING MATERIAL: TYPE 66 NYLON.
- •Rohs Compliant.

#### **Description**

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

## **Package Dimensions**





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#### Notes:

- 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. Specifications are subject to change without notice.

SPEC NO: DSAD0551 REV NO: V.5 DATE: MAR/19/2005
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: H.Q.YUAN

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## **Selection Guide**

Part No.	Dice	Iv (mcd) Lens Type @ 20mA		,	Viewing Angle
		-	Min.	Тур.	<b>2</b> θ <b>1/2</b>
KM2520EF/4ID	HIGH EFFICIENCY RED (GaAsP/GaP)	RED DIFFUSED	7	30	40°

#### Note:

## Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	IF=20mA
λD	Dominant Wavelength	High Efficiency Red	625		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	Forward Voltage	High Efficiency Red	2.0	2.5	V	IF=20mA
IR	Reverse Current	High Efficiency Red		10	uA	VR = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=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]	ead Solder Temperature [2] 260°C For 3 Seconds			
Lead Solder Temperature [3]	ead Solder Temperature [3] 260°C For 5 Seconds			

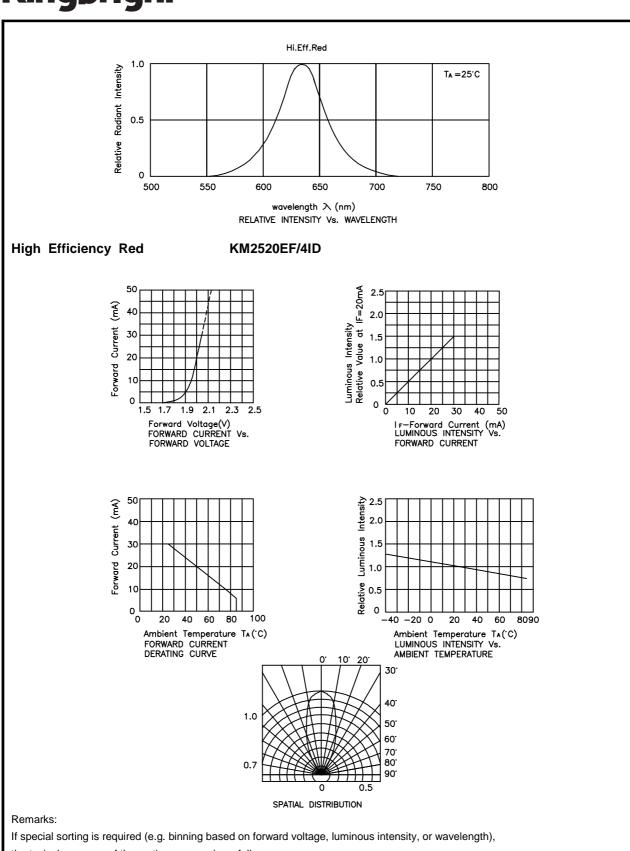
#### Notes

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

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 $<sup>1. \</sup>theta^{1/2}$  is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

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the typical accuracy of the sorting process is as follows:

- 1. Wavelength: +/-1nm
- 2. Luminous Intensity: +/-15%
- 3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.

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