

## T-1 (3mm) CYLINDRICAL LED LAMP

P/N: L-474IT

HIGH EFFICIENCY RED

### **Features**

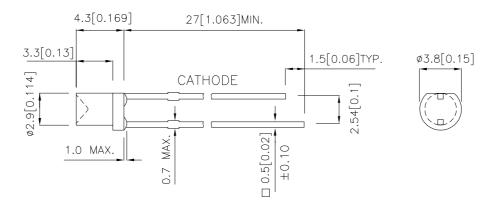
- •WIDE VIEWING ANGLE.
- •LOW POWER CONSUMPTION.
- •RELIABLE AND RUGGED.
- •LONG LIFE SOLID STATE RELIABILITY.
- •RoHS COMPLIANT.

### **Description**

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

# **Package Dimensions**





### Notes:

- All dimensions are in millimeters (inches).
- 2. Tolerance is ±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: DSAD0490 REV NO: V.3 DATE: MAR/27/2006 PAGE: 1 OF 3

DRAWN: Y.L.LI

APPROVED: J. Lu CHECKED: Allen Liu

# **Kingbright**

## **Selection Guide**

Part No.	Dice	Lens Type	Iv (mcd) [2] @ 10mA		Viewing Angle [1]
			Min.	Тур.	2 θ 1/2
L-474IT	HIGH EFFICIENCY RED (GaAsP/GaP)	RED TRANSPARENT	3	8	130°

 $1.\,\theta1/2$  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	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red	627		nm	IF=20mA
λD[1]	Dominant Wavelength	High Efficiency Red	625		nm	Ir=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
V <sub>F</sub> [2]	Forward Voltage	High Efficiency Red	2.0	2.5	V	IF=20mA
lr	Reverse Current	High Efficiency Red		10	uA	VR = 5V

### Notes:

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

# Absolute Maximum Ratings at Ta=25°C

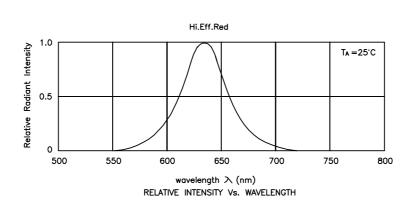
Parameter	High Efficiency Red	Units		
Power dissipation	105	mW		
DC Forward Current	30	mA		
Peak Forward Current [1]	160	mA		
Reverse Voltage	5	V		
Operating/Storage Temperature	-40°C To +85°C			
Lead Solder Temperature [2]	ead Solder Temperature [2] 260°C For 3 Seconds			
ead Solder Temperature [3] 260°C For 5 Seconds				

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

SPEC NO: DSAD0490 DATE: MAR/27/2006 PAGE: 2 OF 3 **REV NO: V.3** 

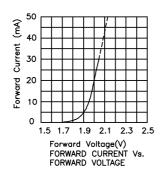
APPROVED: J. Lu CHECKED: Allen Liu DRAWN: Y.L.LI

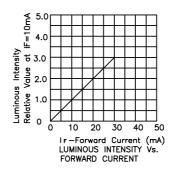
# **Kingbright**

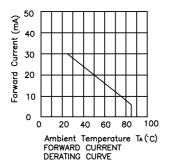


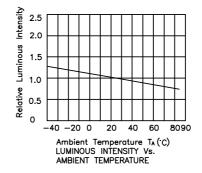
High Efficiency Red

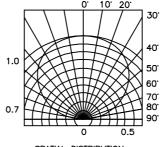
L-474IT











SPATIAL DISTRIBUTION

DRAWN: Y.L.LI

SPEC NO: DSAD0490 REV NO: V.3 DATE: MAR/27/2006 PAGE: 3 OF 3

CHECKED: Allen Liu

APPROVED: J. Lu