

L1387QMP/EGW

### Features

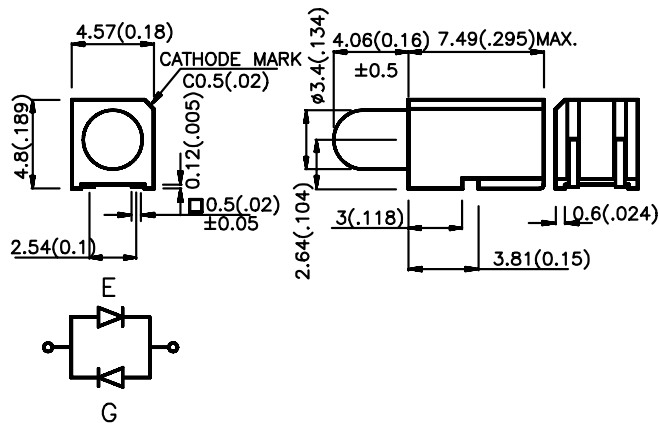
- SURFACE MOUNT TYPE.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- HOUSING MATERIAL: PPA
- 1,000 PCS PER REEL AND 0.64KG PER REEL.

### Description

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

The Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

### Package Dimensions



#### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.1$  (0.004") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	2θ1/2
L1387QMP/EGW	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	8	20	60°
	GREEN (GaP)		8	20	

Note:

1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

## Electrical / Optical Characteristics at T<sub>A</sub>=25°C

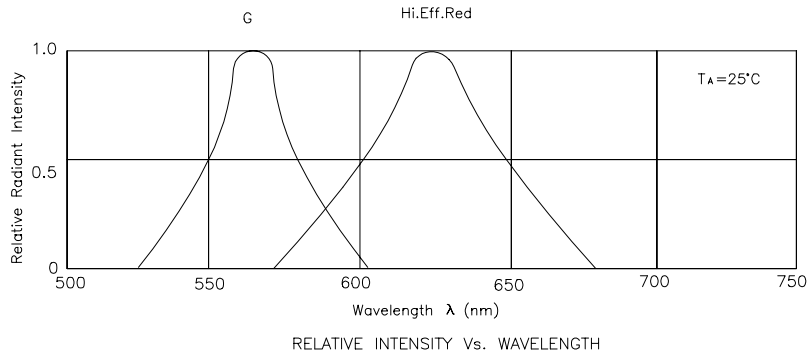
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red Green	627 565		nm	IF=20mA
λ <sub>D</sub>	Dominate Wavelength	High Efficiency Red Green	625 568		nm	IF=20mA
Δλ <sub>1/2</sub>	Spectral Line Halfwidth	High Efficiency Red Green	45 30		nm	IF=20mA
C	Capacitance	High Efficiency Red Green	15 15		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	High Efficiency Red Green	2.0 2.2	2.5 2.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	All		10	uA	VR = 5V

## Absolute Maximum Ratings at T<sub>A</sub>=25°C

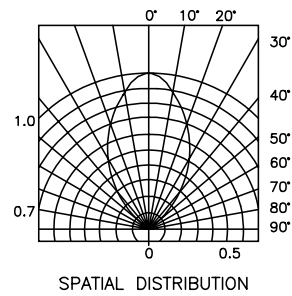
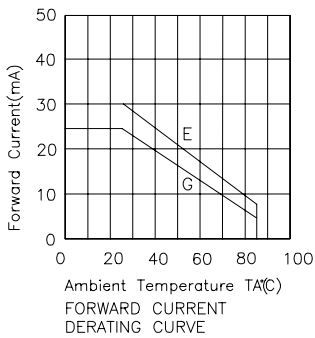
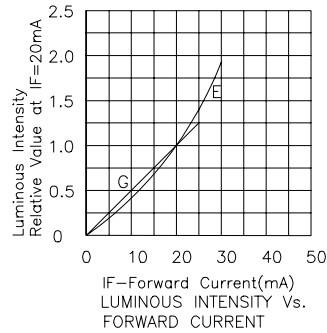
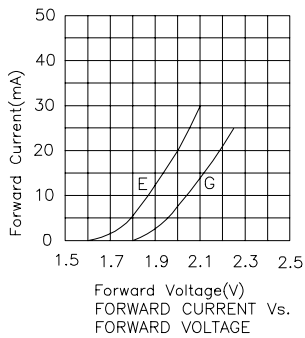
Parameter	High Efficiency Red	Green	Units
Power dissipation	105	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5	5	V
Operating/Storage Temperature	-40°C To +85°C		

Notes:

- 1/10 Duty Cycle, 0.1ms Pulse Width.
- 4mm below package base.



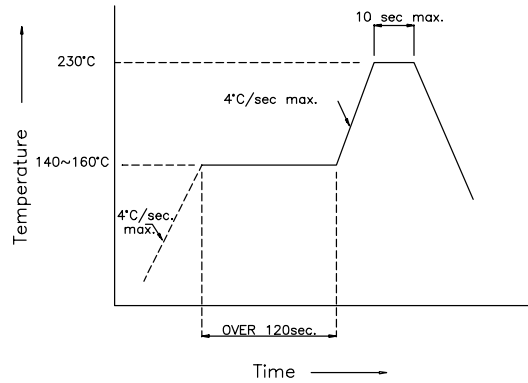
## L1387QMP/EGW High Efficiency Red / Green



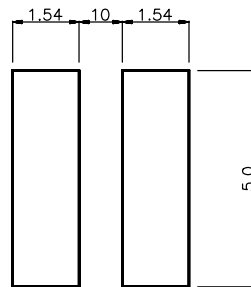
# Kingbright

## L1387QMP/EGW Reflow Soldering Instructions

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process."



### Recommended Soldering Pattern (Units : mm)



### Tape Specifications (Units : mm)

