

W1387QMP/EGW

HIGH EFFICIENCY RED  
GREEN

### Features

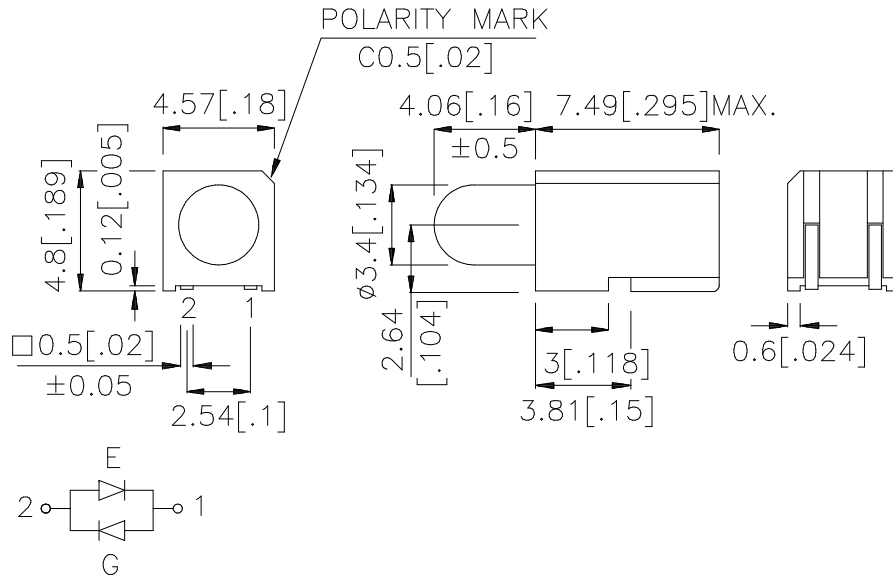
- SURFACE MOUNT TYPE.
- I.C. COMPATIBLE.
- BLACK CASE ENHANCES CONTRAST
- WIDE VIEWING ANGLE.
- HIGH RELIABILITY LIFE MEASURED IN YEARS.
- PACKAGE: 1000PCS / REEL.
- HOUSING MATERIAL: PPA

### 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  $\pm 0.25$  (0.01") unless otherwise noted.
3. Specifications are subject to change without notice.

## Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
W1387QMP/EGW	HIGH EFFICIENCY RED (GaAsP/GaP)	WHITE DIFFUSED	7	20	60°
	GREEN (GaP)		7	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

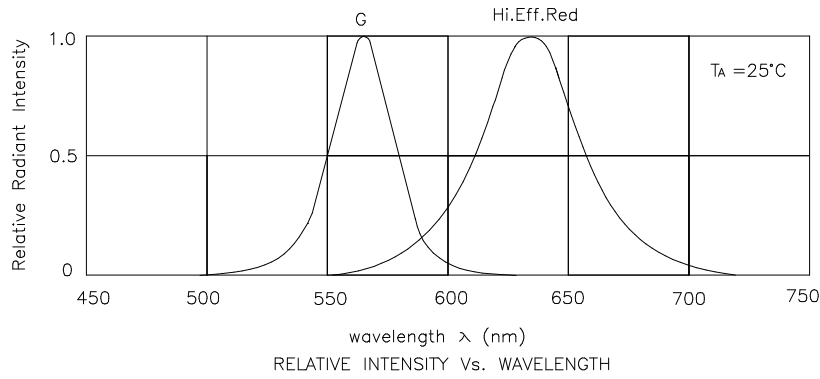
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	High Efficiency Red Green	627 565		nm	I <sub>F</sub> =20mA
λ <sub>D</sub>	Dominate Wavelength	High Efficiency Red Green	625 568		nm	I <sub>F</sub> =20mA
Δλ <sub>1/2</sub>	Spectral Line Half-width	High Efficiency Red Green	45 30		nm	I <sub>F</sub> =20mA
C	Capacitance	High Efficiency Red Green	15 15		pF	V <sub>F</sub> =0V;f=1MHz
V <sub>F</sub>	Forward Voltage	High Efficiency Red Green	2.0 2.2	2.5 2.5	V	I <sub>F</sub> =20mA

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

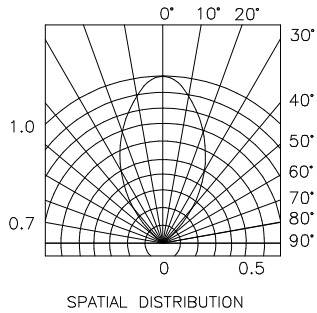
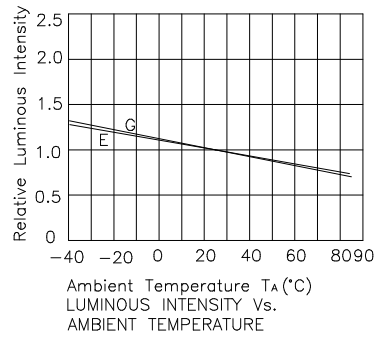
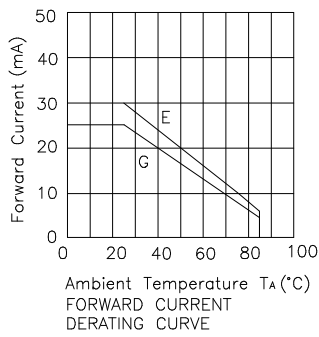
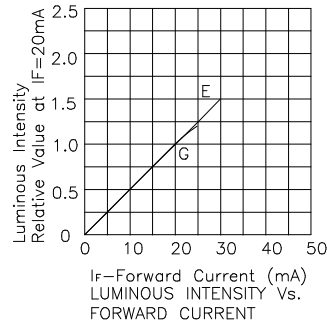
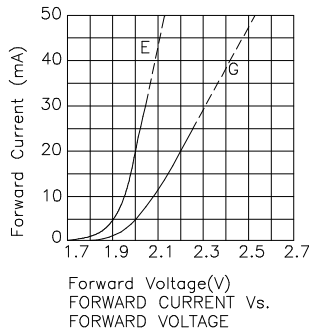
Parameter	High Efficiency Red	Green	Units
Power dissipation	105	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	160	140	mA
Operating/Storage Temperature	-40°C To +85°C		

Note:

1. 1/10 Duty Cycle, 0.1ms Pulse Width.



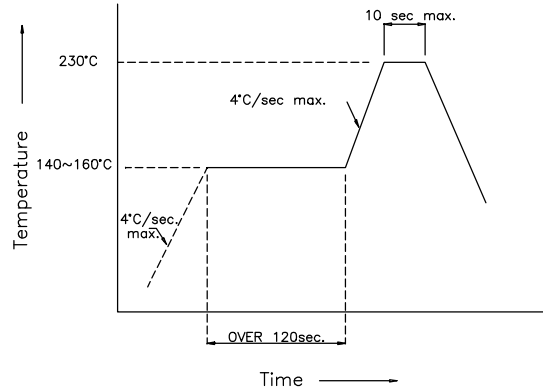
## High Efficiency Red / Green W1387QMP/EGW



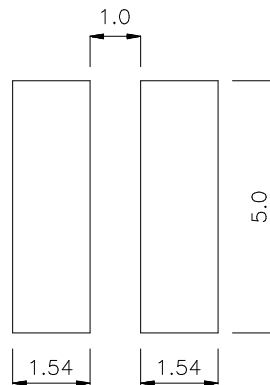
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### SMT Reflow Soldering Instructions

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)

