1.6X0.8mm SMD CHIP LED LAMP

AP1608EC

HIGH EFFICIENCY RED

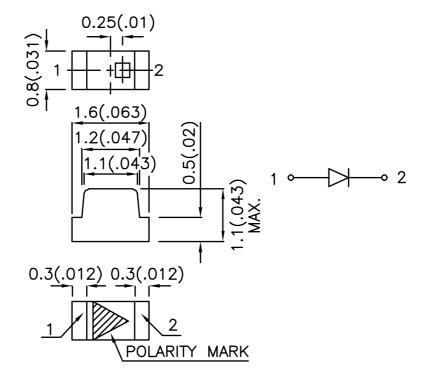
Features

- •1.6mmX0.8mm SMT LED, 1.1mm THICKNESS.
- •LOW POWER CONSUMPTION.
- •WIDE VIEWING ANGLE.
- •IDEAL FOR BACKLIGHT AND INDICATOR.
- •VARIOUS COLORS AND LENS TYPES AVAILABLE.
- •PACKAGE: 2000PCS / REEL.
- •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:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is $\pm 0.1(0.004")$ unless otherwise noted.
- 3. Specifications are subject to change without notice.

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	2θ1/2
AP1608EC	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	4	12	120°

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 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	perating/Storage Temperature -40°C To +85°C	

Note

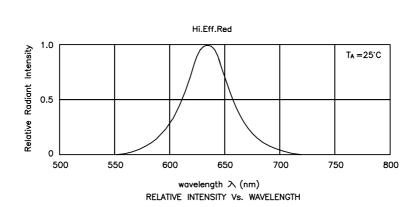
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^{1.} θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

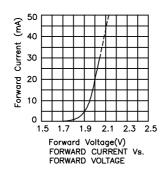
^{1. 1/10} Duty Cycle, 0.1ms Pulse Width.

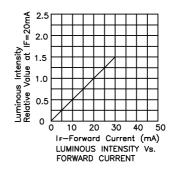
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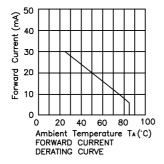


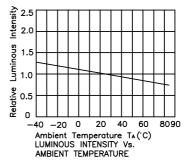
High Efficiency Red

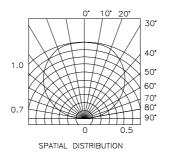
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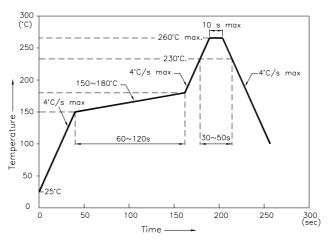
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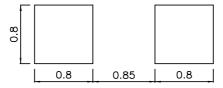
Reflow Soldering Profile For Lead-free SMT Process.



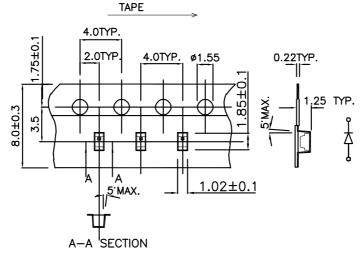
NOTES:

- 1.We recommend the reflow temperature 245°C(+/-5°C).The maximum soldering temperature should be limited to 260°C.
- 2.Don't cause stress to the epoxy resin while it $\,$ is exposed to high temperature.
- 3. Number of reflow process shall be 2 times or less.

Recommended Soldering Pattern (Units: mm)



Tape Specifications (Units: mm)



If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or wavelength), 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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