

1.6x1.25mm BI-COLOR SMD CHIP LED LAMP

APTB1612ESGC

HIGH EFFICIENCY RED SUPER BRIGHT GREEN

Features

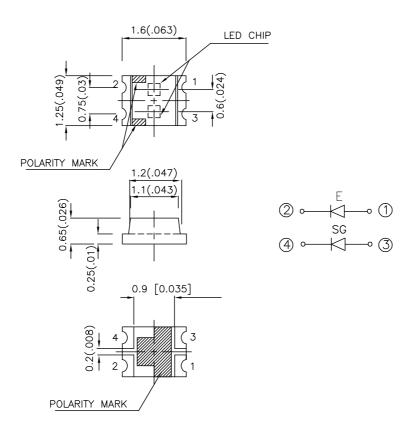
- 1.6mmx1.25mm SMT LED, 0.65mm THICKNESS.
- •BI-COLOR,LOW POWER CONSUMPTION.
- •WIDE VIEWING ANGLE.
- •IDEAL FOR BACKLIGHT AND INDICATOR.
- •VARIOUS COLORS AND LENS TYPES AVAILABLE.
- ●PACKAGE: 2000PCS / REEL.

Description

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

The Super Bright 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 ±0.2(0.008") unless otherwise noted.
- 3. Specifications are subject to change without notice.

SPEC NO: DSAD1078 APPROVED: J. Lu REV NO: V.2 CHECKED: Allen Liu DATE: MAR/01/2005 DRAWN: Y.CHENG PAGE: 1 OF 5

ERP: 1203002009

Selection Guide

Part No.	Dice	Lens Type	lv (mcd) @ 20mA		Viewing Angle
			Min.	Тур.	201/2
APTB1612ESGC	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	4	12	120°
AFIBIOIZESGC	SUPER BRIGHT GREEN (GaP)	WATER CLEAR	4	12	

Note:

Electrical / Optical Characteristics at Ta=25°C

Symbol	Parameter	Device	Тур.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	High Efficiency Red Super Bright Green	627 565		nm	Ir=20mA
λD	Dominant Wavelength	High Efficiency Red Super Bright Green	625 568		nm	IF=20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Super Bright Green	45 30		nm	IF=20mA
С	Capacitance	High Efficiency Red Super Bright Green	15 15		pF	VF=0V;f=1MHz
VF	Forward Voltage	High Efficiency Red Super Bright Green	2.0 2.2	2.5 2.5	V	IF=20mA
I _R	Reverse Current	All		10	uA	$V_R = 5V$

Absolute Maximum Ratings at Ta=25°C

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

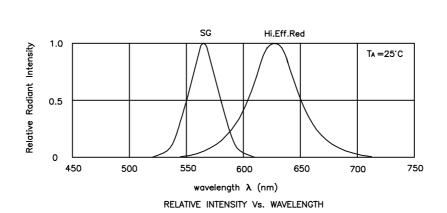
Note

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

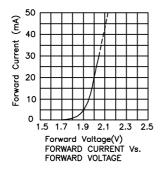
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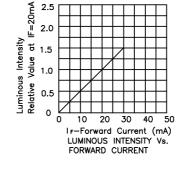
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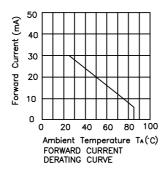
^{1.} θ 1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

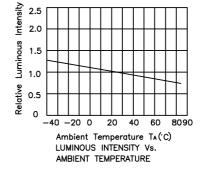


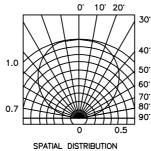
APTB1612ESGC High Efficiency Red







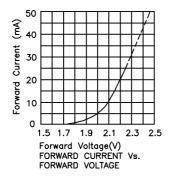


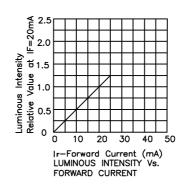


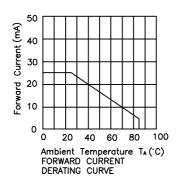
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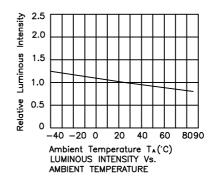
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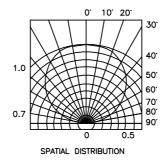
Super Bright Green











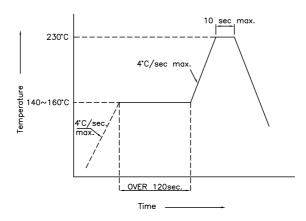
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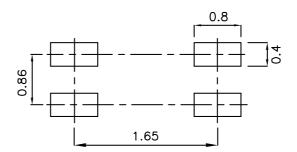
APTB1612ESGC

SMT Reflow Soldering Instructions

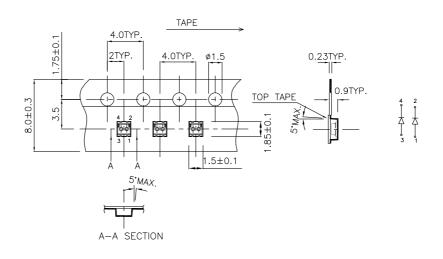
Number of reflow process shall be 2 times or less and cooling process to normal temperature is required between first and second soldering process.



Recommended Soldering Pattern (Units: mm)



Tape Specifications (Units: mm)



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