

APTB1615ESGC

HIGH EFFICIENCY RED
SUPER BRIGHT GREEN

Features

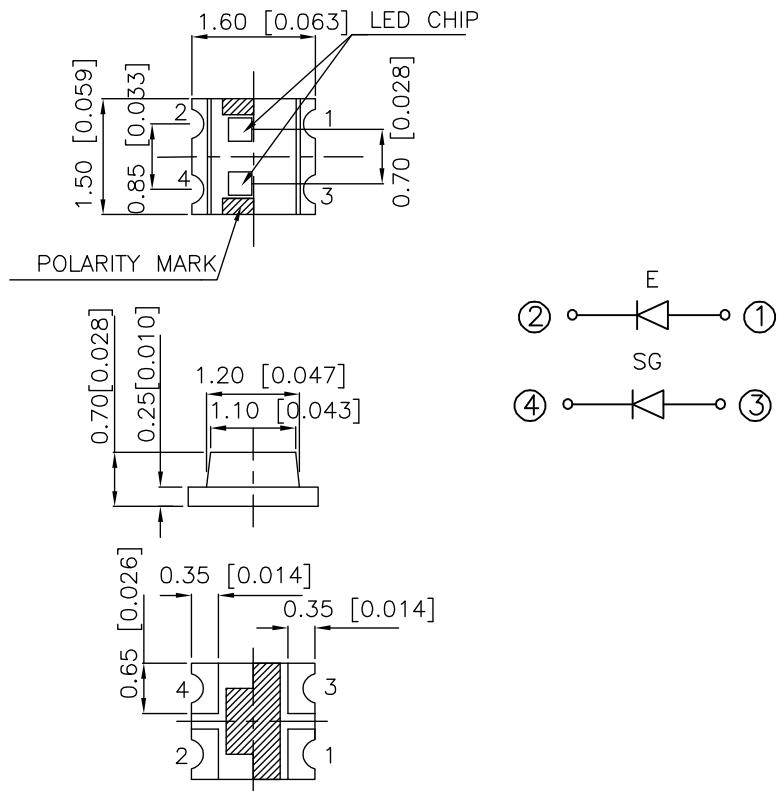
- 1.6mmx1.5mm SMT LED, 0.7mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.

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 $\pm 0.2(0.008")$ unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	I _v (mcd) @ 20mA		Viewing Angle
			Min.	Typ.	
APTB1615ESGC	HIGH EFFICIENCY RED (GaAsP/GaP)	WATER CLEAR	4	12	120°
	SUPER BRIGHT GREEN (GaP)		4	12	

Note:

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

Electrical / Optical Characteristics at T_A=25°C

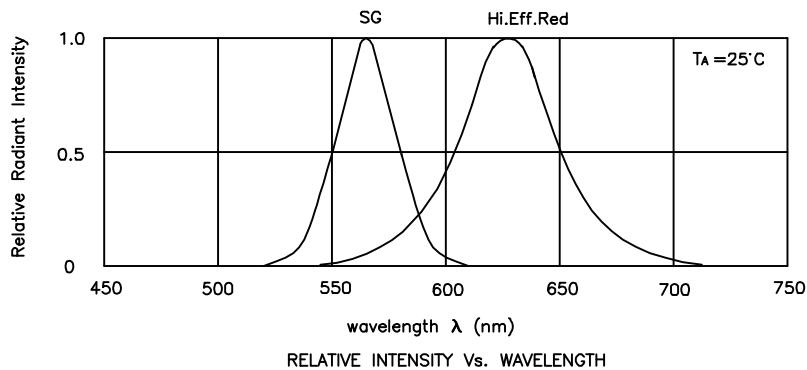
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	High Efficiency Red Super Bright Green	627 565		nm	I _F =20mA
λ _D	Dominant Wavelength	High Efficiency Red Super Bright Green	625 568		nm	I _F =20mA
Δλ1/2	Spectral Line Half-width	High Efficiency Red Super Bright Green	45 30		nm	I _F =20mA
C	Capacitance	High Efficiency Red Super Bright Green	15 15		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	High Efficiency Red Super Bright Green	2.0 2.2	2.5 2.5	V	I _F =20mA
I _R	Reverse Current	All		10	uA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

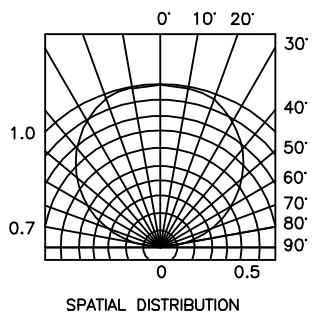
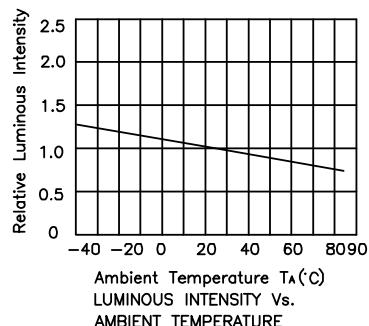
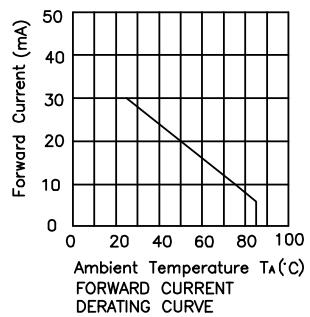
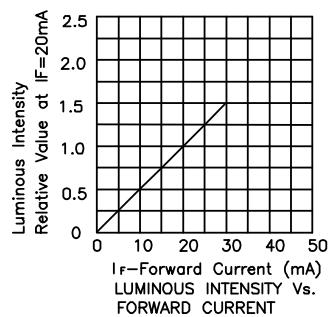
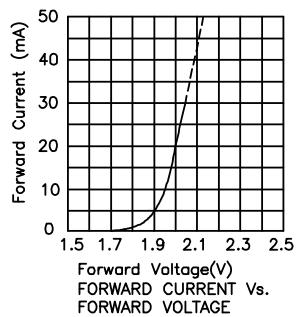
Parameter	High Efficiency Red	Super Bright Green	Units
Power dissipation	105	105	mW
DC Forward Current	30	25	mA
Peak Forward Current [1]	160	140	mA
Reverse Voltage	5		V
Operating/Storage Temperature	-40°C To +85°C		

Note:

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

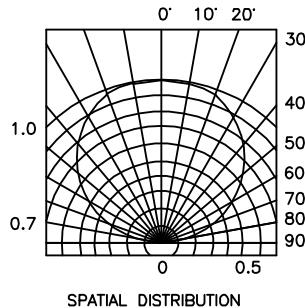
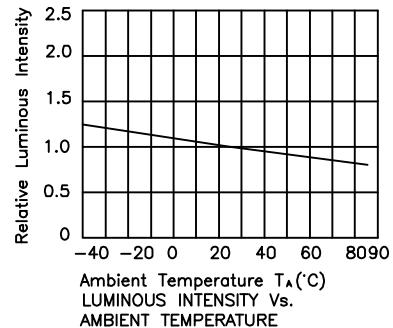
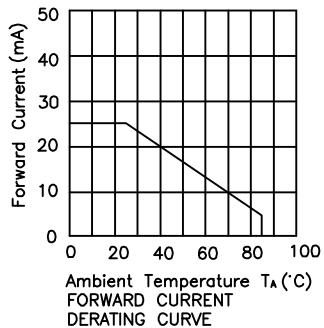
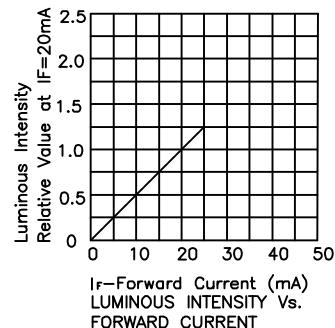
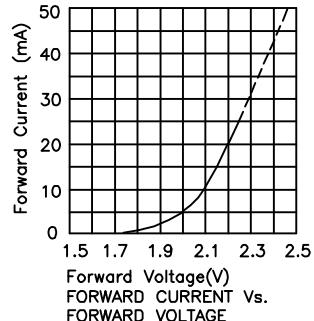


APTB1615ESGC
High Efficiency Red



Kingbright

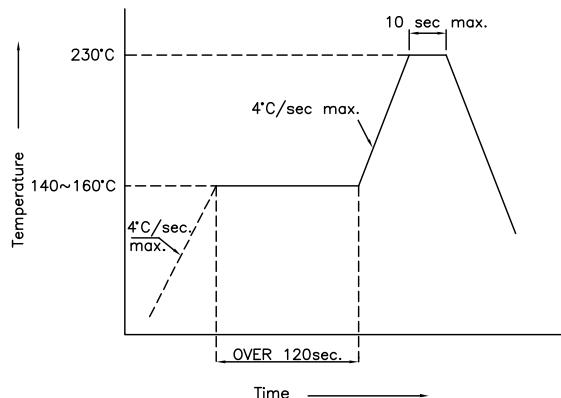
Super Bright Green



APTB1615ESGC

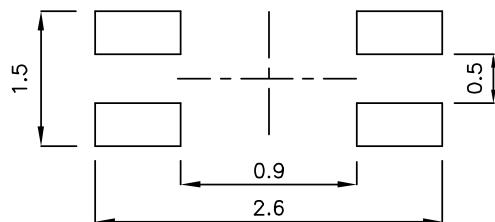
SMT Reflow Soldering Instructions

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



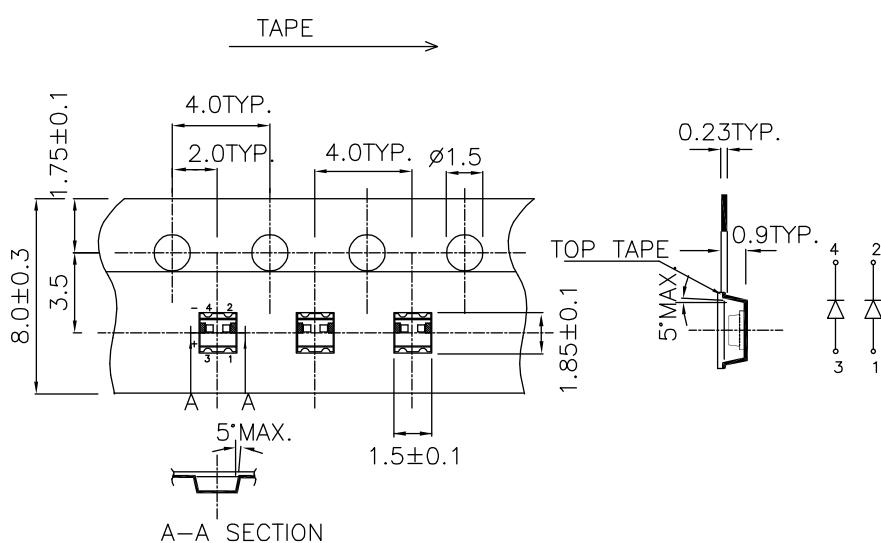
Recommended Soldering Pattern

(Units : mm)



Tape Specifications

(Units : mm)



Remarks:

If there is sorting requirement (eg. forward voltage, luminous intensity or wavelength), the condition as follows:

1. Wavelength: +/-1nm (Test condition is based on the sorting standard).
2. Luminous intensity: +/-15% (Test condition is based on the sorting standard).
3. Forward voltage: +/-0.1V (Test condition is based on the sorting standard).