

APT1615ESGC HIGH EFFICIENCY RED/
SUPER BRIGHT GREEN

Features

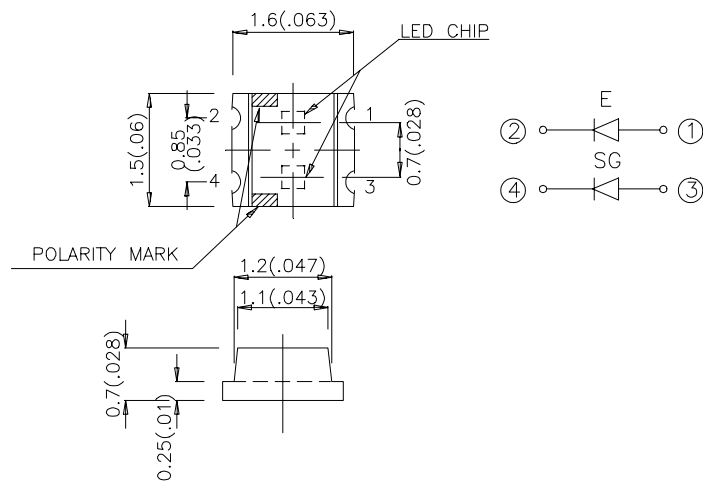
- 1.6mmx1.5mm SMT LED, 0.7mm THICKNESS.
- BI -COLOR, LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.
- PACKAGE : 2000PCS / REEL.

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 (0.0079") 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) @ 20 mA | | Viewing Angle |
|--------------|---------------------------------|-------------|---------------------|------|------------------|
| | | | Min. | Typ. | θ1/2 |
| APTB1615ESGC | HIGH EFFICIENCY RED (GaAsP/GaP) | WATER CLEAR | 5 | 12 | 120° |
| | SUPER BRIGHT GREEN (GaP) | | 3 | 12 | |

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_A=25°C

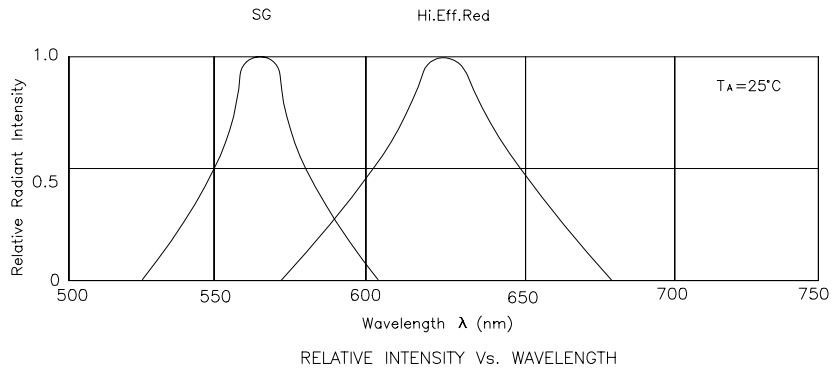
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|-------------------------|---|------------|------------|-------|-----------------|
| λ _{peak} | Peak Wavelength | High Efficiency Red Super Bright Green | 627 565 | | nm | IF=20mA |
| λ _D | Dominate Wavelength | High Efficiency Red Super Bright Green | 625 568 | | nm | IF=20mA |
| Δλ _{1/2} | Spectral Line Halfwidth | High Efficiency Red Super Bright Green | 45 30 | | nm | IF=20mA |
| C | Capacitance | High Efficiency Red Super Bright Green | 15 15 | | pF | VF=0V;f=1MHz |
| V _F | 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 | VR = 5V |

Absolute Maximum Ratings at T_A=25°C

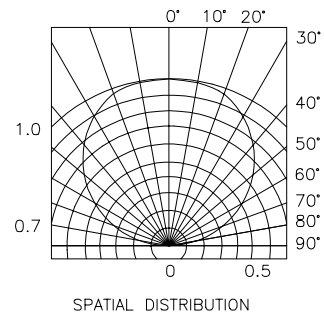
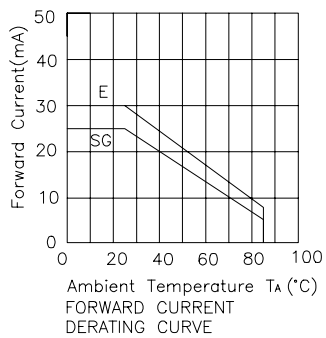
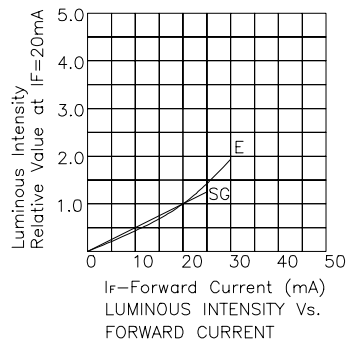
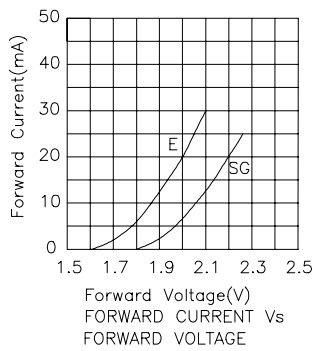
| Parameter | High Efficiency Red | Super Bright Green | Units |
|-------------------------------|---------------------|--------------------|-------|
| Power dissipation | 105 | 105 | mW |
| DC Forward Current | 30 | 25 | mA |
| Peak Forward Current [1] | 160 | 140 | mA |
| Reverse Voltage | 5 | 5 |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

Note:

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

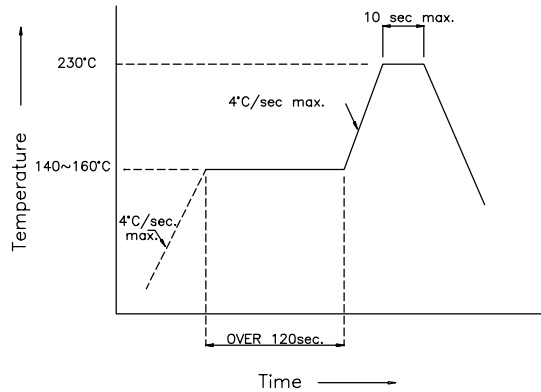


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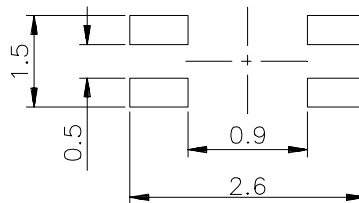


APTB1615ESGC SMT Reflow Soldering Instructions

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)

