

APBA3010SRSGC

Features

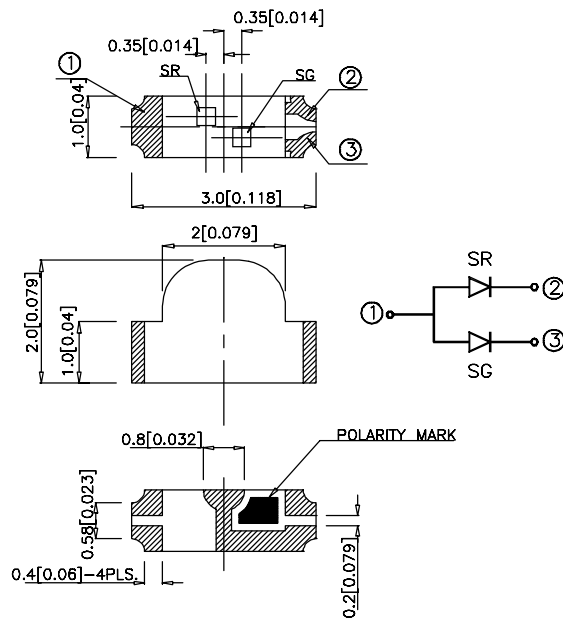
- 3.0mmx1.0mm SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.

Description

The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Super Bright Red source color devices are made with Gallium Aluminum Arsenide Red Light Emitting Diode.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.1 (0.004") unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

Selection Guide

| Part No. | Dice | Lens Type | Iv (mcd) @ 20 mA | | Viewing Angle |
|---------------|---------------------------|-------------|---------------------|------|------------------|
| | | | Min. | Typ. | 2θ1/2 |
| APBA3010SRSGC | SUPER BRIGHT RED (GaAlAs) | WATER CLEAR | 40 | 70 | 140° |
| | SUPER BRIGHT GREEN (GaP) | | 8 | 16 | |

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

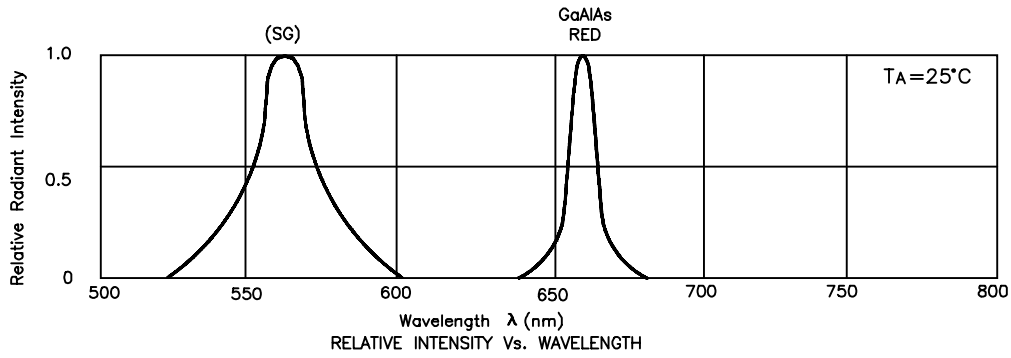
| Symbol | Parameter | Device | Typ. | Max. | Units | Test Conditions |
|-------------------|-------------------------|--|-------------|------------|-------|-----------------|
| λ _{peak} | Peak Wavelength | Super Bright Red Super Bright Green | 660 565 | | nm | IF=20mA |
| Δλ1/2 | Spectral Line Halfwidth | Super Bright Red Super Bright Green | 20 30 | | nm | IF=20mA |
| C | Capacitance | Super Bright Red Super Bright Green | 95 45 | | pF | VF=0V;f=1MHz |
| V _F | Forward Voltage | Super Bright Red Super Bright Green | 1.85 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

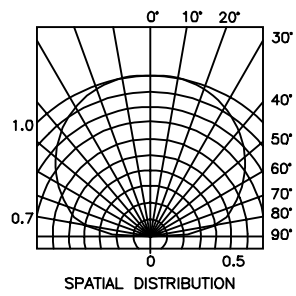
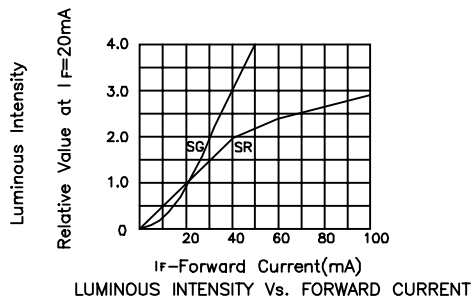
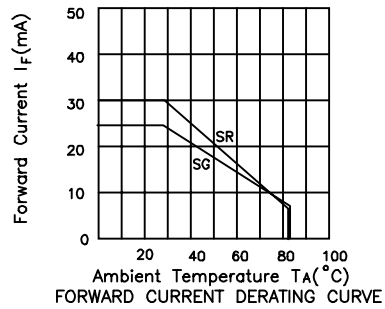
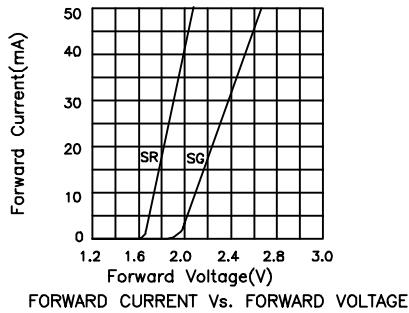
| Parameter | Super Bright Red | Super Bright Green | Units |
|--------------------------------|---------------------|--------------------|-------|
| Power dissipation | 100 | 105 | mW |
| DC Forward Current | 30 | 25 | mA |
| Peak Forward Current [1] | 150 | 150 | mA |
| Reverse Voltage | 5 | 5 | V |
| Operating/Storage Temperature | -40°C To +85°C | | |
| Lead Soldering Temperature [2] | 260°C For 5 Seconds | | |

Notes:

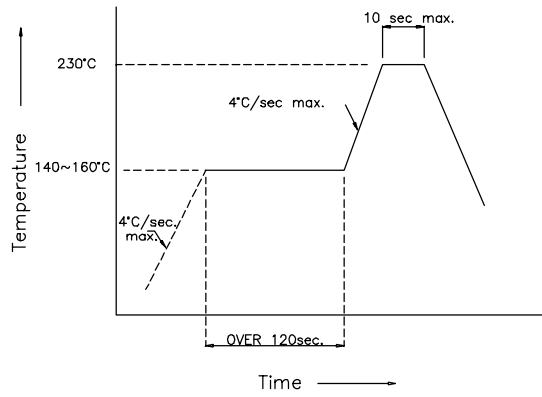
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 4mm below package base.



APBA3010SRSGC Super Bright Red / Super Bright Green

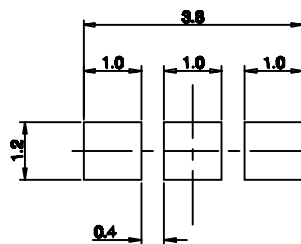


APBA3010SRSGC Reflow Soldering Instructions



APBA3010SRSGC Recommended Soldering Pattern (Units : mm)

FOR REFLOW SOLDERING



APBA3010SRSGC Tape Specifications (Units : mm)

