

APBA3010SRSGC

Features

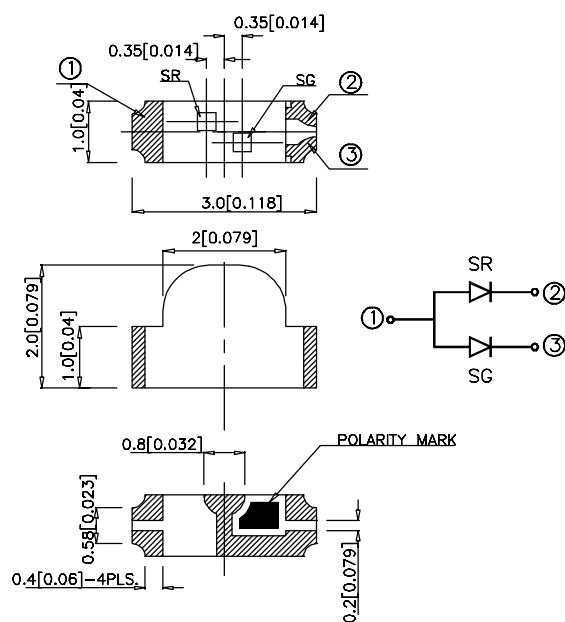
- 3.0mmx1.0mm SMT LED, 2.0mm THICKNESS.
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- VARIOUS COLORS AND LENS TYPES AVAILABLE.

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 $\pm 0.1(0.004")$ 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.	
APBA3010SRSGC	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	40	70	140°
	SUPER BRIGHT GREEN (GaP)		8	16	

Note:

1. $\theta_{1/2}$ 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

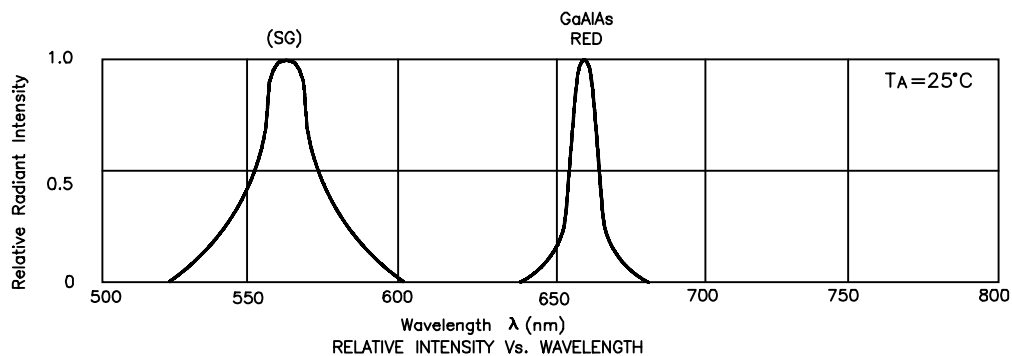
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ_{peak}	Peak Wavelength	Super Bright Red Super Bright Green	660 565		nm	IF=20mA
$\Delta\lambda_{1/2}$	Spectral Line Halfwidth	Super Bright Red Super Bright Green	20 30		nm	IF=20mA
C	Capacitance	Super Bright Red Super Bright Green	95 45		pF	VF=0V;f=1MHz
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		

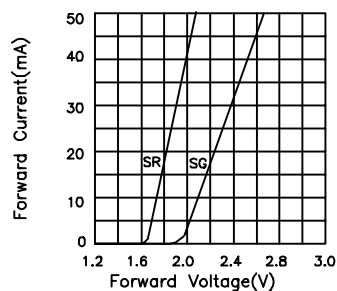
Notes:

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

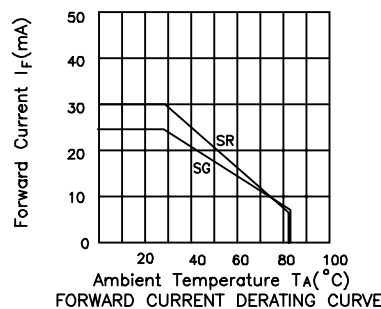


APBA3010SRSGC

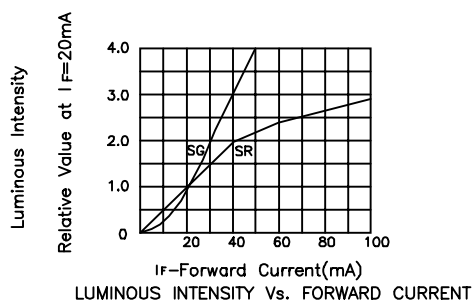
Super Bright Red / Super Bright Green



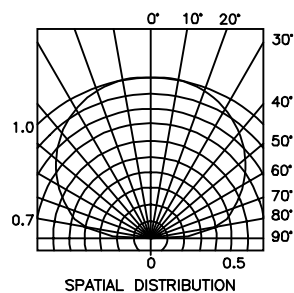
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

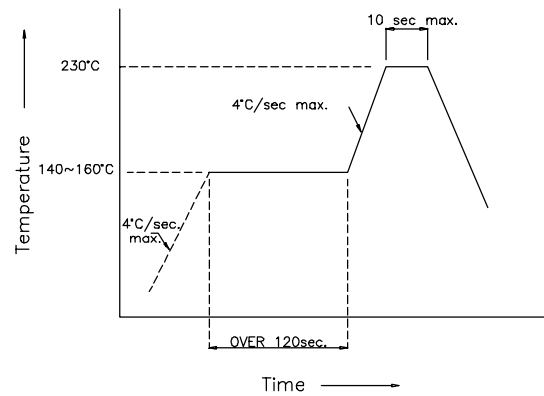


LUMINOUS INTENSITY Vs. FORWARD CURRENT



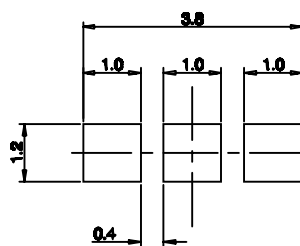
SPATIAL DISTRIBUTION

APBA3010SRSGC Reflow Soldering Instructions



APBA3010SRSGC Recommended Soldering Pattern (Units : mm)

FOR REFLOW SOLDERING



APBA3010SRSGC Tape Specifications (Units : mm)

