

APF3236SRSGMBCP

SUPER BRIGHT RED

SUPER BRIGHT GREEN

BLUE

Features

- LOW POWER CONSUMPTION.
- 3.2mmx3.6mm SMT LED, 1.1mm THICKNESS.
- ONE RED, ONE GREEN AND ONE BLUE CHIPS IN ONE PACKAGE.
- CAN PRODUCE ANY COLOR IN VISIBLE SPECTRUM, INCLUDING WHITE LIGHT.
- PACKAGE : 1000PCS / REEL.

Description

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

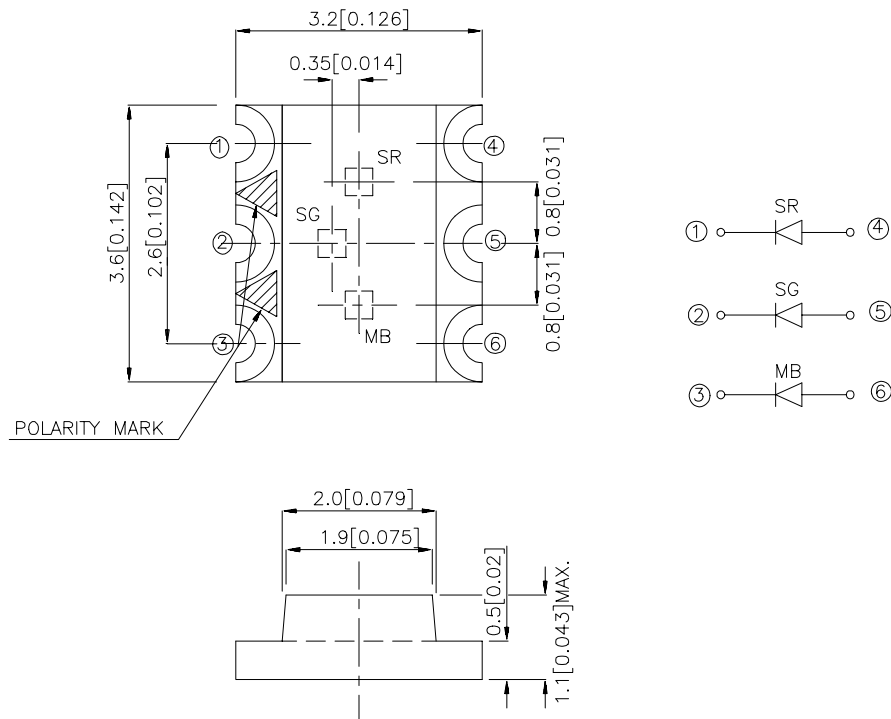
The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

The Blue source color devices are made with GaN on SiC Light Emitting Diode.

Static electricity and surge damage the LEDs. It is recommended to use a wrist band or anti-electrostatic glove when handling the LEDs.

All devices, equipment and machinery must be electrically grounded.

Package Dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ± 0.2 (0.0079") unless otherwise noted.
3. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 20 mA		Viewing Angle
			Min.	Typ.	2θ1/2
APF3236SRSGMBCP	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	36	70	120°
	SUPER BRIGHT GREEN (GaP)		2.6	12	
	BLUE (GaN)		1.6	8	

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

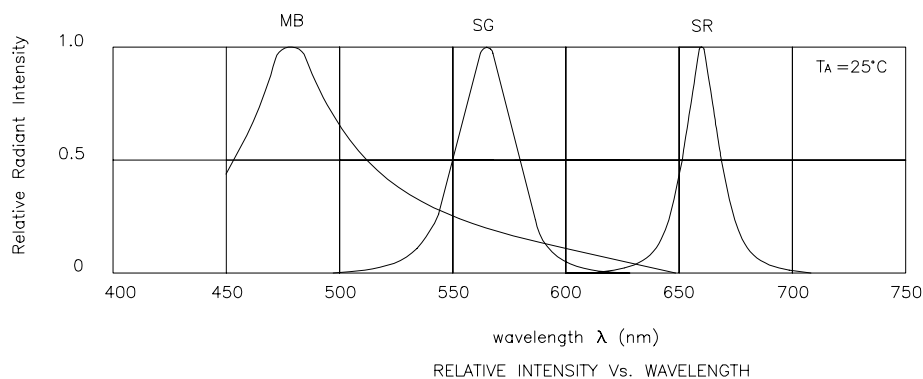
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ _{peak}	Peak Wavelength	Super Bright Red Super Bright Green Blue	660 565 430		nm	I _F =20mA
λ _D	Dominate Wavelength	Super Bright Red Super Bright Green Blue	640 568 466		nm	I _F =20mA
Δλ _{1/2}	Spectral Line Half-width	Super Bright Red Super Bright Green Blue	20 30 60		nm	I _F =20mA
C	Capacitance	Super Bright Red Super Bright Green Blue	45 15 100		pF	V _F =0V;f=1MHz
V _F	Forward Voltage	Super Bright Red Super Bright Green Blue	1.85 2.2 3.8	2.5 2.5 4.5	V	I _F =20mA
I _R	Reverse Current	All		10	μA	V _R = 5V

Absolute Maximum Ratings at T_A=25°C

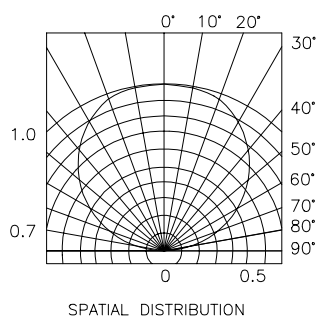
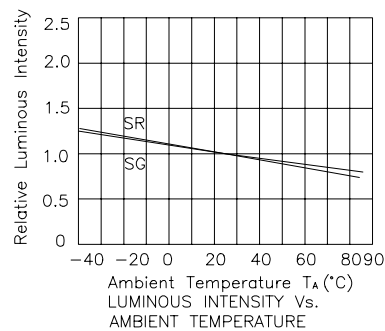
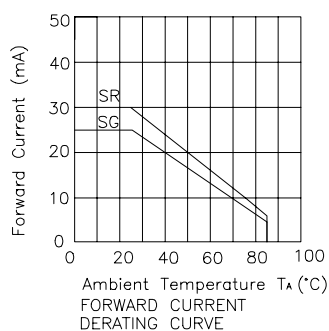
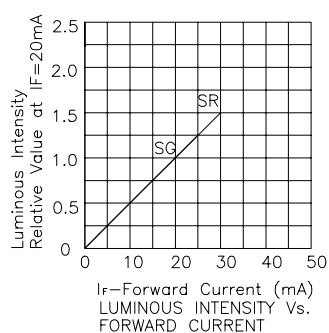
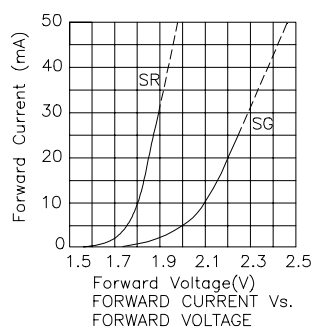
Parameter	Super Bright Red	Super Bright Green	Blue	Units
Power dissipation	100	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	155	140	150	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C			

Note:

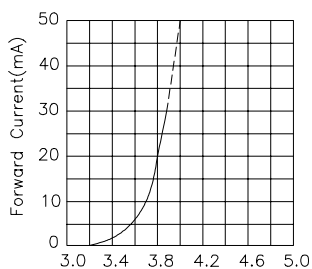
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



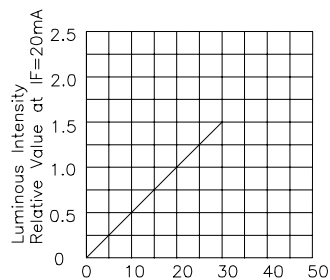
APF3236SRSGMBCP Super Bright Red / Super Bright Green



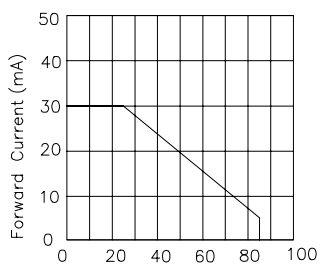
Blue



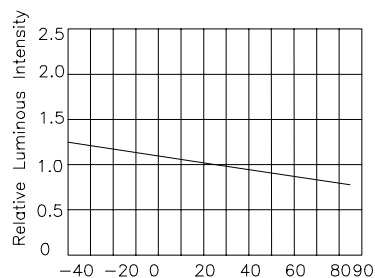
Forward Voltage(V)
FORWARD CURRENT Vs.
FORWARD VOLTAGE



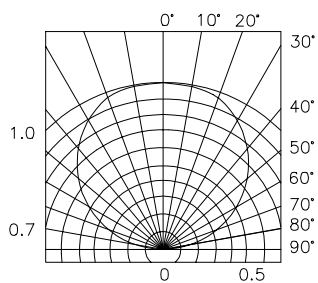
I_f —Forward Current (mA)
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



Ambient Temperature T_a ($^{\circ}\text{C}$)
FORWARD CURRENT
DERATING CURVE



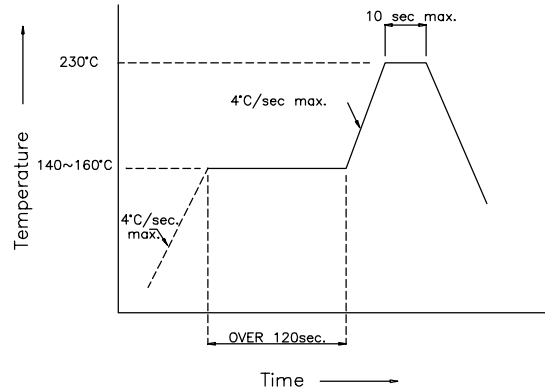
Ambient Temperature T_a ($^{\circ}\text{C}$)
LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



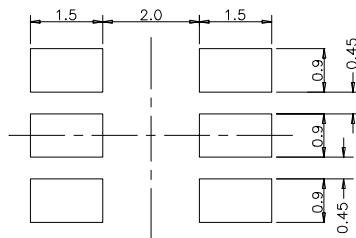
SPATIAL DISTRIBUTION

APF3236SRSGMBCP SMT Reflow Soldering Instruction

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)

