

APF3236SRSGMBCPRV

### Features

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

### Description

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

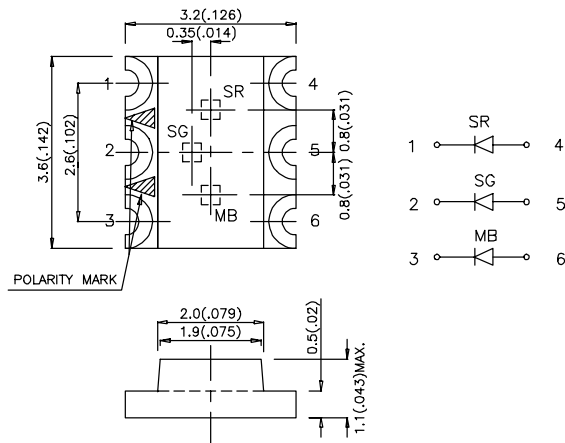
The Super Bright Green source color devices are made with Gallium Phosphide Green Light Emitting Diode.

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  $\pm 0.25(0.01)$  unless otherwise noted.
3. Lead spacing is measured where the lead emerge package.
4. Specifications are subjected to change without notice.

### Selection Guide

APF3236PRV	Dice	Lens Type	I <sub>v</sub> (mcd) @ 20 mA		Viewing Angle
			Min.	Min.	2θ1/2
APF3236SRSGMBC PRV	SUPER BRIGHT RED (GaAlAs)	WATER CLEAR	40	70	120°
	SUPER BRIGHT GREEN (GaP)		3	12	
	BLUE (GaN)		2	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<sub>A</sub>=25°C

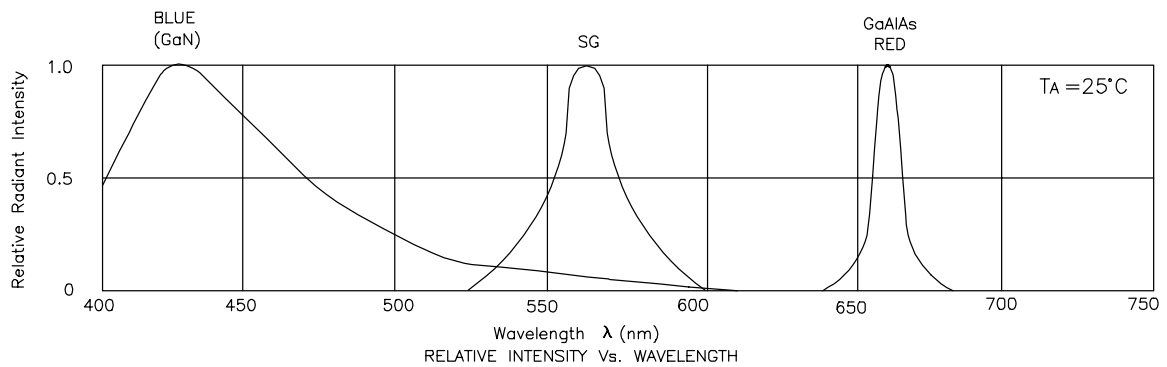
Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λ <sub>peak</sub>	Peak Wavelength	Super Bright Red Super Bright Green Blue	660 565 430		nm	IF=20mA
λΔ1/2	Spectral Line Halfwidth	Super Bright Red Super Bright Green Blue	20 30 65		nm	IF=20mA
C	Capacitance	Super Bright Red Super Bright Green Blue	95 45 100		pF	VF=0V;f=1MHz
V <sub>F</sub>	Forward Voltage	Super Bright Red Super Bright Green Blue	1.85 2.2 3.8	2.5 2.5 4.5	V	IF=20mA
I <sub>R</sub>	Reverse Current	All		10	μA	VR = 5V

### Absolute Maximum Ratings at T<sub>A</sub>=25°C

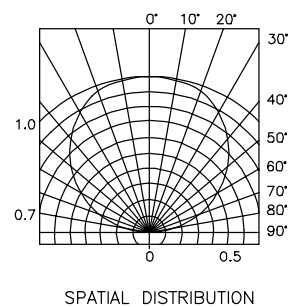
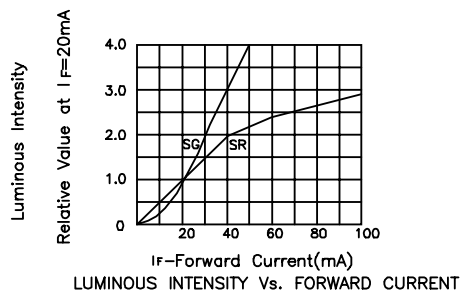
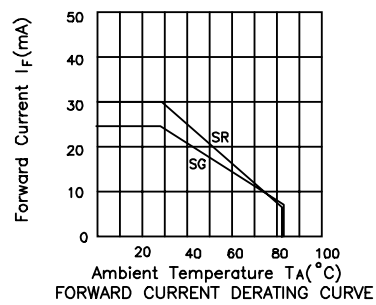
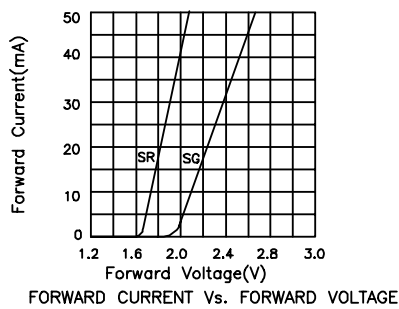
Parameter	Super Bright Red	Super Bright Green	Blue	Units
Power dissipation	100	105	105	mW
DC Forward Current	30	25	30	mA
Peak Forward Current [1]	150	150	200	mA
Reverse Voltage	5	5	5	V
Operating/Storage Temperature	-40°C To +85°C			

Note:

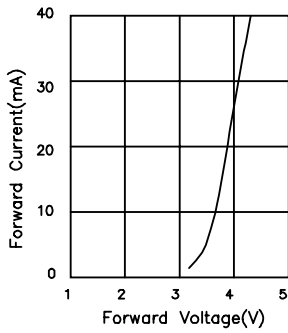
1. 1/10 Duty Cycle, 0.1ms Pulse Width.



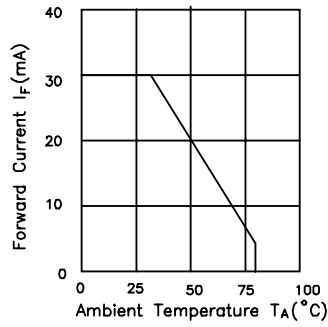
## APF3236SRSGMBCPRV Super Bright Red / Super Bright Green



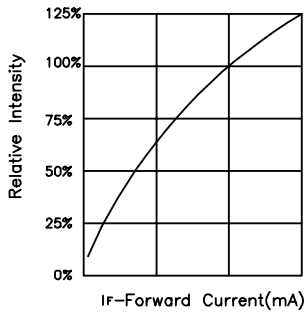
## Blue



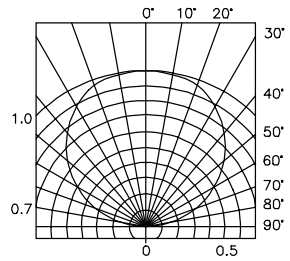
FORWARD CURRENT Vs. FORWARD VOLTAGE



FORWARD CURRENT DERATING CURVE

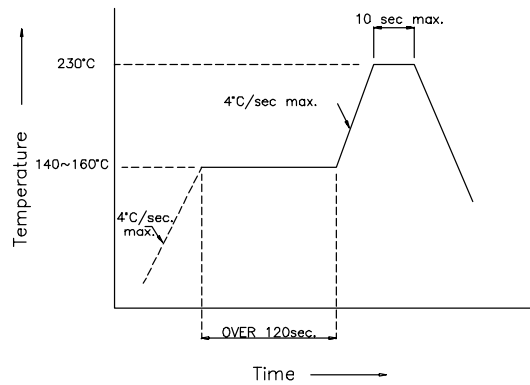


RELATIVE INTENSITY Vs. FORWARD CURRENT

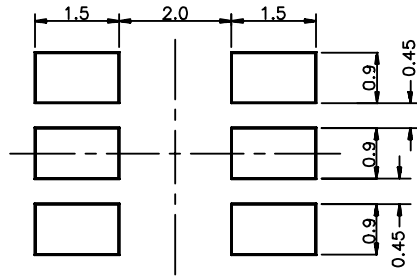


SPATIAL DISTRIBUTION

## APF3236PRV SMT Reflow Soldering Instruction



## APF3236PRV Recommended Soldering Pattern (Units : mm)



## APF3236PRV Tape Specifications (Units : mm)

