

# SMLP34 series

## PICOLED™-RGB

### SMLP34RGB1W

4pin type  
1010(0404)  
1.0×1.0mm(t=0.2mm)

#### Features

- The smallest 3 color type LED in the world\* PICOLED™-RGB
- 4pin type
- Low height contributes to the improvement of color mixture



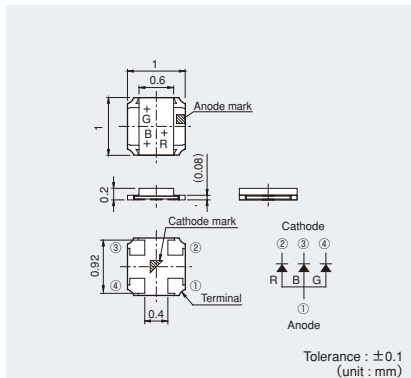
\* Investigated Aug. 2010

### Specifications

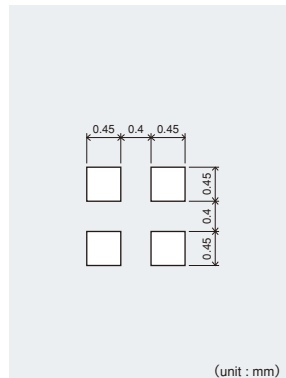
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)						Electrical and Optical Characteristics (Ta=25°C)									
			Power Dissipation Pd(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)	Forward Voltage VF		Reverse Current IR		Dominant Wavelength λD			Luminous Intensity Iv		
								Typ.(V)	IF(mA)	Max.(μA)	VR(V)	Min.*2 (nm)	Typ.*2 (nm)	Max.*2 (nm)	IF(mA)	Min. (mcd)	Typ. (mcd)	IF(mA)
SMLP34RGB1W	InGaN	Blue						3.0				465	470	475		9	18	
		Green	-	20	100*1	5	-30 to +85	-40 to +100	3.1	5	100	5	520	527	535	5	22	45
	AlGaInP on GaAs	Red						2.1				620	624	629		14	28	
SMLP34RGB2W	AlGaInP	Red						2.2				619	624	629		14	35	
	InGaN	Green	-	20	100*1	5	-40 to +85	-40 to +100	3.3	5	10	5	520	527	535	5	56	110
		Blue						3.2				465	470	475		28	45	

\* 1:Duty ≤ 1/20, 1kHz \* 2:Reference

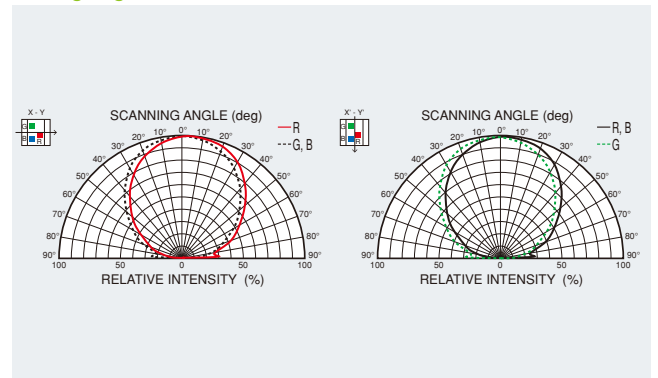
### Dimensions



### Recommended Solder Pattern



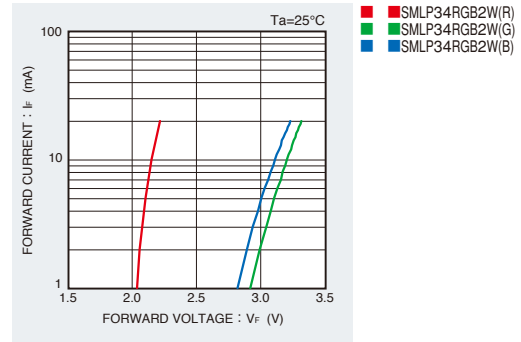
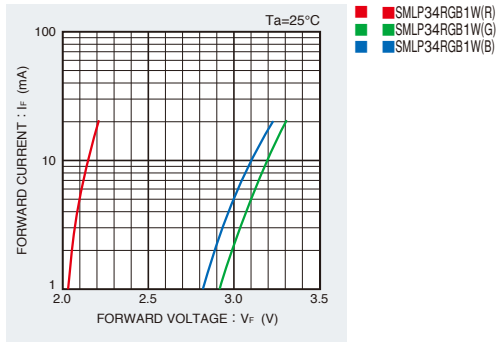
### Viewing Angle



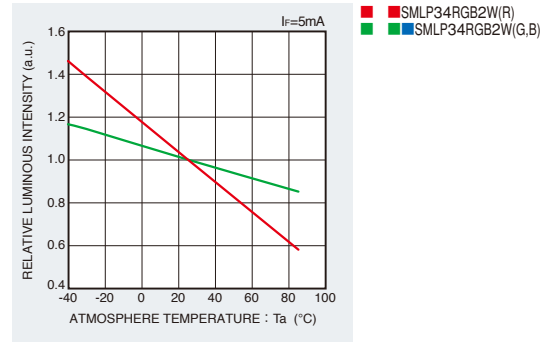
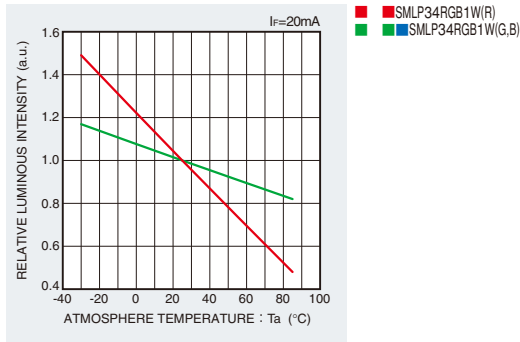
\* PICOLED™ is ROHM's pending trademark.

Electrical Characteristics Curves

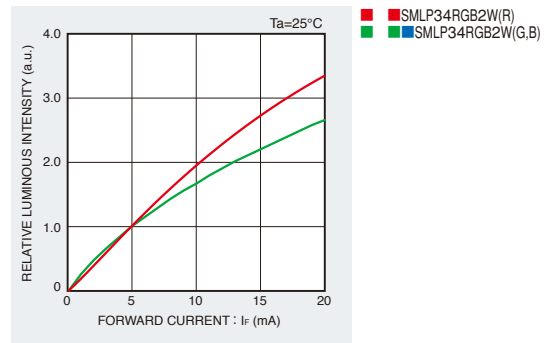
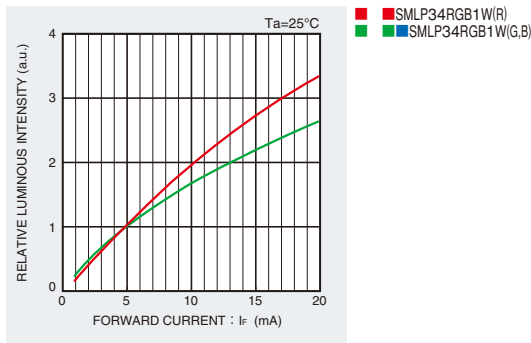
Forward Current-Forward Voltage



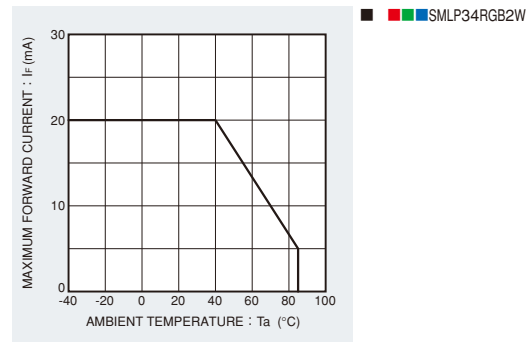
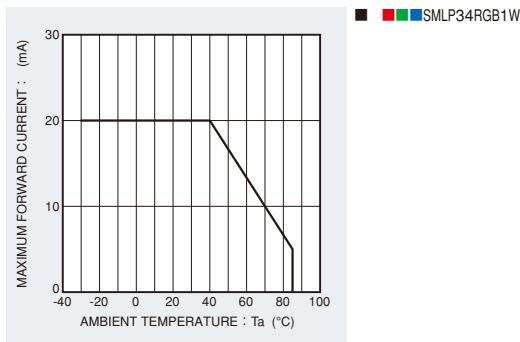
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



Rank Reference of Brightness

■ SMLP34RGB1W

(Ta=25°C, If=5mA)

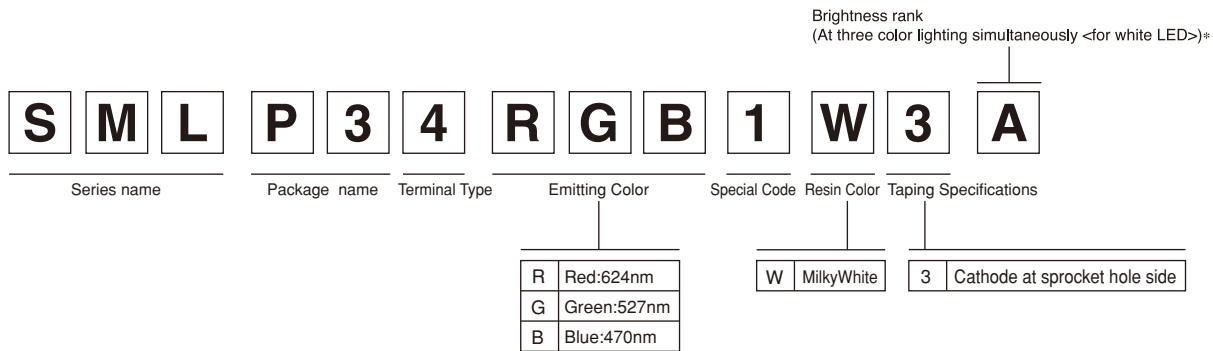
Mini-mold Chip LEDs	Package size (mm)	Height (mm)	Luminous Intensity (mcd)	Emitting Color	A	B	C	D	E	F	G	H	J	K	L	M
					Blue	9 to 18	18 to 36	9 to 18	18 to 36	9 to 18	18 to 36	9 to 18	18 to 36	9 to 18	18 to 36	9 to 18
Green					22 to 36		36 to 56		56 to 90		22 to 36		36 to 56		56 to 90	
Red					14 to 28						28 to 56					

■ SMLP34RGB2W

(Ta=25°C, If=5mA)

Mini-mold Chip LEDs	Package size (mm)	Height (mm)	Luminous Intensity (mcd)	Emitting Color	A	B	C	D	E	F	G	H	J	K	L	M
					Blue	28 to 56	56 to 110	28 to 56	56 to 110	28 to 56	56 to 110	28 to 56	56 to 110	28 to 56	56 to 110	28 to 56
Green					56 to 90		90 to 140		140 to 220		56 to 90		90 to 140		140 to 220	
Red					14 to 28						28 to 56					

Part No. Explanation



- \* Concerning the Brightness rank
- Please refer to the rank chart above for luminous intensity classification.
- Part name is individual for each rank.
- When shipped as sample, the part name will be a representative part name.
- General products are free of ranks. Please contact sales if rank appointment is needed.

Packing Specification

ROHM LED products are being shipped with desiccant (silica gel) concluded in moisture-proof bags. Pasting the moisture sensitive label on the outer surface of the moisture-proof bags or enclosing the humidity indication card inside the bag is available upon request. Please contact the nearest sales office or distributor if necessary.

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