

# SMLP3 Series PICOLED™-RGB

## SMLP34RGB1W

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

## SMLP36RGB1W

6pin type  
1510(0604)  
1.5×1.0mm(t=0.2mm)

### Features

- The smallest 3 color type LED in the world\* PICOLED™-RGB
- 4pin, 6pin types available
- Low height contributes to the improvement of color mixture



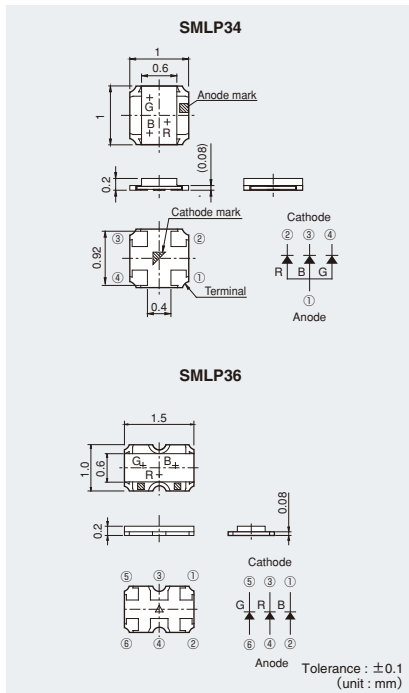
\* Investigated Aug. 2009

### Specifications

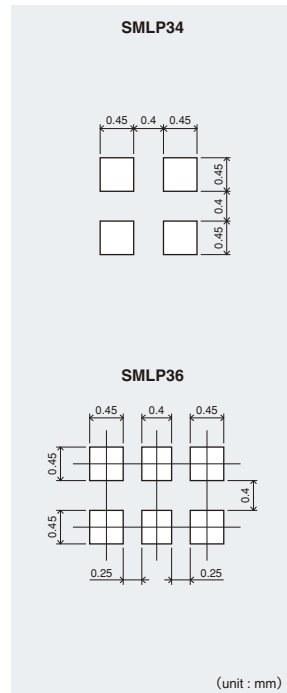
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)												
			Power Dissipation Pd(mW)	Forward Current If(mA)	Peak Forward Current Ifp(mA)	Reverse Voltage Vr(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)	Forward Voltage Vf		Reverse Current Ir		Dominant Wavelength λD			Luminous Intensity Iv				
								Typ.(V)	If(mA)	Max.(μA)	Vr(V)	Min.*2	Typ.*2	Max.*2	Min.	Typ.	Max.	Min.	Typ.	Max.
SMLP34RGB1W (3 colors, 4 terminals)	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	5	
	AlGaInP on GaAs	Red						2.1				620	624	629		14	28			
SMLP36RGB1W (3 colors, 6 terminals)	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	5	
	AlGaInP on GaAs	Red						2.1				620	624	629		14	28			

\* 1:Duty1/20, 1ms \* 2:Reference

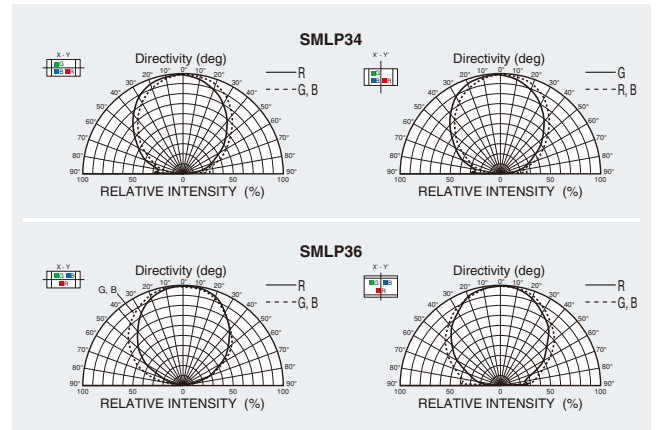
### Dimensions



### Recommended Solder Pattern



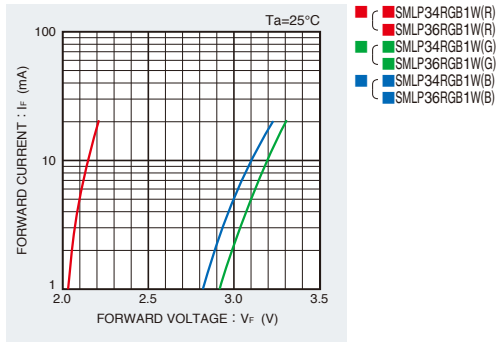
### Viewing Angle



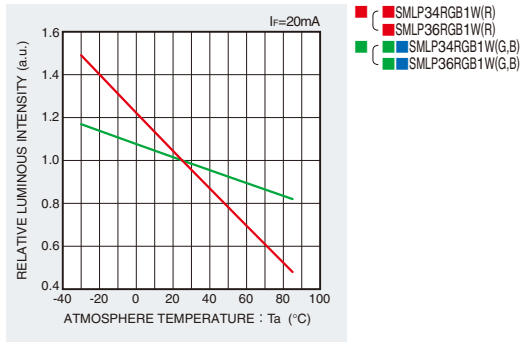
\* PICOLED™ is ROHM's pending trademark.

## Electrical Characteristics Curves

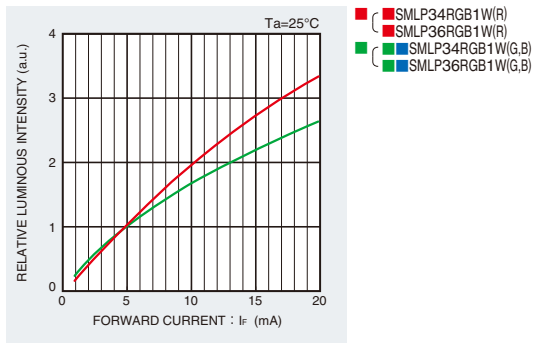
### Forward Current-Forward Voltage



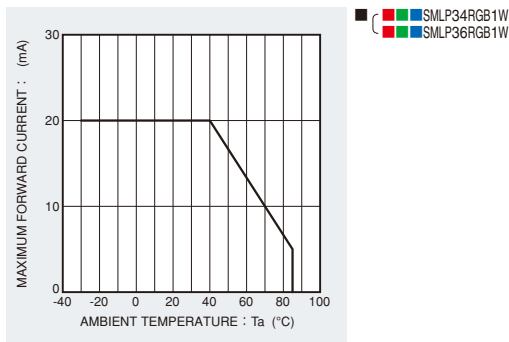
### Luminous Intensity-Atmosphere Temperature



### Luminous Intensity-Forward Current



### Derating



# SMLP3 Series

## Rank Reference of Brightness

### SMLP34RGB

(Ta=25°C, If=5mA)

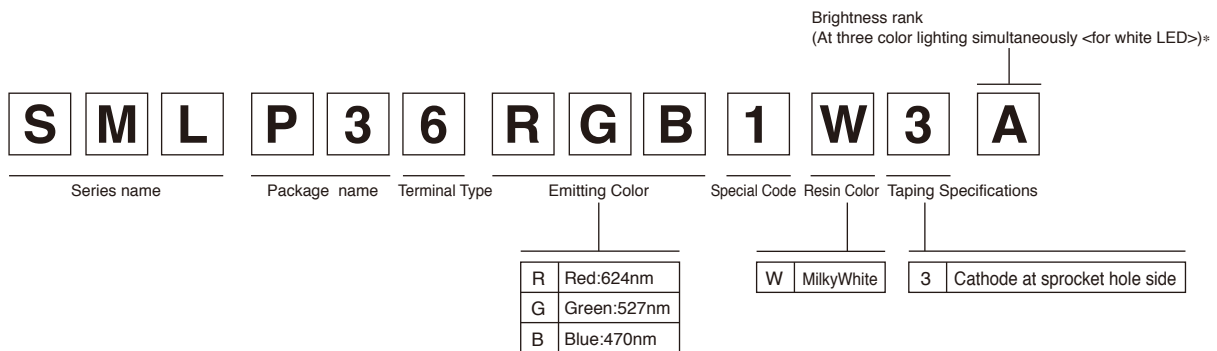
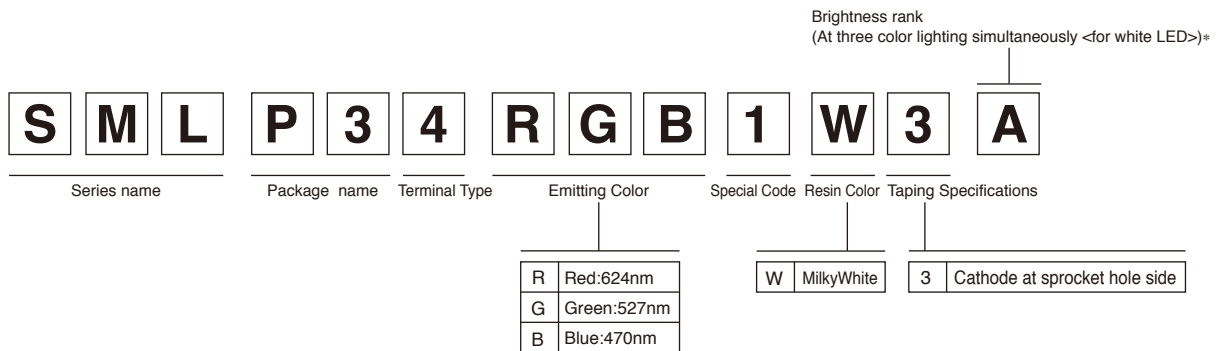
Package size (mm)	Height (mm)	Luminous Intensity (mcd)	Emitting Color	A	B	C	D	E	F	G	H	J	K	L	M
				Mini-mold Chip LEDs	1010 1510	0.2	Blue	9 to 18	18 to 36	9 to 18	18 to 36	9 to 18	18 to 36	9 to 18	18 to 36
			Green	22 to 36		36 to 56		56 to 90		22 to 36		36 to 56		56 to 90	
			Red	14 to 28			28 to 56								

### SMLP36RGB

(Ta=25°C, If=5mA)

Package size (mm)	Height (mm)	Luminous Intensity (mcd)	Emitting Color	A	B	C	D	E	F	G	H	J	K	L	M
				Mini-mold Chip LEDs	1010 1510	0.2	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
			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								

## 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) included 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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