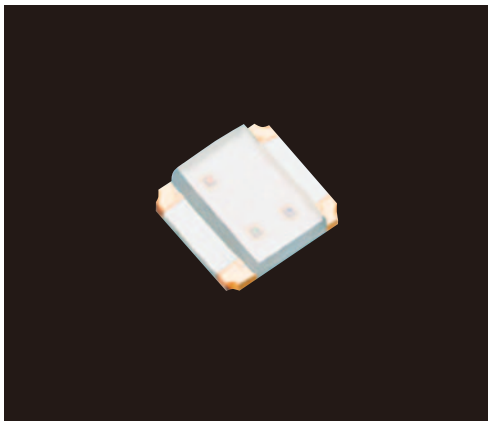


SMLP34 series

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

Color Type

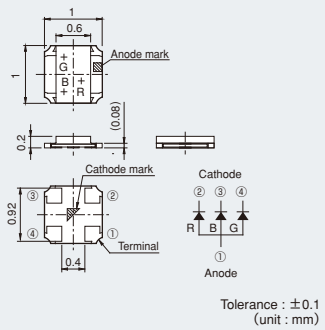
＊Investigated Aug. 2010

Specifications

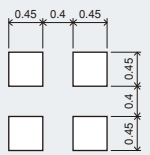
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25℃) Power Dissipation PD(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(℃)	Storage Temperature Tstg(℃)	Electrical and Optical Characteristics (Ta=25℃) Forward Voltage VF Typ.(V)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

＊1:Duty≦1/20, 1kHz ＊2:Reference

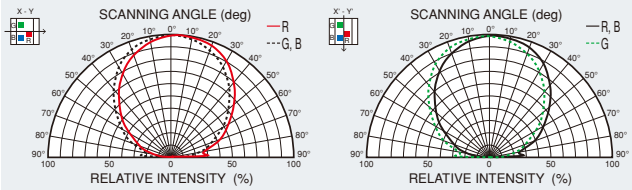
Dimensions



Recommended Solder Pattern



Viewing Angle



＊PICOLEDTM is ROHM's pending trademark.

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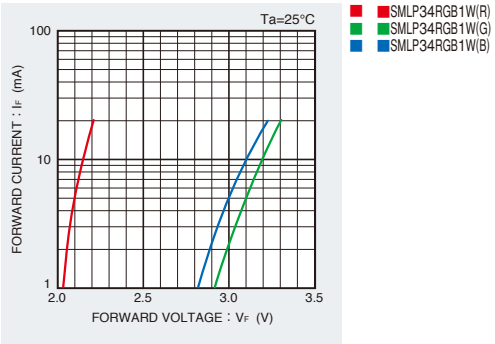
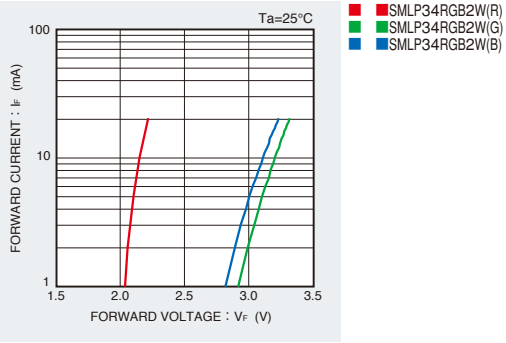
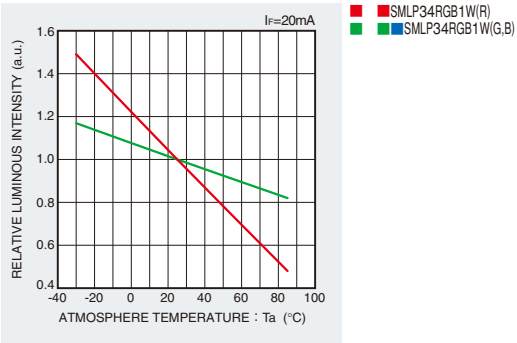
Electrical Characteristics Curves

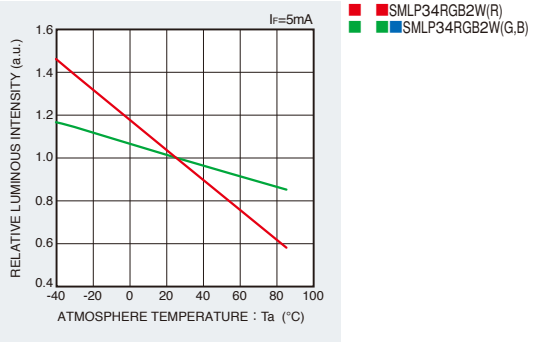
Forward Current-Forward Voltage



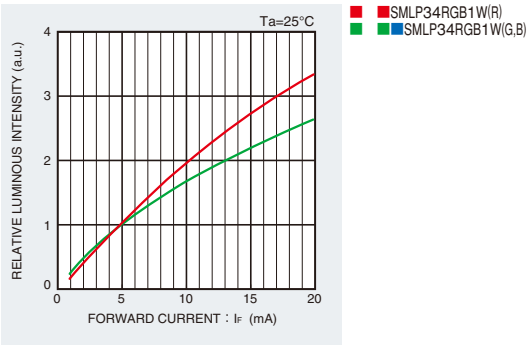


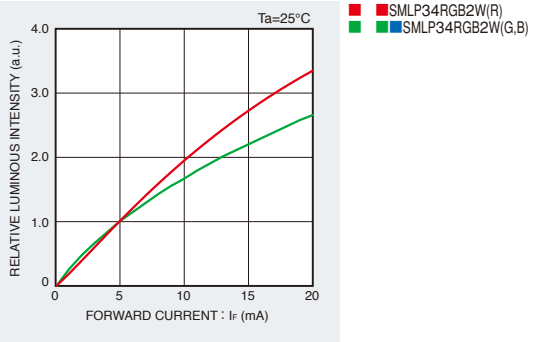
Luminous Intensity-Atmosphere Temperature



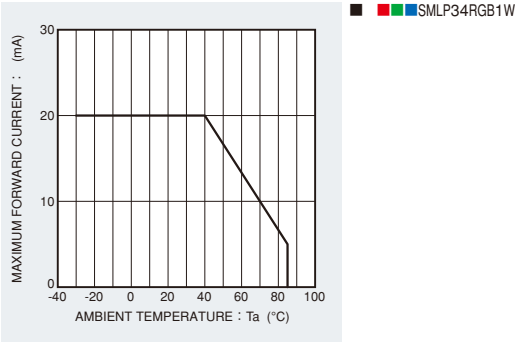


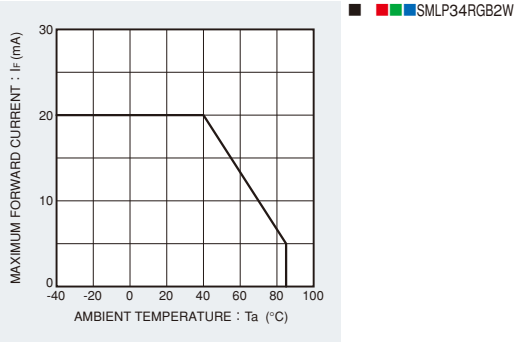
Luminous Intensity-Forward Current





Derating





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Rank Reference of Brightness

SMLP34RGB1W

(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	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					

SMLP34RGB2W

(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	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	56 to 110
			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

Brightness rank
(At three color lighting simultaneously <for white LED>)*

S M L P 3 4 R G B 1 W 3 A

Series name | Package name | Terminal Type | Emitting Color | Special Code | Resin Color | Taping Specifications

R	Red:624nm
G	Green:527nm
B	Blue:470nm

W	MilkyWhite

3	Cathode at sprocket hole side

* 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 distributer if necessary.

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