

SMLW56 Series

SRGB1

7950 (3120)
7.9 × 5.0mm (t=1.1mm)

Features

- High Brightness tri-color LEDs



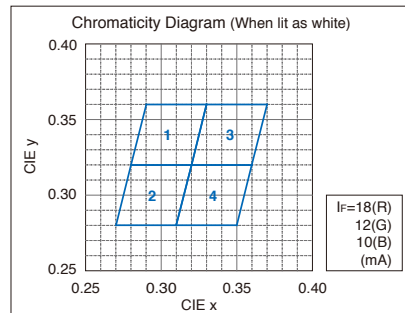
Specifications

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 (V)	Reverse Current Ir (μA)	Dominant Wavelength λD (nm)			Luminous Intensity Iv (mcd)				
								Typ.	Max.	Min.*1	Typ.	Max.*1	Min.	Typ.	Max.	Min.	Typ.	Max.
■ SMLW56RGB1W	AlGaInP on Si	Red		50				2.1	10	619	624	629	450	700				
	InGaN	Green	400	40	100	5	-40 to +85	3.3	20	520	527	535	710	1200	20			
	InGaN	Blue						3.2		460	470	475	220	400				

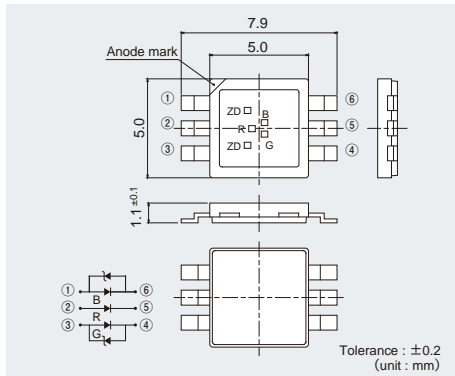
*1=Reference

Chromaticity Coordinates

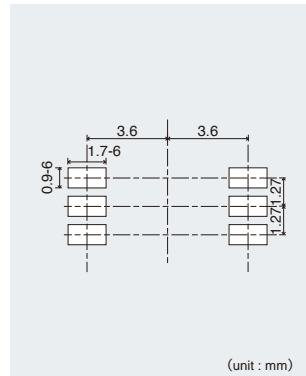
Electrical and Optical Characteristics (Ta=25°C)				
Chromaticity Coordinates (x, y)		Luminous Intensity Iv (mcd)		
	If (mA)	Min.	Typ.	If (mA)
(0.32, 0.32)	(R)18			(R)18
	(G)12	1100	1800	(G)12
	(B)10			(B)10



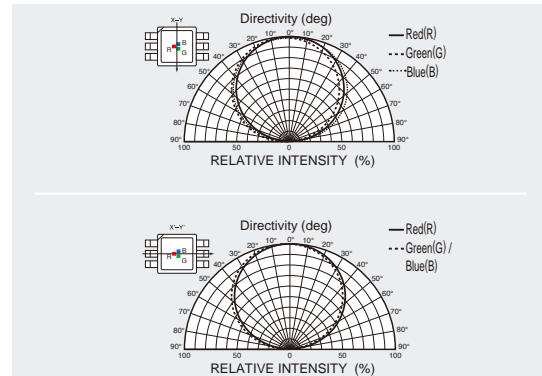
Dimensions



Recommended Solder Pattern

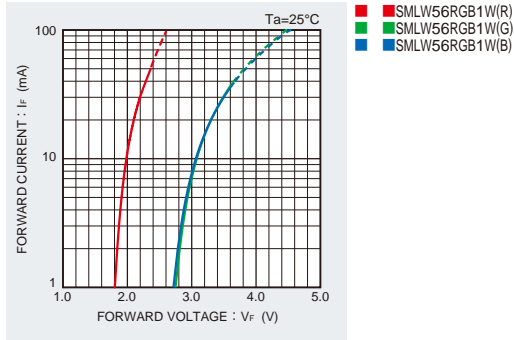


Viewing Angle

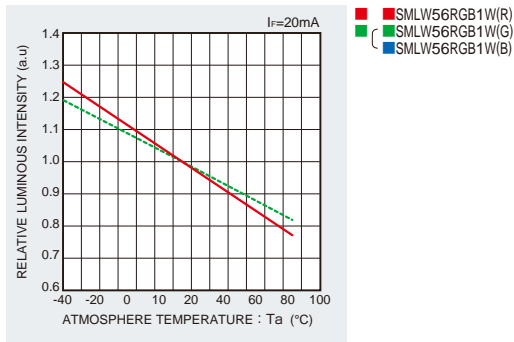


Electrical Characteristics Curves

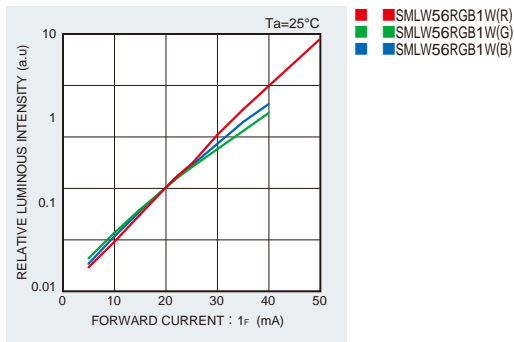
Forward Current-Forward Voltage



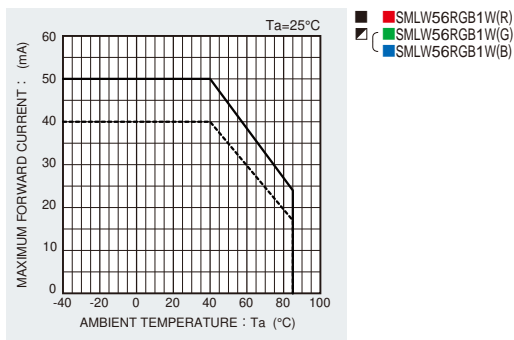
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



Rank Reference of Brightness

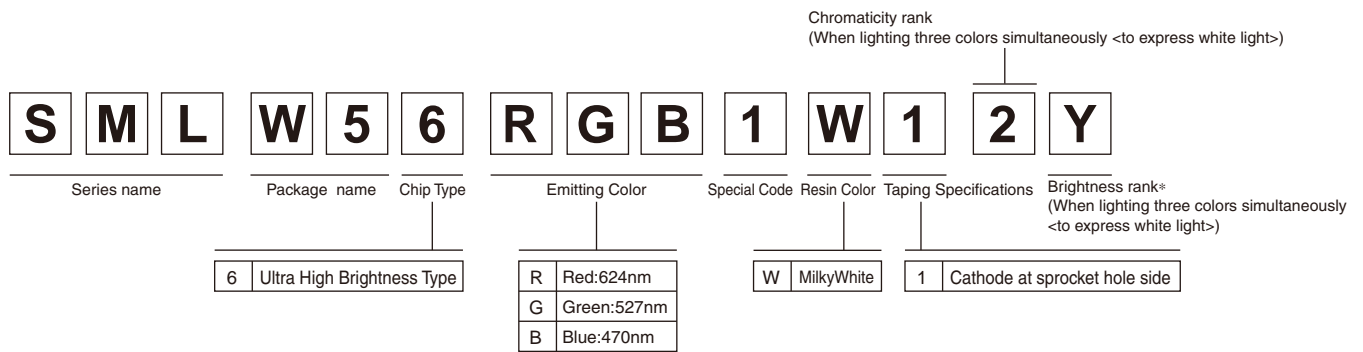
■ SMLW56RGB1W

(Ta=25°C, If=20mA)

Emitting Color	Y*									
	220 to 280	280 to 360	355 to 460	450 to 560	560 to 710	710 to 900	900 to 1100	1100 to 1400	1400 to 1800	1800 to 2200
Red					R					
Green					G					
Blue	B									
White								WB		

* When lighting three colors simultaneously <to express white light>

Part No. Construction



* Concerning the Brightness rank

- Please refer to the rank chart above for luminous intensity classification.
- Please refer to the Chromaticity diagram for color 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.

Notes

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