SRGB Series

High Bright RGB LEDs

SMLW56 (SRGB1)

SMLV56 (SRGB2)

SMLW56/SMLV56 Series

SMLW56 (SRGB1)

Electrical Characteristics (Ta=25°C)

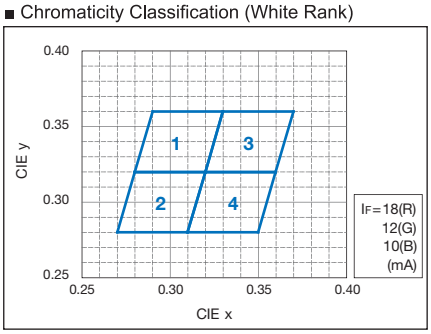
Part No.	Element Constitution	Color	Absolute Maximum Ratings						Electrical and Optical Characteristics										
			Permissible Loss PD (mW)	Forward Current IF (mA)	Peak Forward Current IFP (mA)	Reverse Voltage VR (V)	Operating Temp. Topr (°C)	Storage Temp. Tstg (°C)	Forward Voltage		Reverse Current		Wavelength λD				Brightness		
									Typ. (V)	IF (mA)	Max. (μA)	VR (V)	min. (nm)	Typ. (nm)	Max. (nm)	IF (mA)	min. (mcd)	Typ. (mcd)	IF (mA)
■	AlGaInP on Si	Red	400	50	100*	5	-40 to 85	-40 to 100	2.1	20	10	5	-	624	-	20	450	700	20
■ **SMLW56RGB1W**	InGaN on SiC	Green		40					3.3		-		-	527	-		710	1200	
■		Blue							3.2				-	470	-		220	400	

*Duty≤1/20, Pulse width≤1ms

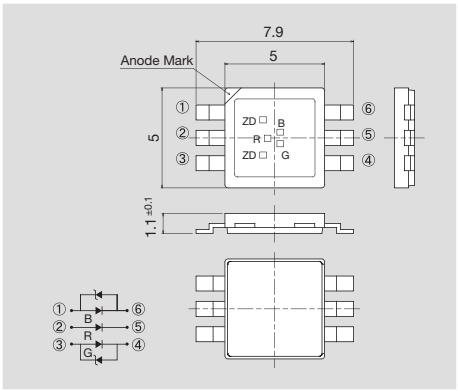
(White LED)

Electrical and Optical Characteristics(Ta=25°C)				
Chromaticity (x, y)	IF (mA)	Brightness min. (mcd)	Typ. (mcd)	IF (mA)
	(R)18			(R)18
(0.32, 0.32)	(G)12	1100	1800	(G)12
	(B)10			(B)10

■ Chromaticity Classification (White Rank)



■ Dimensions (Unit:mm)



SMLV56 (SRGB2)

Electrical Characteristics (Ta=25°C)

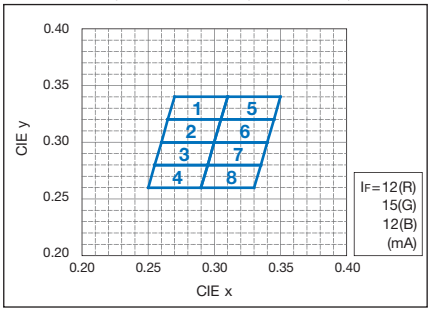
Part No.	Element Constitution	Color	Absolute Maximum Ratings (Ta=25°C)						Electrical and Optical Characteristics (Ta=25°C)										
			Permissible Loss PD (mW)	Forward Current IF (mA)	Peak Forward Current IFP (mA)	Reverse Voltage VR (V)	Operating Temp. Topr (°C)	Storage Temp. Tstg (°C)	Forward Voltage		Reverse Current		Wavelength λD				Brightness		
									Typ. (V)	IF (mA)	Max. (μA)	VR (V)	min. (nm)	Typ. (nm)	Max. (nm)	IF (mA)	min. (mcd)	Typ. (mcd)	IF (mA)
■	AlGaInP on Si	Red	400	50	100*	5	-40 to 85	-40 to 100	2.1	20	10	5	-	624	-	20	450	700	20
■ **SMLV56RGB1W**	InGaN on SiC	Green		40					3.3		-		-	527	-		710	1200	
■		Blue											-	470	-		220	400	

*Duty≤1/20, Pulse width≤1ms

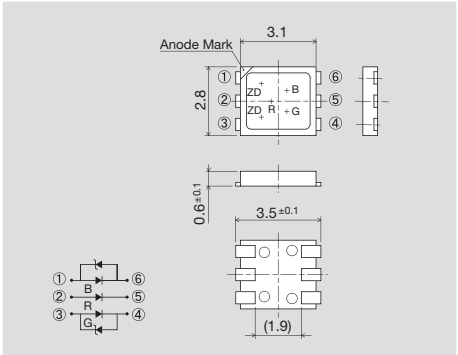
(White LED)

Electrical and Optical Characteristics (Ta=25°c)				
Chromaticity (x, y)	IF (mA)	Brightness min. (mcd)	Typ. (mcd)	IF (mA)
	(R)12			(R)12
(0.30, 0.30)	(G)15	1100	1700	(G)15
	(B)12			(B)12

■ Chromaticity Classification (White Rank)



■ Dimensions (Unit:mm)



SRGB Series

Thin | Temp. Range -40℃ 100℃ | High Bright | R G B

Color Type: FULL COLOR

2 Package Types

ROHM offers high bright RGB LEDs in two package types: a compact model (SRGB2) and a larger type (SRGB1).

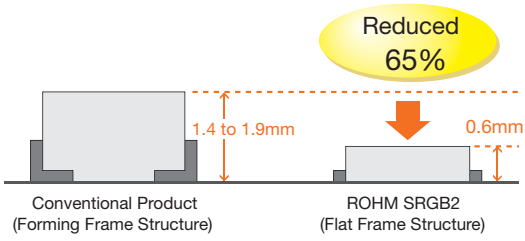
- SRGB1: 7.9×5.0mm t=1.1mm
- The SRGB2 features the same mounting area as the PLCC6 package, but in a lower profile (t=0.6mm).

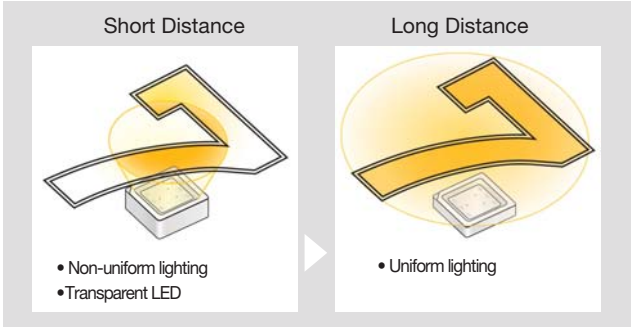
SMLW56RGB (SRGB1)	High Bright RGB  700/1200/400* 7.9×5.0 t=1.1
SMLV56RGB (SRGB2)	Compact High Bright RGB  700/1200/400* 3.5×2.8 t=0.6

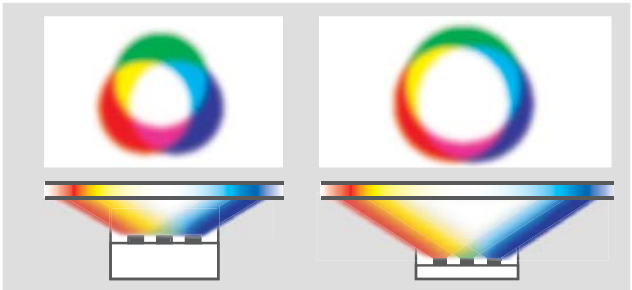
*R/G/B mcd (20mA)

Higher Brightness in a Lower Profile

Proprietary technology is required in order to reduce the profile. Excellent distance characteristics ensure uniform lighting and superior color mixture.
In addition the special construction prevents viewing the LED through the external panel, and color mixture sorting is performed for optimum color tones.







The content specified in this document is correct as of 1st April, 2009.

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