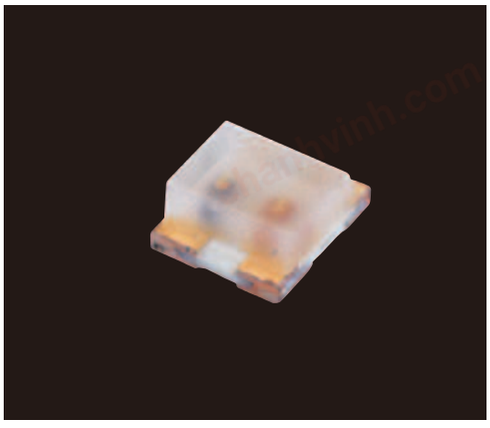
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ROHM SEMICONDUCTOR

Data Sheet



SML-52 Series

1315(0605)
1.3×1.5mm(t=0.6mm)

Features

・2-color type LED
・Abundant 2 color variations

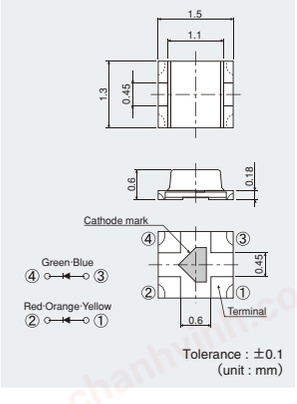
Color Type: B◆U　M◆U　M◆D　M　Y

Specifications

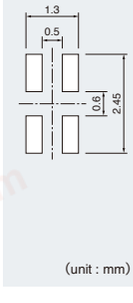
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25℃)						Electrical and Optical Characteristics (Ta=25℃)									
			Power Dissipation PD(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(℃)	Storage Temperature Tstg(℃)	Forward Voltage VF		Reverse Current IR		Dominant Wavelength λD			Luminous Intensity Iv		
									Typ. (V)	IF(mA)	Max. (μA)	VR(V)	Min.*3 (nm)	Typ. (nm)	Max.*3 (nm)	IF(mA)	Min. (mcd)	Typ. (mcd)	IF(mA)
■■ SML522BUW	InGaN	Blue	66	20	60*2	5	-40 to +85	-40 to +100	2.9	5	10	5	465	470	475	5	9.0	22	5
	AlGaInP on GaAs	Red	50						1.9				619	624	629		10	21	
■■ SML-522MUW	AlGaInP on GaAs	Yellowish Green	52	20	60*1	4	-30 to +85	-40 to +85	2.1	20	100	4	569	572	575	20	14	40	20
		Red	50						1.9				615	620	625		22	63	
■■ SML-522MU8W		Green	52		60*2			-40 to +100	2.2				569	572	575		16	40	
		Red											615	620	625		25	63	
■■ SML-521MUW	AlGaInP on GaAs Gap	Yellowish Green	70	25	60*1			-40 to +85	2.2				569	572	575		5.6	16	
		Red	50	20					1.9				615	620	625		22	63	
■■ SML-522MD8W	AlGaInP on GaAs	Green	52	20	100*2	5	-40 to +85	-40 to +100	2.1		10		569	572	575		10	18	
		Orange											602	605	608		40	63	
■■ SML-521MDW	AlGaInP on GaAs Gap	Yellowish Green	70	25	60*1	4	-30 to +85	-40 to +85	2.2		100		569	572	575		5.6	16	
		Orange	50	20					1.9				602	605	608		22	63	
■■ SML-521MYW		Yellowish Green	70	25					2.2				569	572	575		5.6	16	
		Yellow	50	20					1.9				584	587	590		22	63	

*1:Duty1/5, 200Hz　*2:Duty1/10, 1kHz　*3:Rrference

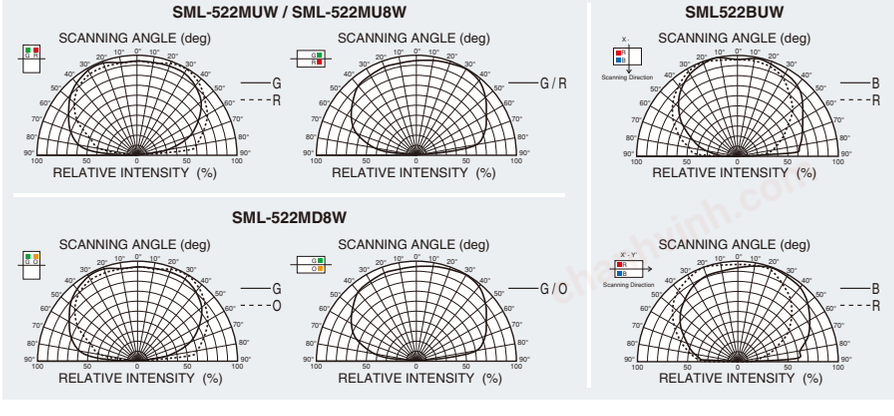
Dimensions



Recommended Solder Pattern



Viewing Angle



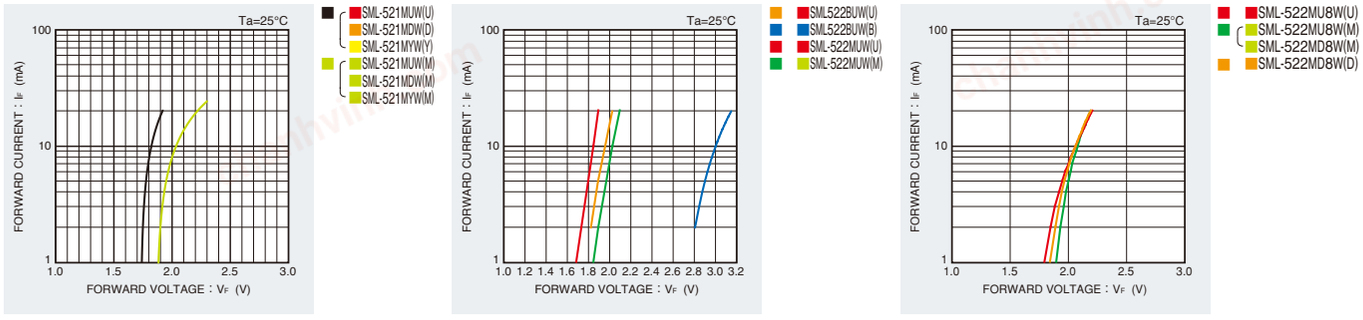
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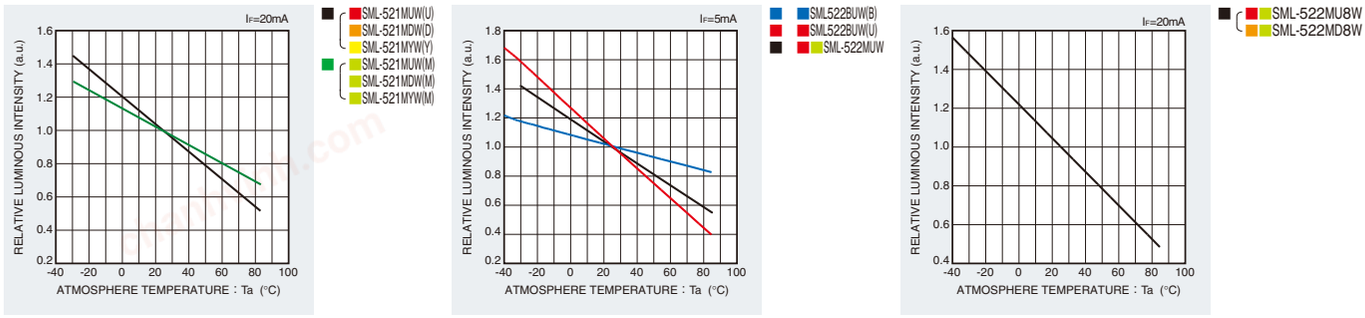
SML-52 Series

Electrical Characteristics Curves

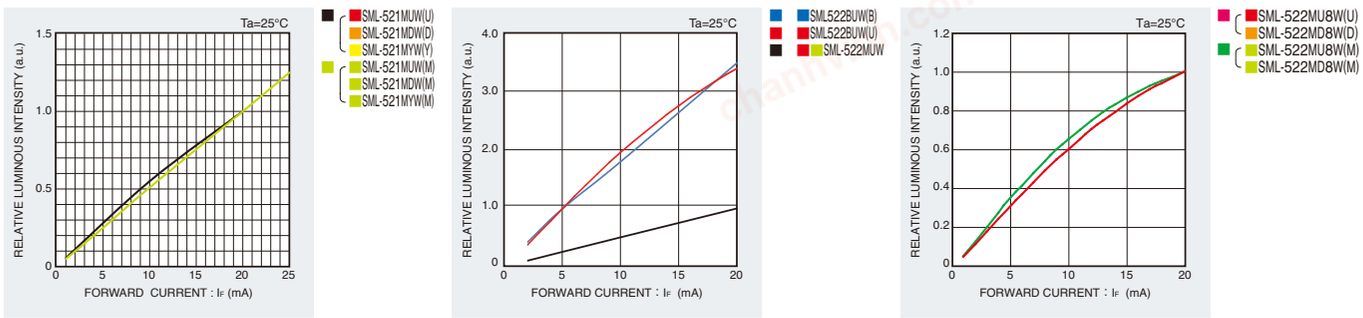
Forward Current-Forward Voltage



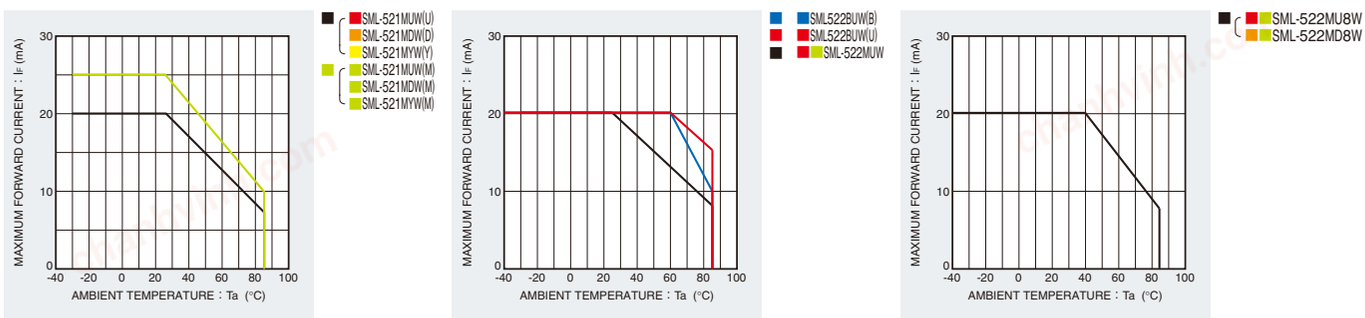
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



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SML-52 Series

Rank Reference of Brightness

Dual Color

(Ta=25°C, IF=20mA)

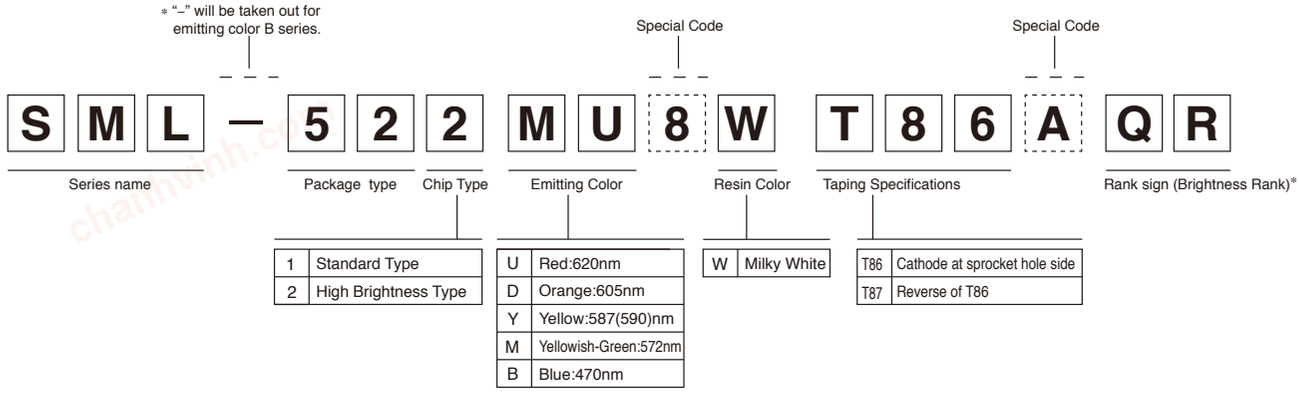
	Package size (mm)	Height (mm)	Part No.	Luminous Intensity (mcd) / Emitting Color	K 4.0 to 6.3	L 6.3 to 10	M 10 to 16	N 16 to 25	P 25 to 40	Q 40 to 63	R 63 to 100	S 90 to 140	T 140 to 220	U 220 to 360
Mini-mold Chip LEDs	1315	0.6	SML-522MUW※	Red						U				
				Yellowish Green					M					
			SML-522MU8W	Red						U				
				Green					M					
			SML-521MUW※	Red						U				
				Yellowish Green			M							
			SML-521MDW※	Orange						D				
				Yellowish Green			M							
			SML-522MD8W	Orange						D				
				Green				M						
			SML-521MYW※	Yellow						Y				
				Yellowish Green			M							

(Ta=25°C, IF=5mA)

	Package size (mm)	Height (mm)	Part No.	Luminous Intensity (mcd) / Emitting Color	K 4.0 to 6.3	L 6.3 to 10	M 10 to 16	N 16 to 25	P 25 to 40	Q 40 to 63	R 63 to 100	S 90 to 140	T 140 to 220	U 220 to 360
Mini-mold Chip LEDs	1315	0.6	SML522BUW	Red				U						
				Blue				B						

※Brightness on specification sheet include tolerance of within ± 10%.

Part No. Construction



※ 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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ROHM SEMICONDUCTOR

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