

SML-52 Series

1315(0605)
1.3×1.5mm(t=0.6mm)

Features

- 2-color type LED
- Abundant 2 color variations

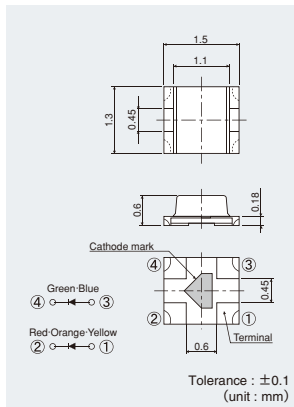


Specifications

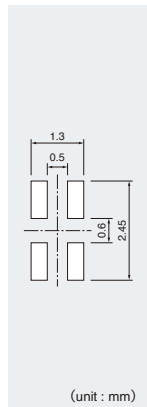
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)						Electrical and Optical Characteristics (Ta=25°C)										
			Power Dissipation Pd(mW)	Forward Current If(mA)	Peak Forward Current Ifp(mA)	Reverse Voltage Vr(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)	Forward Voltage V _F (V)	Reverse Current I _R (μA)	Dominant Wavelength λ _D (nm)			Luminous Intensity I _v (mcd)					
SML522BUW	InGaP	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				2.1				569	572	575		14	40	
		Red	50						1.9				615	620	625		22	63	
SML-522MU8W	AlGaInP on GaAs	Green	52	20	60 ₊₂	4	-30 to +85	-40 to +100	2.2		100		569	572	575		16	40	
		Red	52						2.2				615	620	625		25	63	
SML-521MUW	AlGaInP on GaAs Gap	Yellowish Green	70	25	60 ₊₁				2.2				569	572	575	20	5.6	16	
		Red	50						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	20	10	4	569	572	575		10	18	20
		Orange	52						2.1				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				569	572	575		5.6	16	
		Orange	50						1.9				602	605	608		22	63	
SML-521MYW		Yellowish Green	70	25	60 ₊₁	4	-30 to +85	-40 to +85	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:R:Reference

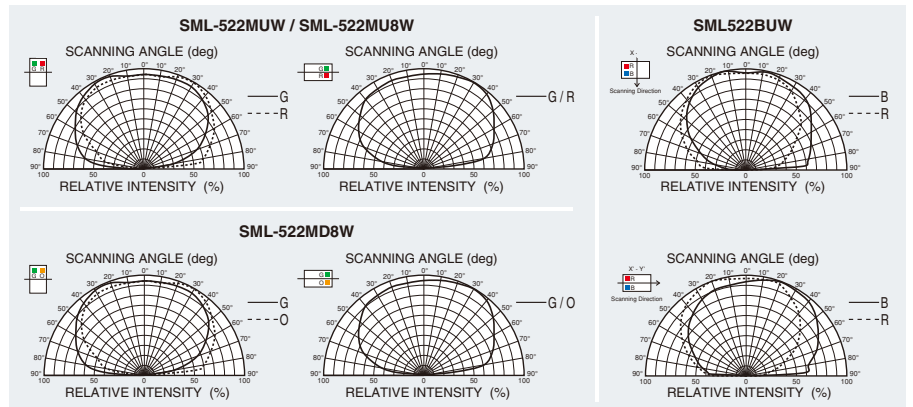
Dimensions



Recommended Solder Pattern

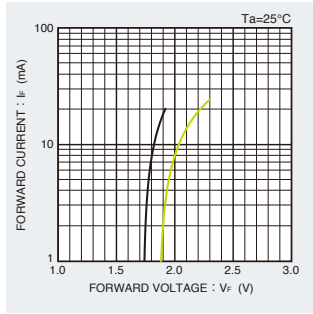


Viewing Angle

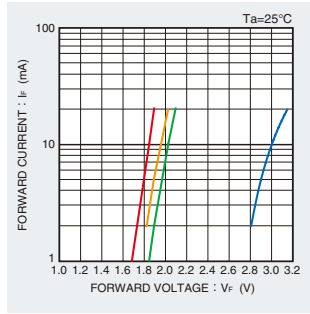


Electrical Characteristics Curves

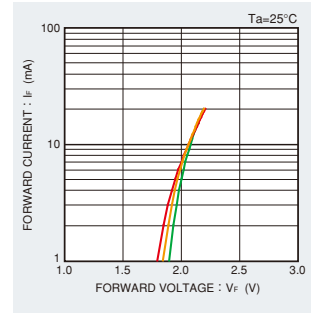
Forward Current-Forward Voltage



- SML-521MU(W)
- SML-521MD(W)
- SML-521MY(W)
- SML-521MU(W)
- SML-521MD(W)
- SML-521MY(W)

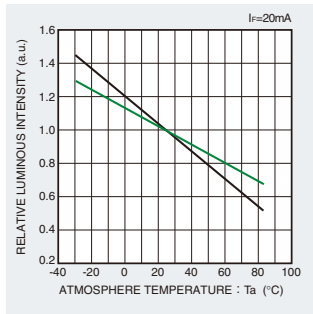


- SML-522BU(W)
- SML-522BU(W)
- SML-522BU(W)
- SML-522MU(W)

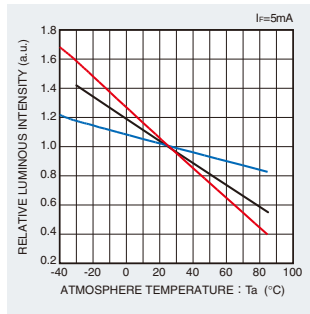


- SML-522MU8(W)
- SML-522MU8(W)
- SML-522MD8(W)
- SML-522MD8(W)

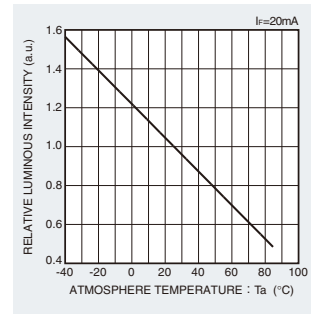
Luminous Intensity-Atmosphere Temperature



- SML-521MU(W)
- SML-521MD(W)
- SML-521MY(W)
- SML-521MU(W)
- SML-521MD(W)
- SML-521MY(W)

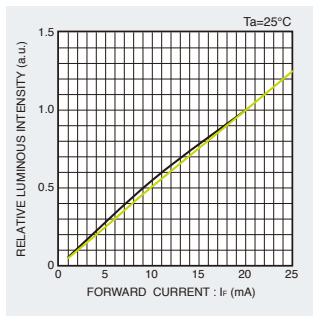


- SML-522BU(W)
- SML-522BU(W)
- SML-522MU(W)

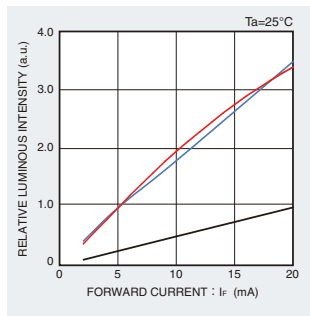


- SML-522MU8(W)
- SML-522MD8(W)

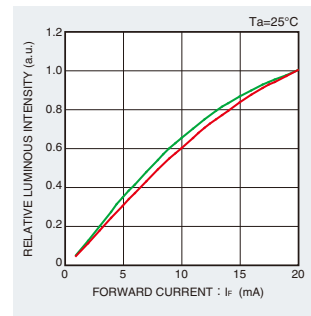
Luminous Intensity-Forward Current



- SML-521MU(W)
- SML-521MD(W)
- SML-521MY(W)
- SML-521MU(W)
- SML-521MD(W)
- SML-521MY(W)

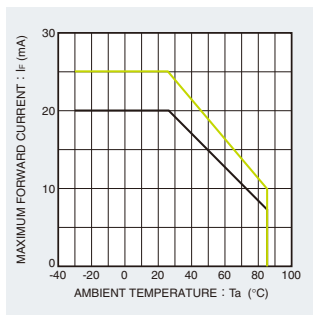


- SML-522BU(W)
- SML-522BU(W)
- SML-522MU(W)

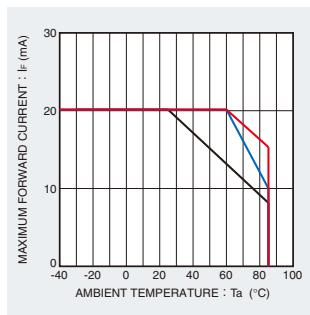


- SML-522MU8(W)
- SML-522MD8(W)
- SML-522MU8(W)
- SML-522MD8(W)

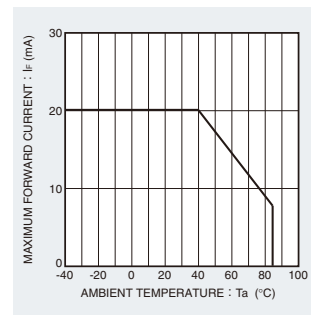
Derating



- SML-521MU(W)
- SML-521MD(W)
- SML-521MY(W)
- SML-521MU(W)
- SML-521MD(W)
- SML-521MY(W)



- SML-522BU(W)
- SML-522BU(W)
- SML-522MU(W)



- SML-522MU8(W)
- SML-522MD8(W)

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	L	M	N	P	Q	R	S	T	U	
				4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	90 to 140	140 to 220	220 to 360	
Mini-mold Chip LEDs	1315	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	L	M	N	P	Q	R	S	T	U
				4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	90 to 140	140 to 220	220 to 360
Mini-mold Chip LEDs	1315	SML522BUW	Red										
			Blue					B					

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

Part No. Construction

*“-” will be taken out for emitting color B series.

S

M

L

-

5

2

2

M

U

8

W

T

8

6

A

Q

R

Series name
Package type
Chip Type
Emitting Color
Resin Color
Taping Specifications
Rank sign (Brightness Rank)*

1	Standard Type	U	Red:620nm	W	Milky White	T86	Cathode at sprocket hole side
2	High Brightness Type	D	Orange:605nm	Y	Yellow:587(590)nm	T87	Reverse of T86
		M	Yellowish-Green:572nm				
		B	Blue:470nm				

- * 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 distributor if necessary.

Notes

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