

# SML-02 Series

3025(1210)  
3.0×2.5mm(t=1.3mm)

### Features

•2-color type with reflector (standard)

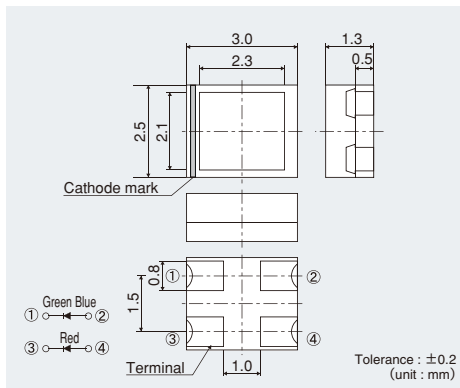


### Specifications

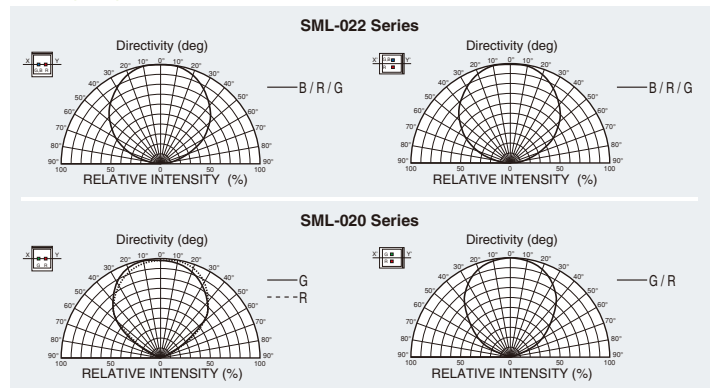
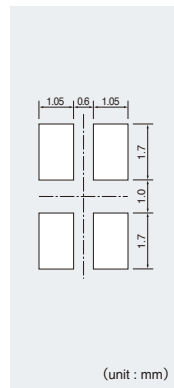
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)						Electrical and Optical Characteristics (Ta=25°C)									
			Power Dissipation Pd(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)	Forward Voltage VF Typ. (V)	IF(mA)	Reverse Current IR Max. (μA)	VR(V)	Dominant Wavelength λD			Luminous Intensity Iv		
												Min.*3 (nm)	Typ. (nm)	Max.*3 (nm)	IF(mA)	Min. (mcd)	Typ. (mcd)	IF(mA)
■ ■ SML022BUT	InGaN	Blue	120	30	80*2	5		-40 to +100	3.2		5	464	470	476		56	140	
	AlGaInP on GaAs	Red	75						2			619	624	629		90	220	
■ ■ SML-020MVT	GaAsP on GaAs	Green	60	25	60*1		-30 to +85	-40 to +85	2.2	20	100	20	569	572	575	9	20	20
		Red							2				625	630	635			
■ ■ SML-022ML8T	AlGaInP on GaAs	Green	52	20	60*2			-40 to +100	2.1			4	569	572	575	16	40	
		Red												630	635			

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

### Dimensions

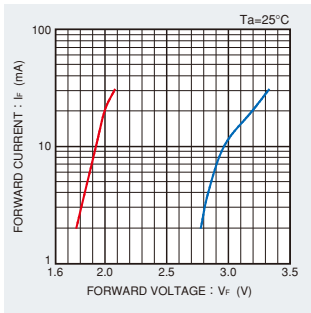


### Recommended Solder Pattern Viewing Angle

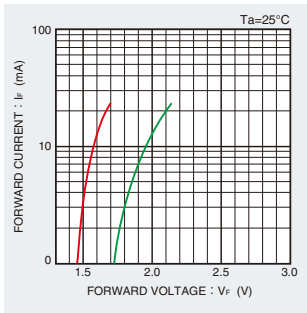


## Electrical Characteristics Curves

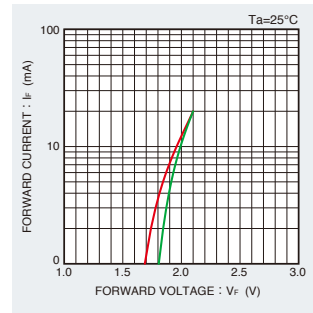
### Forward Current-Forward Voltage



■ SML022BUT(U)  
■ SML022BUT(B)

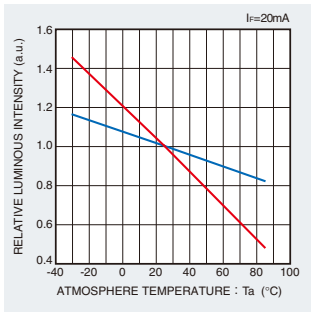


■ SML-020MVT(V)  
■ SML-020MVT(M)

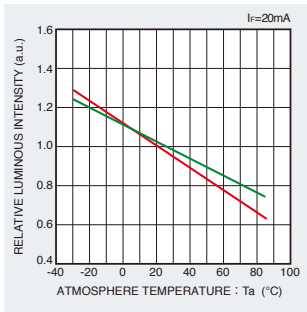


■ SML-022ML8T(L)  
■ SML-022ML8T(M)

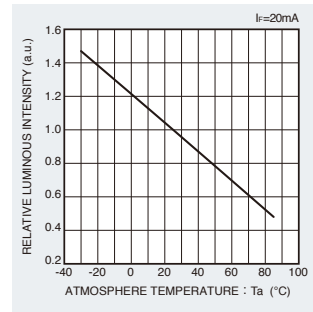
### Luminous Intensity-Atmosphere Temperature



■ SML022BUT(U)  
■ SML022BUT(B)

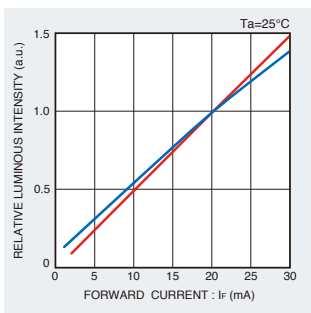


■ SML-020MVT(V)  
■ SML-020MVT(M)

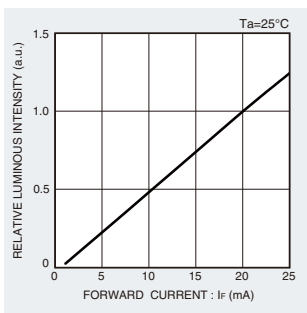


■ SML-022ML8T

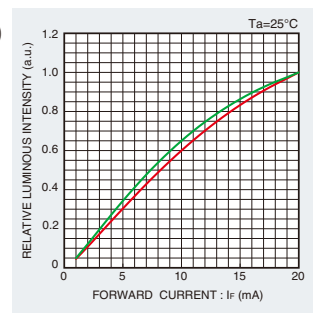
### Luminous Intensity-Forward Current



■ SML022BUT(U)  
■ SML022BUT(B)

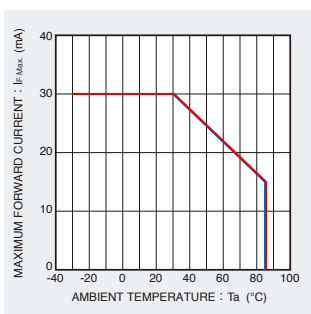


■ SML-020MVT(V)  
■ SML-020MVT(M)

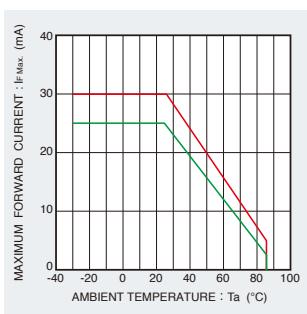


■ SML-022ML8T(L)  
■ SML-022ML8T(M)

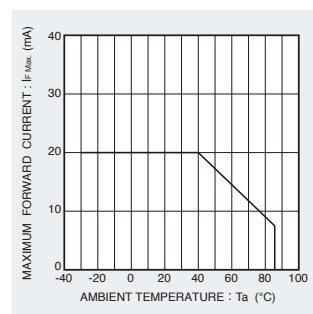
### Derating



■ SML022BUT(U)  
■ SML022BUT(B)



■ SML-020MVT(V)  
■ SML-020MVT(M)



■ SML-022ML8T

## Rank Reference of Brightness

### Dual Color

(Ta=25°C, If=20mA)

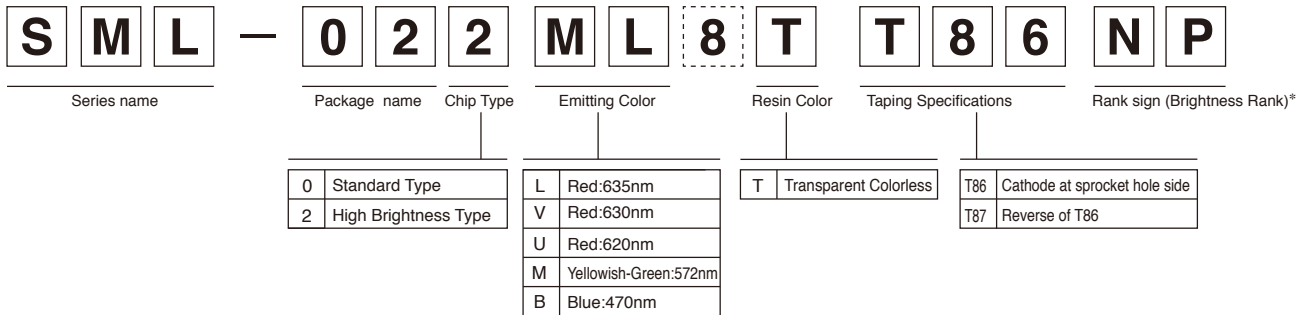
Part No.	Emitting Color	Luminous Intensity (mcd)												
		K	L	M	N	P	Q	R	S	T	U			
Chip LEDs with Reflector	SML022BUT	Red	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	90 to 140	140 to 220	220 to 360	U	
		Blue	B											
	SML-020MVT*	Red	V			M								
		Green	M											
	SML-022ML8T	Red	L											
		Green	M											

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

## Part No. Construction

\* "-" will be taken out for emitting color B series.

Special Code



- \* 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.

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