

SML-81 Series

3412(1305)
3.4 × 1.25mm (t=1.1mm)

Features

- Reverse-mount type

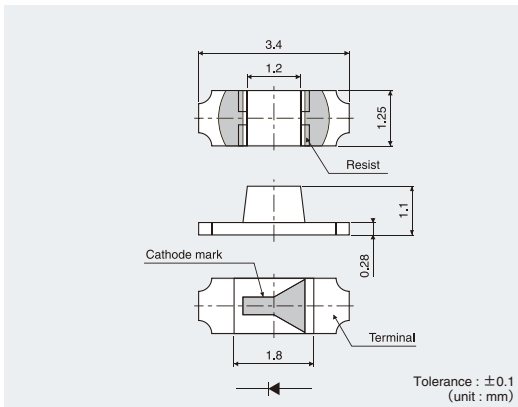
Color Type U D W M B

Specifications

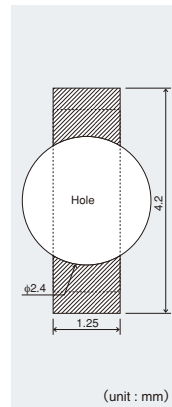
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)											
			Power Dissipation Pd (mW)	Forward Current IF (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage VR (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage VF (V)		Reverse Current IR (μA)		Dominant Wavelength λD (nm)			Luminous Intensity Iv (mcd)			
■ SML-811UT(A)	AlGaInP on GaAs	Red	62	25	100 ⁺²	5	-40 to +85	-40 to +100	1.95	10	5	100	615	620	625	10	11.2	22.4	10
■ SML-811DT(A)		Orange											602	605	608				
■ SML-811WT(A)		Yellow											587	590	593				
■ SML-812MT	GaP	Yellowish Green	65	20	60 ⁺¹	4	-30 to +85	-40 to +85	2.1	20	4	4	569	572	575	20	5.6	16	20
■ SML-810MT													567	570	573				
■ SML812BCT	InGaN	Blue	80	20	100 ⁺²	5			3.3		5	5	464	470	476		22	56	

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

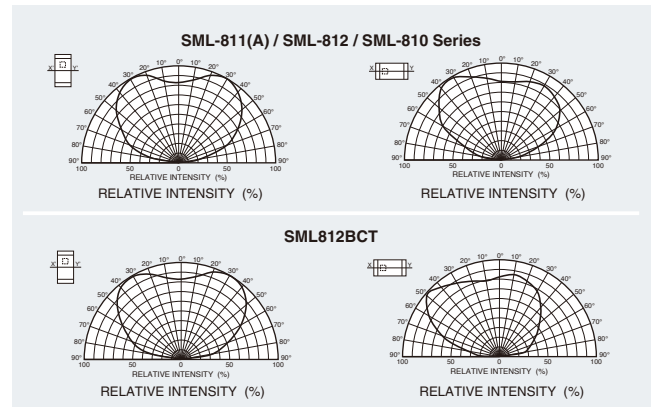
Dimensions



Recommended Solder Pattern

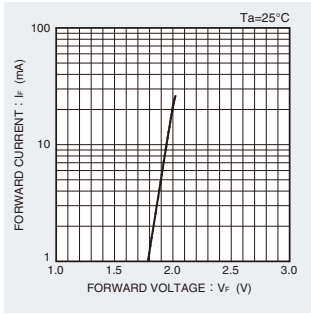


Viewing Angle

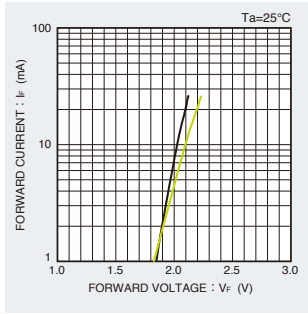


Electrical Characteristics Curves

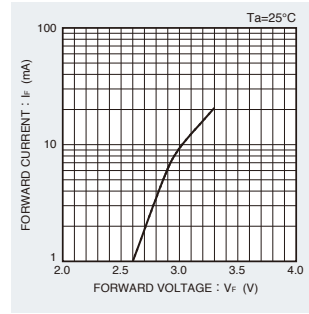
Forward Current-Forward Voltage



■ SML-811UT(A)
■ SML-811DT(A)
■ SML-811WT(A)

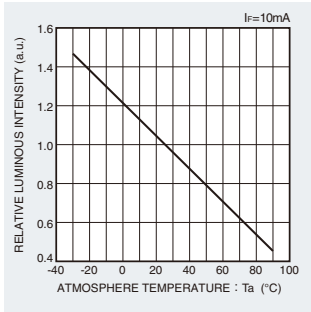


■ SML-812MT
■ SML-810MT

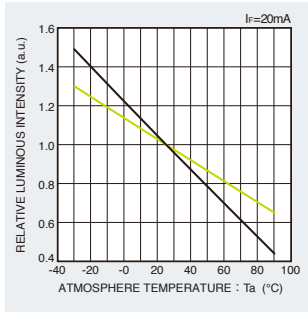


■ SML812BCT

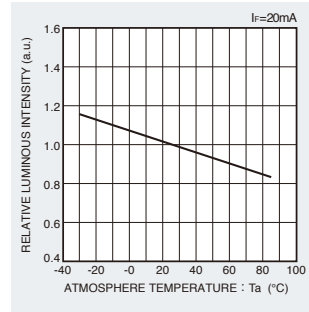
Luminous Intensity-Atmosphere Temperature



■ SML-811UT(A)
■ SML-811DT(A)
■ SML-811WT(A)

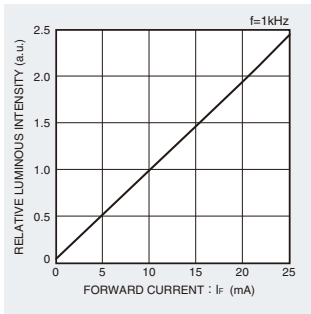


■ SML-812MT
■ SML-810MT

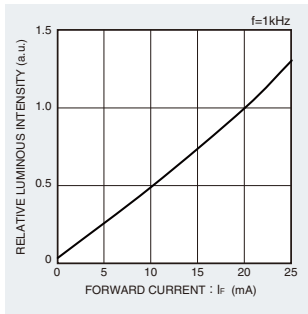


■ SML812BCT

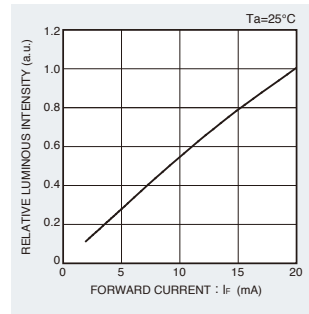
Luminous Intensity-Forward Current



■ SML-811UT(A)
■ SML-811DT(A)
■ SML-811WT(A)

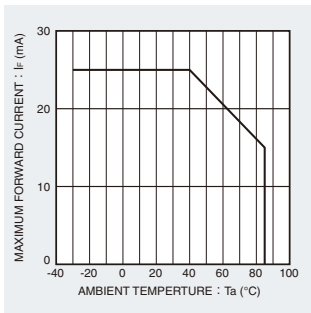


■ SML-812MT
■ SML-810MT

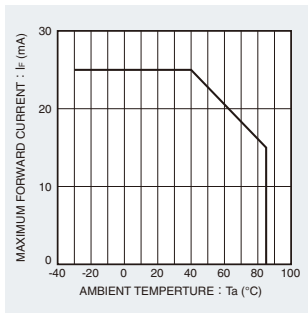


■ SML812BCT

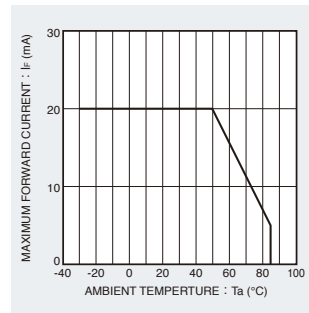
Derating



■ SML-811UT(A)
■ SML-811DT(A)
■ SML-811WT(A)



■ SML-812MT
■ SML-810MT



■ SML812BCT

SML-81 Series

Rank Reference of Brightness

Red (U) Orange (D) Yellow (W)

(Ta=25°C, If=20mA)

Package size(mm)	Height(mm)	Luminous intensity (mcd)	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU	AV	AW	AX
			9.0 to 11.2	11.2 to 14	14 to 18	18 to 22.4	22.4 to 28	28 to 35.5	35.5 to 45	45 to 56	56 to 71	71 to 90	90 to 112	112 to 140	140 to 180	180 to 224	224 to 280	280 to 355
Reverse Mount Chip LEDs	34125	1.1	SML-811UT(A)															
			SML-811DT(A)															
			SML-811WT(A)															

* Please note that the brightness of some products may fall between ranks (half rank).

Green (M) Blue (B)

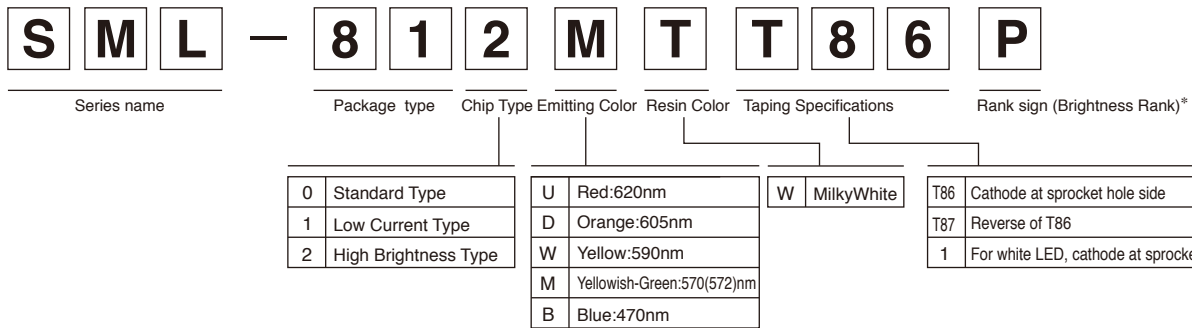
(Ta=25°C, If=20mA)

Package size(mm)	Height(mm)	Luminous intensity (mcd)	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
			1.0 to 1.6	1.6 to 2.5	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630	630 to 1000	1000 to 1600
Reverse Mount Chip LEDs	34125	1.1	SML-810MT*															
			SML-812MT*															
			SML812BCT															

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

Part No. Construction

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



* 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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