

SML-81 series

3412(1305)
3.4 × 1.25mm (t=1.1mm)

Features

- Reverse-mount available type

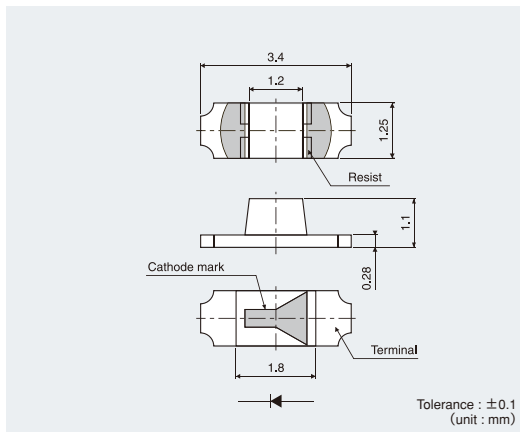


Specifications

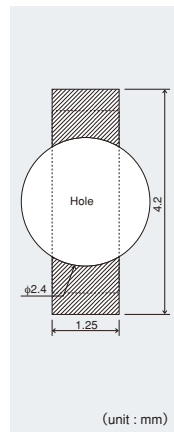
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)											
			Power Dissipation Pd (mW)	Forward Current If (mA)	Peak Forward Current Ifp (mA)	Reverse Voltage Vr (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage V _F		Reverse Current I _R		Dominant Wavelength λ _D			Luminous Intensity I _v			
							Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	Min.*3 (nm)	Typ.*3 (nm)	Max.*3 (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)		
■ SML-811VT(A)	AlGaInP	Red	62	25	100*2	5	-40 to +85	-40 to +100	1.95	10	5	625	630	636	10	11	22	10	
■ SML-811UT(A)												615	620	625		11.2	22.4		
■ SML-811DT(A)		Orange										602	605	608		14	28		
■ SML-811WT(A)												Yellow	587	590		593	9		18
■ SML-811YT(A)													584	587		590			
■ SML-812MT	GaP	Yellowish Green	65	60*1	4	-30 to +85	-40 to +85	2.1	20	4	569	572	575	14	40				
■ SML-810MT											567	570	573	20	5.6	16	20		
■ SML812BCT	InGaN	Blue	80	20	100*2	5	-40 to +85	-40 to +100	3.3	5	5	464	470	476	22	56			
□ SML813WBC8W		White										66	(x, y) (0.30, 0.30)	5	45	5			

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

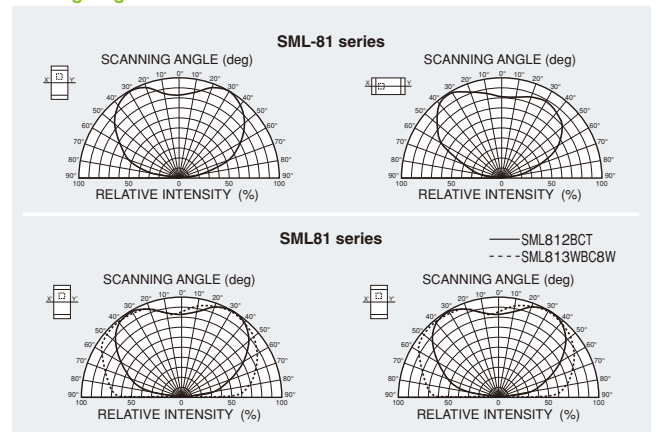
Dimensions



Recommended Solder Pattern

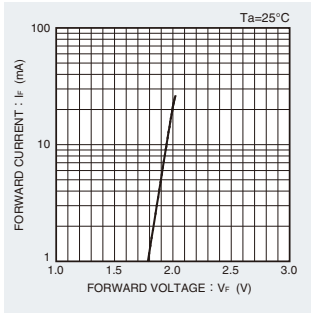


Viewing Angle

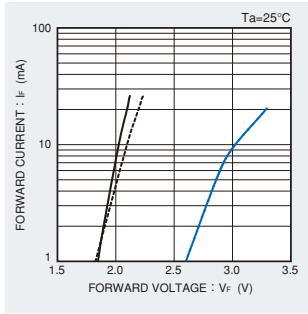


Electrical Characteristics Curves

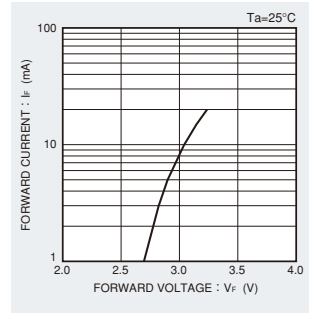
Forward Current-Forward Voltage



- SML-811VT(A)
- SML-811UT(A)
- SML-811DT(A)
- SML-811WT(A)
- SML-811YT(A)

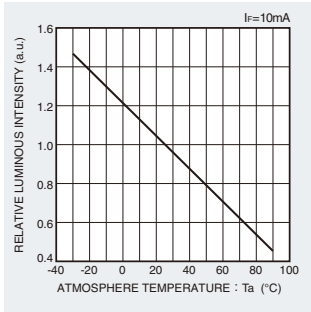


- SML-812MT
- SML-810MT
- SML-812BCT

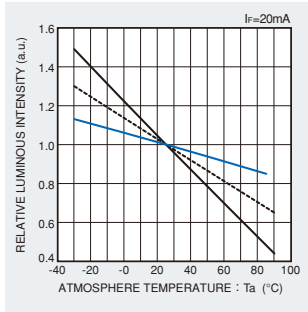


- SML813WBC8W

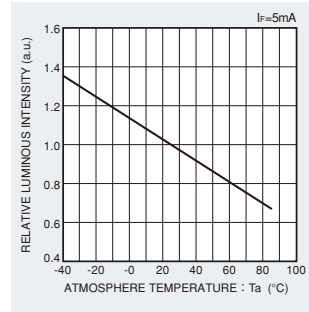
Luminous Intensity-Atmosphere Temperature



- SML-811VT(A)
- SML-811UT(A)
- SML-811DT(A)
- SML-811WT(A)
- SML-811YT(A)

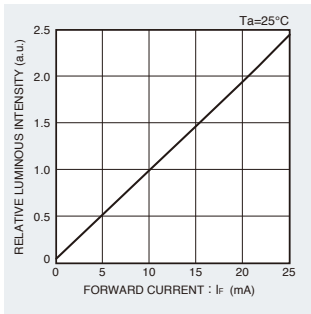


- SML-812MT
- SML-810MT
- SML-812BCT

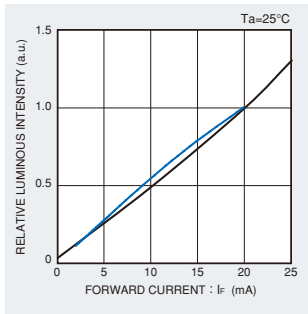


- SML813WBC8W

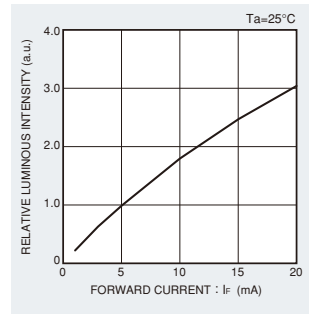
Luminous Intensity-Forward Current



- SML-811VT(A)
- SML-811UT(A)
- SML-811DT(A)
- SML-811WT(A)
- SML-811YT(A)

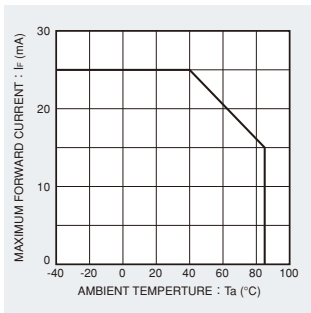


- SML-812MT
- SML-810MT
- SML-812BCT

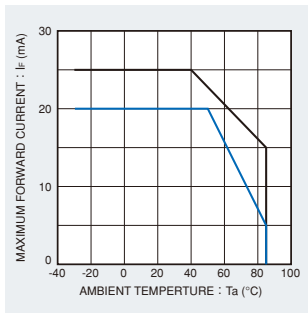


- SML813WBC8W

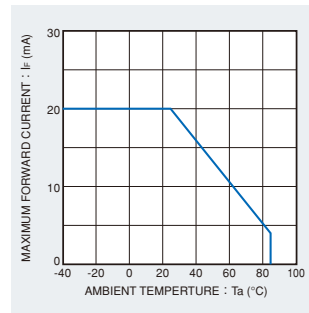
Derating



- SML-811VT(A)
- SML-811UT(A)
- SML-811DT(A)
- SML-811WT(A)
- SML-811YT(A)



- SML-812MT
- SML-810MT
- SML-812BCT



- SML813WBC8W

SML-81 series

Rank Reference of Brightness

Red (V, U)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	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	34125	1.1	10	SML-811V(A)* SML-811UT(A)*															

Orange (D)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	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	34125	1.1	10	SML-811DT(A)*															

Yellow (W, Y)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	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	34125	1.1	10	SML-811YT(A)* SML-811WT(A)*															

Green (M)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	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	34125	1.1	10	SML-810MT* SML-812MT*															

Blue (B)

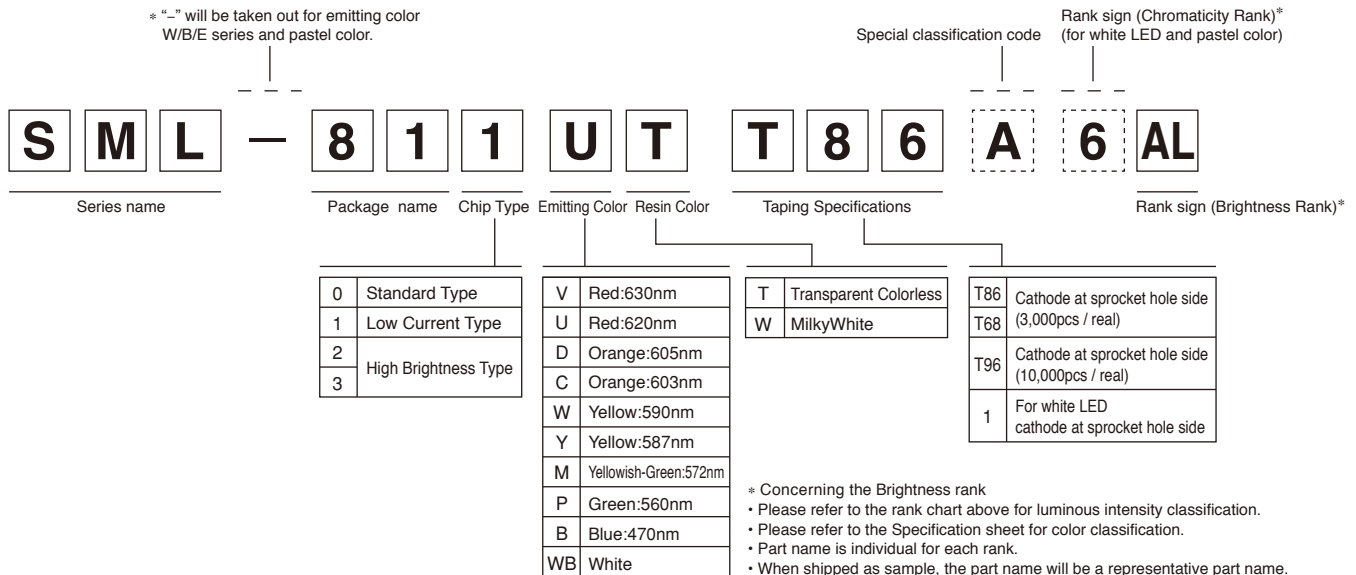
Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
				0.9 to 1.4	1.4 to 2.2	2.2 to 3.6	3.6 to 5.6	5.6 to 9	9 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900	900 to 1400
Reverse Mount	34125	1.1	20	SML813BC8T SML812BCT															

White (WB)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I _F (mA)	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
				0.9 to 1.4	1.4 to 2.2	2.2 to 3.6	3.6 to 5.6	5.6 to 9	9 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900	900 to 1400
Reverse Mount	34125	1.1	20	SML813WBC8W															

* Please note that the brightness of some products may fall between ranks (half rank).
** Brightness on specification sheet include tolerance of within ± 10%.

Part No. Construction



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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