



## SML-81 series

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

3412 (1305)  
 3.4 × 1.25mm (t=1.1mm)

### Features

- Reverse-mount available type

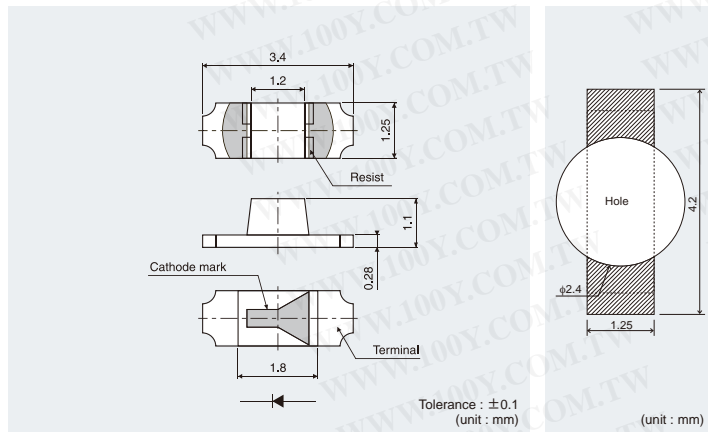
Color Type	V	U	D
Y	W	M	B

### Specifications

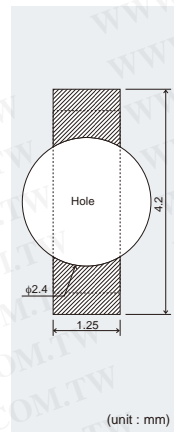
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)																	
			Power Dissipation Pd (mW)	Forward Current IF (mA)	Peak Forward Current IFP (mA)	Reverse Voltage VR (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage VF Typ. (V)	VF (mA)	Reverse Current IR Max. (μA)	VR (V)	Dominant Wavelength λD (nm)			Luminous Intensity Iv (mcd)									
<b>SML-811VT(A)</b>	AlGaInP	Red	62	25	100*2	5	-40 to +85	-40 to +100	1.95	10	5	625	630	636	11	22	10								
<b>SML-811UT(A)</b>												615	620	625											
<b>SML-811DT(A)</b>		Orange										602	605	608				10	11.2	22.4					
<b>SML-811WT(A)</b>												587	590	593											
<b>SML-811YT(A)</b>	Yellow	584	587	590	9	18																			
<b>SML-812MT</b>	GaP	Yellowish Green	65	60*1	4	-30 to +85	-40 to +85	2.1	20	4	569	572	575	14	40	20									
<b>SML-810MT</b>								2.2			567	570	573				5.6	16							
<b>SML813BC8T</b>	InGaN	Blue						87			20	100*2	5						-40 to +85	-40 to +100	3.3	5	464	470	476
<b>SML812BCT</b>								80									-30 to +85	-40 to +85							

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

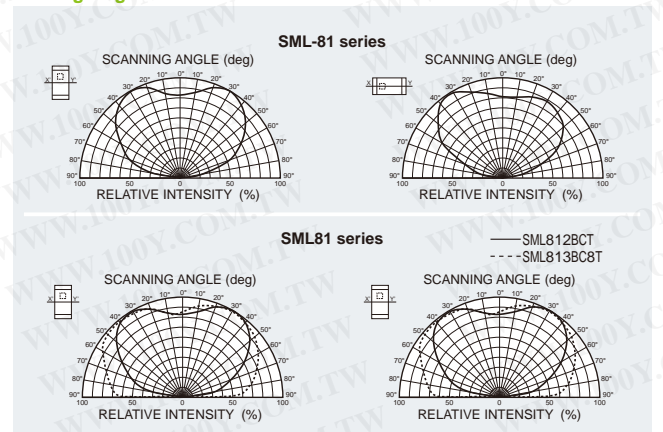
### Dimensions



### Recommended Solder Pattern

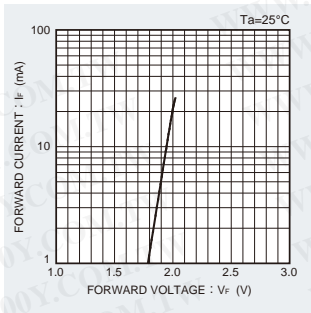


### Viewing Angle

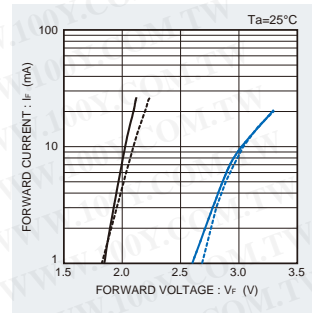


Electrical Characteristics Curves

Forward Current-Forward Voltage

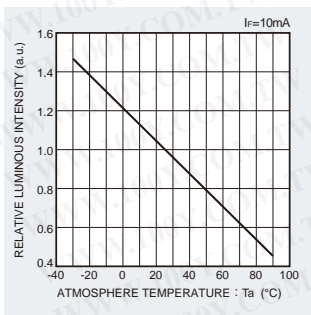


- SML-811VT(A)
- SML-811UT(A)
- SML-811DT(A)
- SML-811WT(A)
- SML-811YT(A)

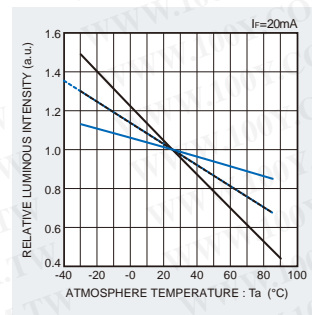


- SML-812MT
- SML-810MT
- SML812BCT
- SML813BC8T

Luminous Intensity-Atmosphere Temperature

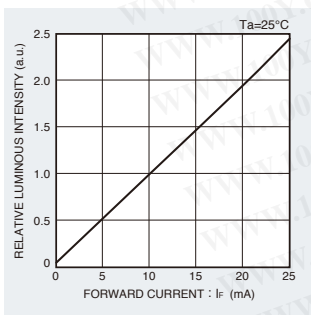


- SML-811VT(A)
- SML-811UT(A)
- SML-811DT(A)
- SML-811WT(A)
- SML-811YT(A)

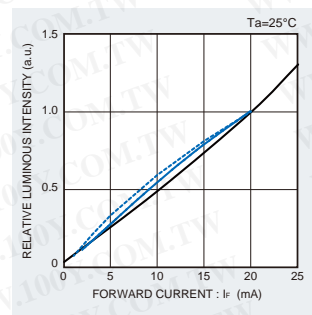


- SML-812MT
- SML-810MT
- SML812BCT
- SML813BC8T

Luminous Intensity-Forward Current

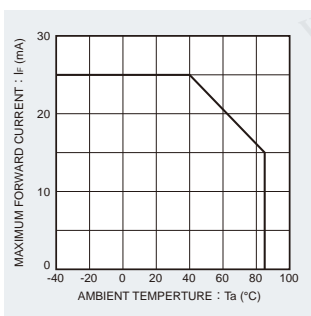


- SML-811VT(A)
- SML-811UT(A)
- SML-811DT(A)
- SML-811WT(A)
- SML-811YT(A)

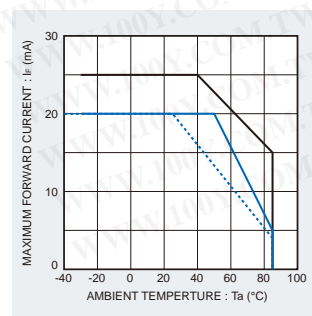


- SML-812MT
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Derating



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



- SML-812MT
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## Rank Reference of Brightness

### Red (V, U)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I <sub>f</sub> (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 <sub>f</sub> (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 <sub>f</sub> (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-811WT(A)* SML-811YT(A)*															

### Green (M)

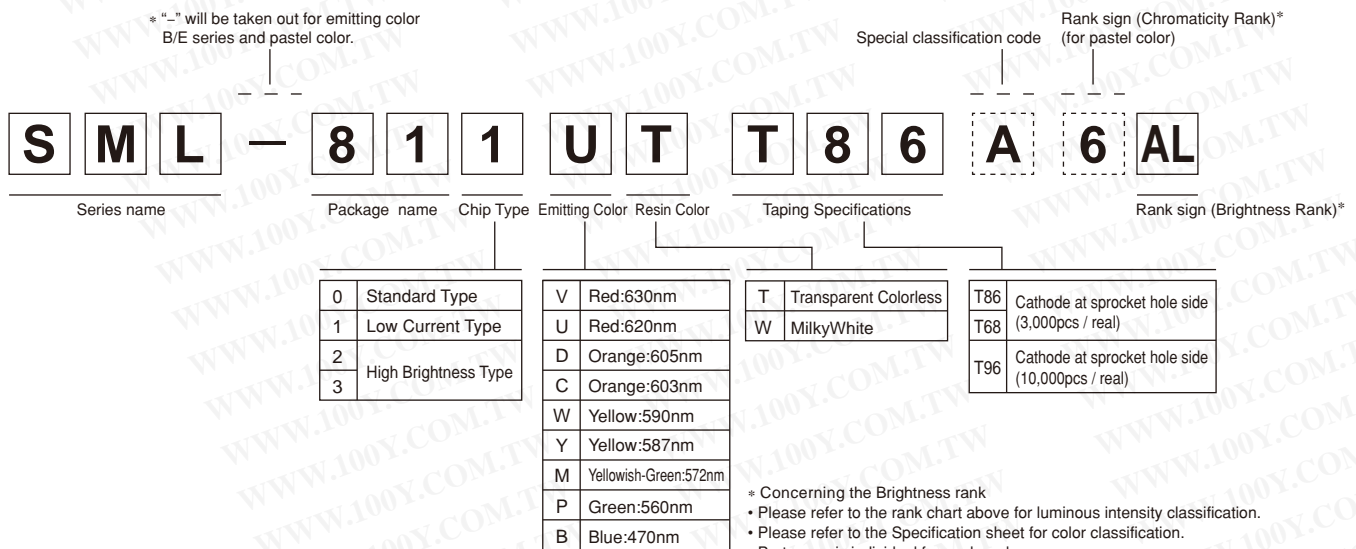
Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I <sub>f</sub> (mA)	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
				1.0 to 1.6	1.6 to 2.5	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	400 to 630	630 to 1000	1000 to 1600
Reverse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

### Blue (B)

Package structure	Package size	Height (mm)	Luminous Intensity (mcd) I <sub>f</sub> (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															

\* 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



\* Concerning the Brightness rank  
 • Please refer to the rank chart above for luminous intensity classification.  
 • Please refer to the Specification sheet for color 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.

\* Please refer to the Specification sheet about Taping specification.

## 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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