

# SML-81 Series

3412(1305) 3.4×1.25mm(t=1.1mm)

#### **Features**

·Reverse-mount type











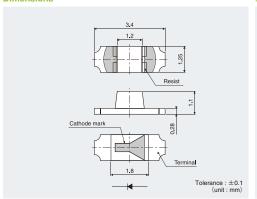


# **Specifications**

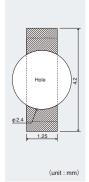
		Emitting Color		Electrical and Optical Characteristics (Ta=25°C)															
Part No.	Chip Structure		Power Dissipation PD(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(°C)							ant Wa Typ. (nm)		gth λD IF(mA)			IF(mA)
■SML-811UT(A)		Red											615	620	625		11.2		
SML-811DT(A)	AlGaInP	Orange	62		100 *2	5	-40 to +85	-40 to +100	1.95	10		5	602	605	608	10	11.2	22.4	10
SML-811WT(A)	on GaAs	Yellow		25							100		587	590	593		14	28	
SML-812MT	Yellowish	Yellowish	65		60 *1	4			2.1		100		569	572	575		14	40	
SML-810MT	GaP	Green	05		OU +1		-30 to +85	-40 to +85	2.2	20		4	567	570	573	20	5.6	16	20
SML812BCT	InGaN on SiC	Blue	80	20	100 *2	5			3.3			5	464	470	476		22	56	

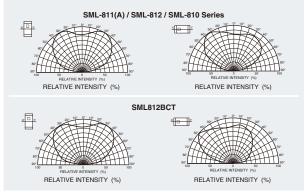
\*1:Duty1/5, 200Hz / \*2:Duty1/10,1kHz / \*3:Reference

#### **Dimensions**



# Recommended Solder Pattern Viewing Angle

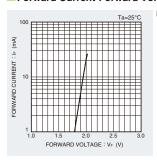


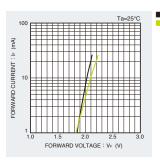


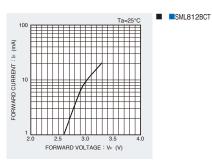
#### **Electrical Characteristics Curves**

# Forward Current-Forward Voltage

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

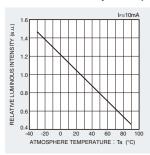


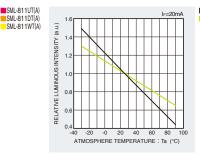


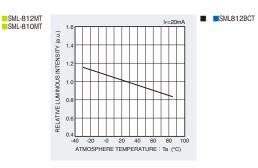


SML-812MT

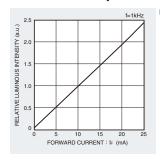
# Luminous Intensity-Atmosphere Temperature

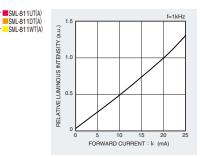


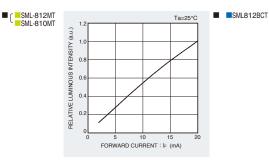




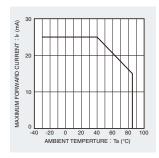
# ■ Luminous Intensity-Forward Current

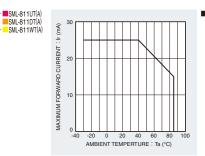


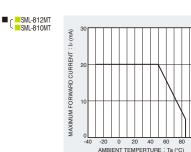




# Derating







#### **Rank Reference of Brightness**

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

(Ta=25°C, IF=20mA)

	Package size(mm)	Lumino Intens		AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU	AV	AW	AX
	size(mm)	Height(mm) (mc	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						SML-81	I1UT(A)											
Mount Chip	34125	1.1				SML-81	I1DT(A)											
LEDs							SML-81	1WT(A)										

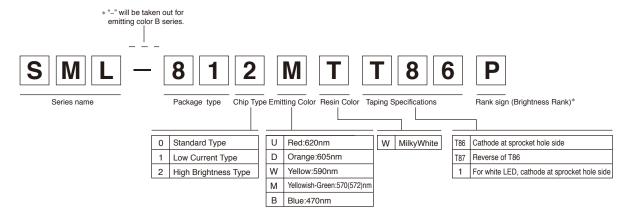
\*Please note that the brightness of some products may fall between ranks (half rank).

# Green (M) Blue (B)

																(	Ta=25°C,	IF=20mA)
	Package	Luminous Intensity (mcd)	G	Н	J	K	L	М	N	Р	Q	R	S	Т	U	V	W	Х
	size(mm)	Height(mm)	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								SML-8	10MT**									
Mount Chip LEDs	34125	1.1						SML-8										
											SML812B	СТ						

%Brightness on specification sheet include tolerance of within  $\pm 10\%$ .

#### **Part No. Construction**



- \* 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 distributer if necessary.

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