



SML-R1 Series

PICOLED™-side

16115(0604)
1.6 × 1.15mm (t=0.2mm)

Features

- Ultra compact, thin side-view type LED
- Ultra low height package t=0.2mm

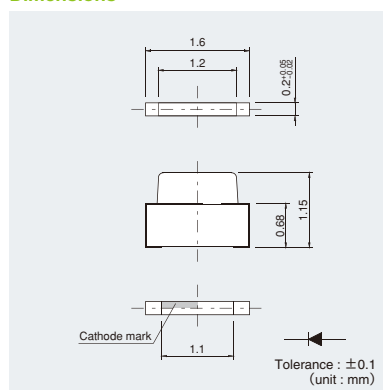
Color Type	V	U	D	Y
	M	P	B	WB

Specifications

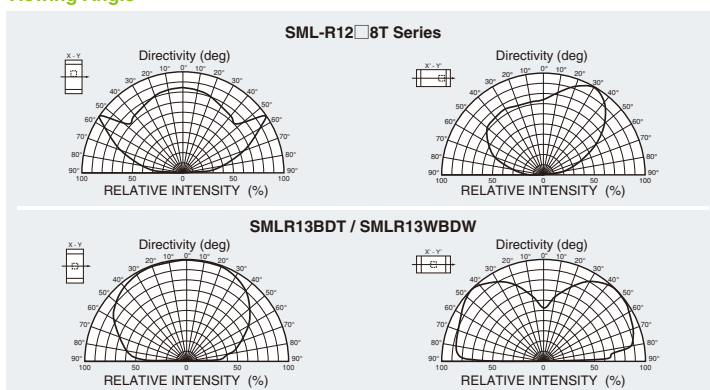
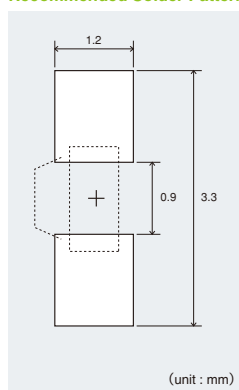
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25℃)						Electrical and Optical Characteristics (Ta=25℃)																				
			Power Dissipation Pd(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(℃)	Storage Temperature Tstg(℃)	Forward Voltage VF		Reverse Current IR	Dominant Wavelength λD			Luminous Intensity Iv														
									Typ.(V)	IF(mA)	Max. (μA)	VR(V)	Min.*2 (nm)	Typ. (nm)	Max.*2 (nm)	IF(mA)	Min. (mcd)	Typ. (mcd)	IF(mA)										
■ SML-R12V8T	AlGaInP on GaAs	Red	54	20	100*1	5	-40 to +85	-40 to +100	2.2	20	10	5	625	630	635	20	16	40	20										
■ SML-R12U8T																													
■ SML-R12D8T		Orange																											
■ SML-R12Y8T		Yellow																											
■ SML-R12M8T		Yellowish Green																											
■ SML-R12P8T	InGaN	Green																											
■ SMLR13BDT		Blue	66																										
□ SMLR13WBDW		White	78																										

* 1:Duty 1/10, 1kHz / * 2:Reference

Dimensions



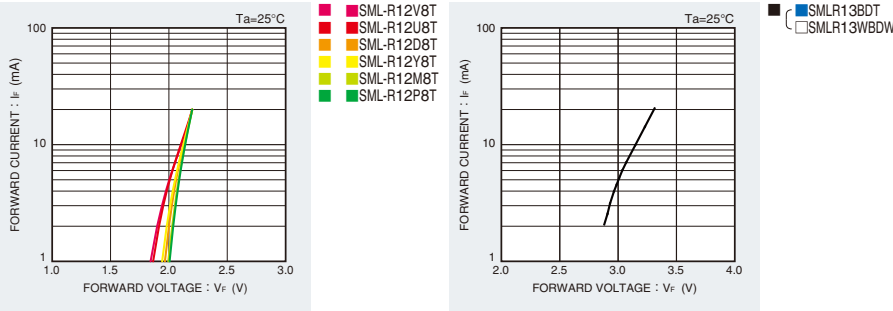
Recommended Solder Pattern Viewing Angle



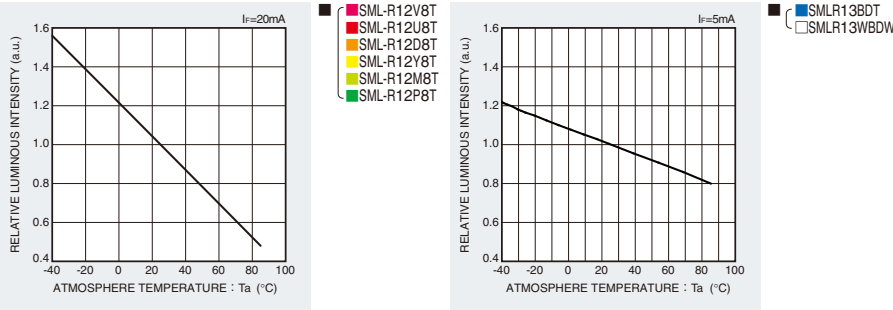
* PICOLED™ is ROHM's pending trademark.

Electrical Characteristics Curves

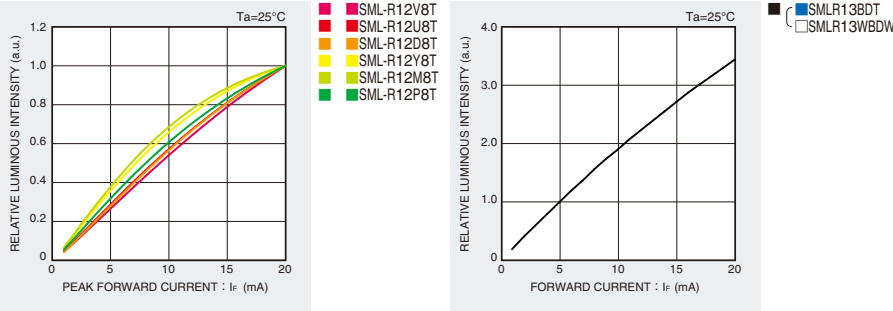
Forward Current-Forward Voltage



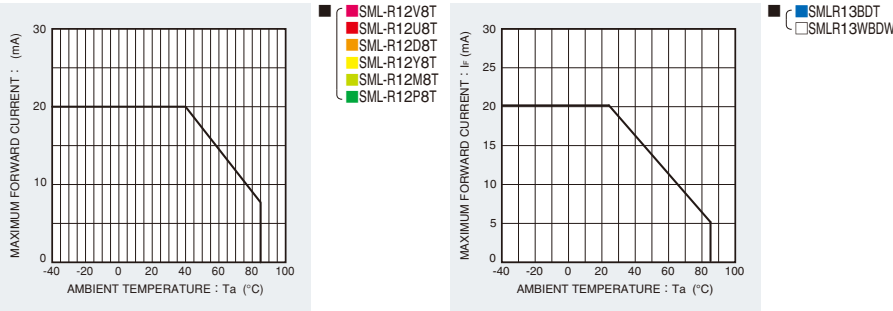
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



SML-R1 Series

Rank Reference of Brightness

■ Red (V, U)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity (mcd) Height(mm)	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
Side View Chip LEDs	16115	0.2	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
										SML-R12V8T								
										SML-R12U8T								

■ Orange (D)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity (mcd) Height(mm)	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
Side View Chip LEDs	16115	0.2	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
												SML-R12D8T						

■ Yellow (Y)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity (mcd) Height(mm)	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
Side View Chip LEDs	16115	0.2	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
										SML-R12Y8T								

■ Green (M, P)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity (mcd) Height(mm)	F	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W	X
Side View Chip LEDs	16115	0.2	0.63 to 1.0	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
							SML-R12P8T			SML-R12M8T									

■ Blue (B)

(Ta=25°C, If=5mA)

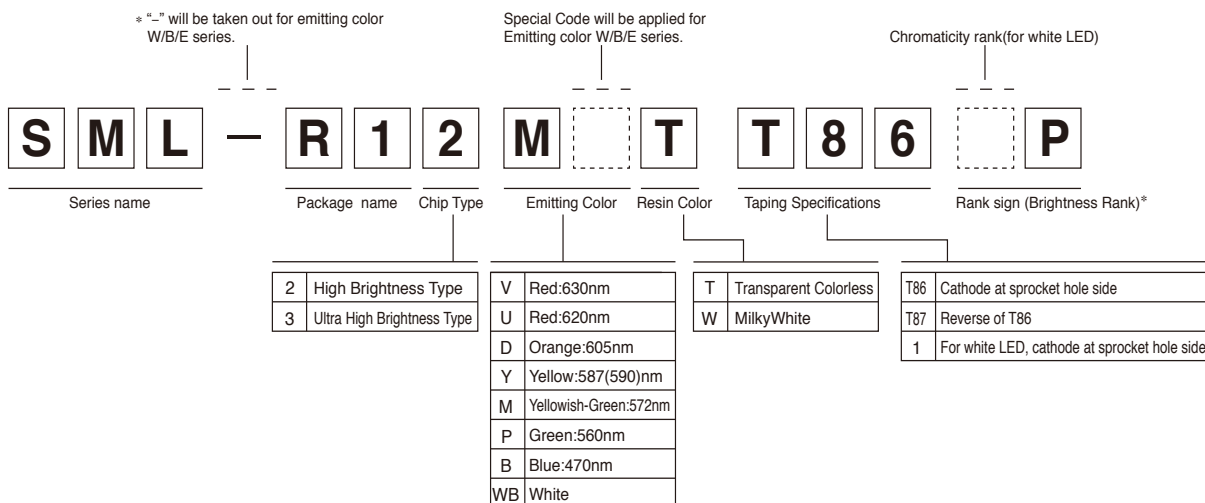
	Package size(mm)	Luminous Intensity (mcd) Height(mm)	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W
Side View Chip LEDs	16115	0.2	0.9 to 1.4	1.4 to 2.2	2.2 to 3.6	3.6 to 5.6	5.6 to 9.0	9 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900
									SMLR13BDT								

■ White (WB)

(Ta=25°C, If=5mA)

	Package size(mm)	Luminous Intensity (mcd) Height(mm)	P	Q	R	S	T	U	V	W
Side View Chip LEDs	1810	0.2	25 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900
					SMLR13WBDW					

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 distributor if necessary.

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