



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

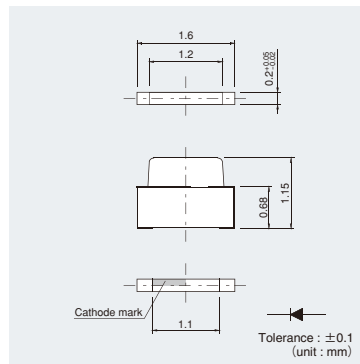


Specifications

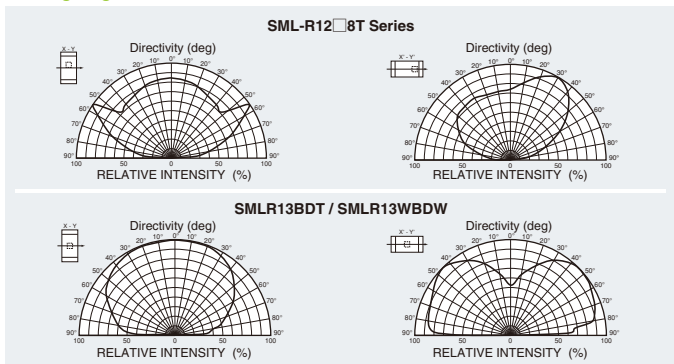
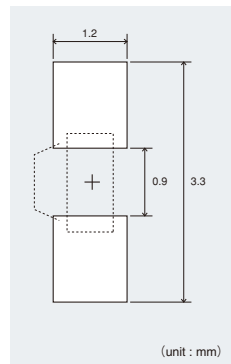
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)										
			Power Dissipation Pd (mW)	Forward Current If (mA)	Peak Forward Current Ifp (mA)	Reverse Voltage Vr (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage Vf Typ. (V)	Reverse Current Ir Max. (μA)	Vr (V)	Dominant Wavelength λ D (nm)			Luminous Intensity Iv (mcd)			
■ 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
■ SML-R12U8T													615	620	625		25	63
■ SML-R12D8T		Orange											602	605	608		40	100
■ SML-R12Y8T													587	590	593		25	63
■ SML-R12M8T		Yellowish Green											569	572	575		10	25
■ SML-R12P8T		Green											557	560	563		2.5	6.3
■ SMLR13BDT	InGaN on SiC	Blue	66	5	465	470	475	5	14	36								
□ SMLR13WBDW		White	78		(x, y) (0.30, 0.30)	56	110											

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

Dimensions



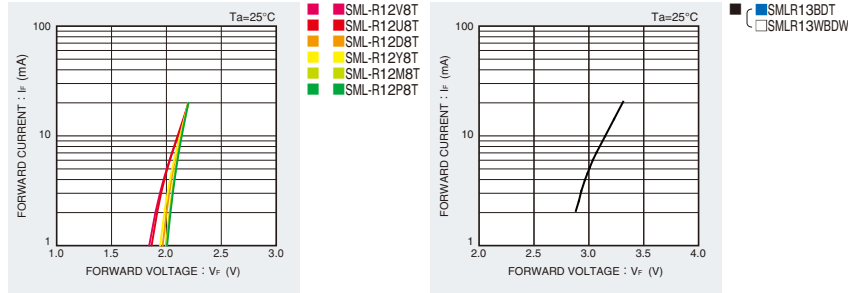
Recommended Solder Pattern Viewing Angle



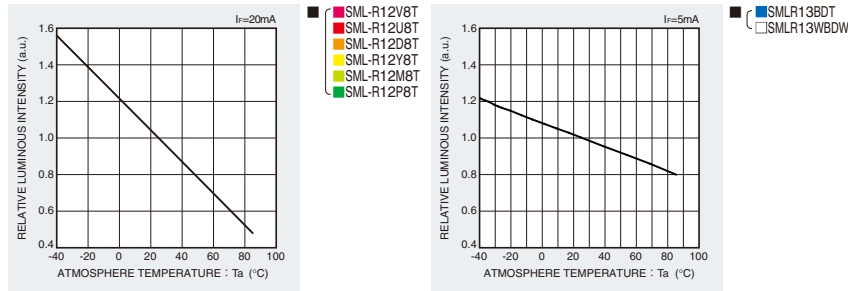
* PICOLED™ is ROHM's pending trademark.

Electrical Characteristics Curves

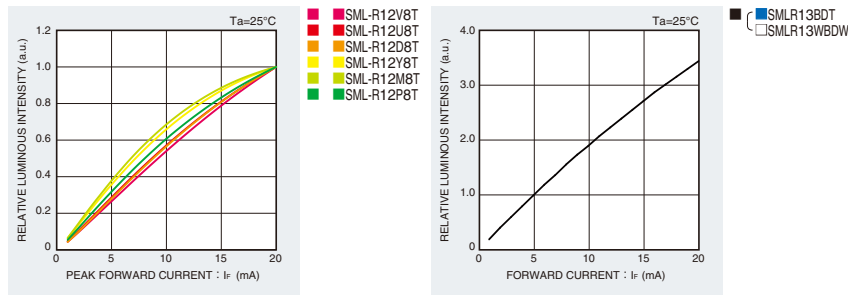
Forward Current-Forward Voltage



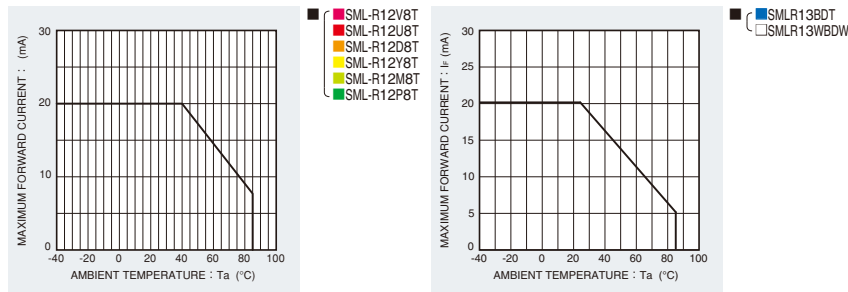
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



SML-R1 Series

Rank Reference of Brightness

Red (V, U)

(Ta=25°C, If=20mA)

Package size(mm)	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
16115	0.2									SML-R12V8T								
Side View Chip LEDs										SML-R12U8T								

Orange (D)

(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
16115	0.2										SML-R12D8T							
Side View Chip LEDs																		

Yellow (Y)

(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
16115	0.2									SML-R12Y8T								
Side View Chip LEDs																		

Green (M, P)

(Ta=25°C, If=20mA)

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

Blue (B)

(Ta=25°C, If=5mA)

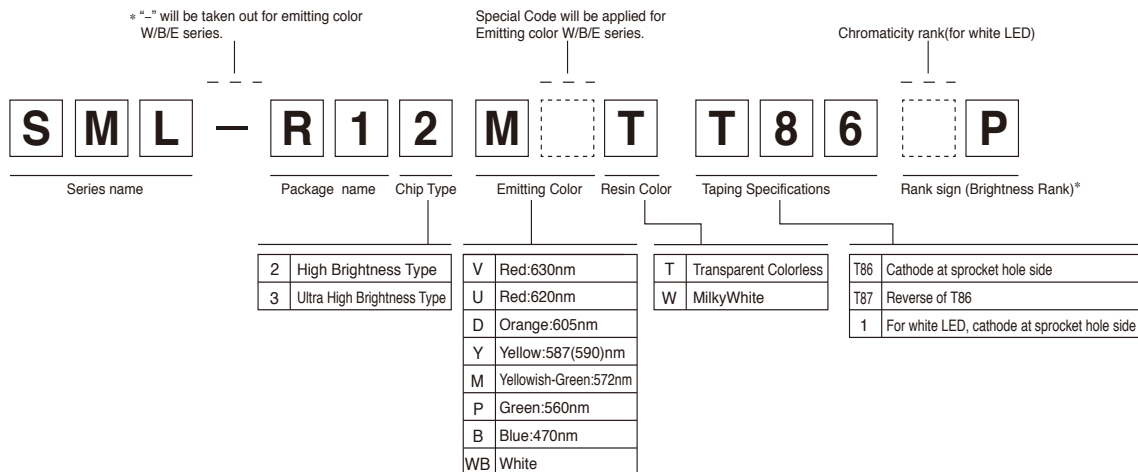
Package size(mm)	Height(mm)	Luminous Intensity (mcd)	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W
			0.9 to 1.4	1.4 to 2.2	2.2 to 3.6	3.6 to 5.6	5.6 to 9.0	9 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900
16115	0.2									SMLR13BDT							
Side View Chip LEDs																	

White (WB)

(Ta=25°C, If=5mA)

Package size(mm)	Height(mm)	Luminous Intensity (mcd)	P	Q	R	S	T	U	V	W
			25 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900
1810	0.35		SMLR13WBDW							
Side View Chip LEDs										

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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