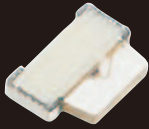


SML-R1 Series

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

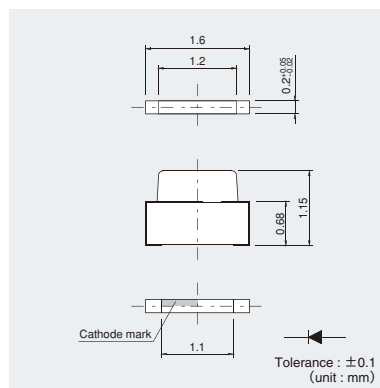
Color Type	V	U	D	Y
	M	P	B	WB

Specifications

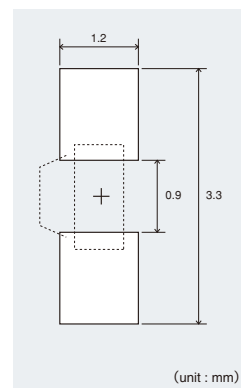
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)						Electrical and Optical Characteristics (Ta=25°C)									
			Power Dissipation Pd (mW)	Forward Current IF (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage VR (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage VF Typ. (V)	IF (mA)	Reverse Current IR Max. (μA)	VR (V)	Dominant Wavelength λD Min.*2 (nm)	Typ. (nm)	Max.*2 (nm)	Luminous Intensity Iv Min. (mcd)	Typ. (mcd)	IF (mA)
■ SML-R12V8T	AlGaInP on GaAs	Red											625	630	635	16	40	
■ SML-R12U8T													615	620	625	25	63	
■ SML-R12D8T		Orange	54						2.2	20			602	605	608	40	100	20
■ SML-R12Y8T		Yellow		20	100*1	5	-40 to +85	-40 to +100			10	5	587	590	593	25	63	
■ SML-R12M8T	InGaN	Yellowish Green											569	572	575	10	25	
■ SML-R12P8T		Green											557	560	563	2.5	6.3	
■ SMLR13BDT		Blue	66						3.0	5			465	470	475	14	36	5
□ SMLR13WBDW		White	78										(x, y) (0.30, 0.30)			56	110	

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

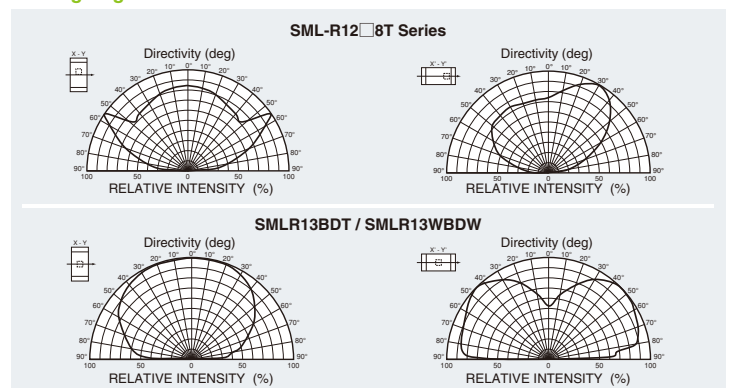
Dimensions



Recommended Solder Pattern



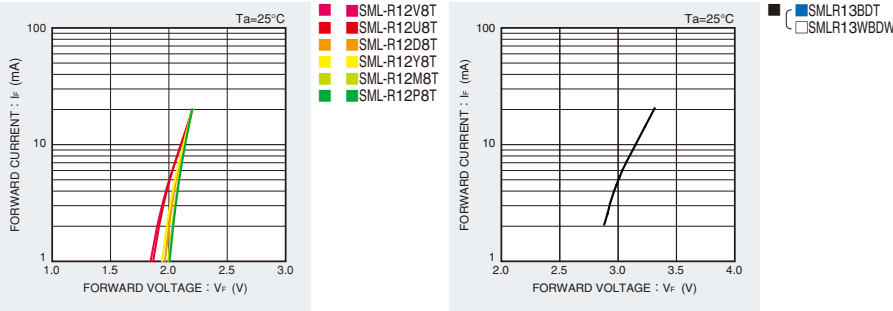
Viewing Angle



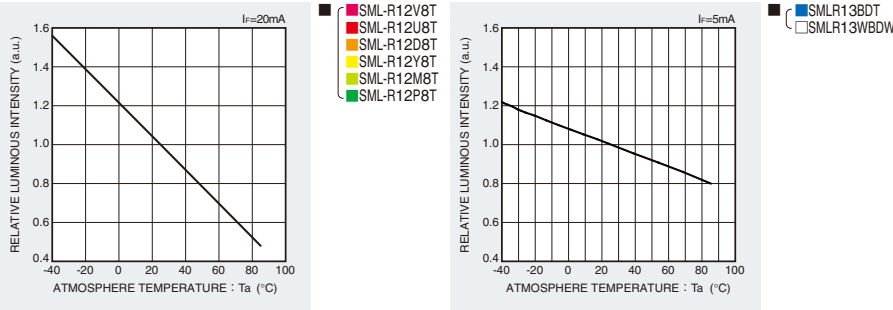
* PICOLED™ is ROHM's pending trademark.

Electrical Characteristics Curves

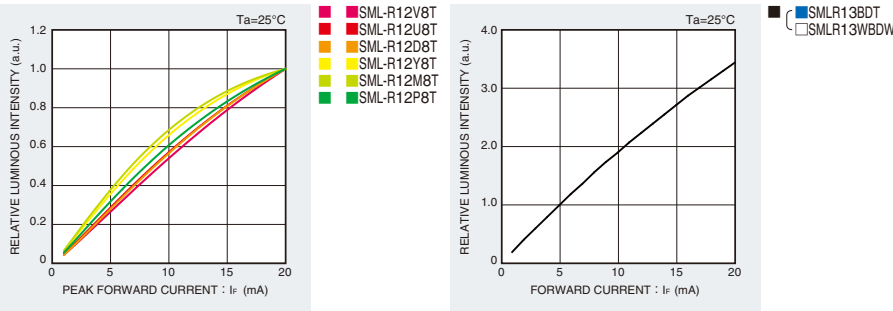
Forward Current-Forward Voltage



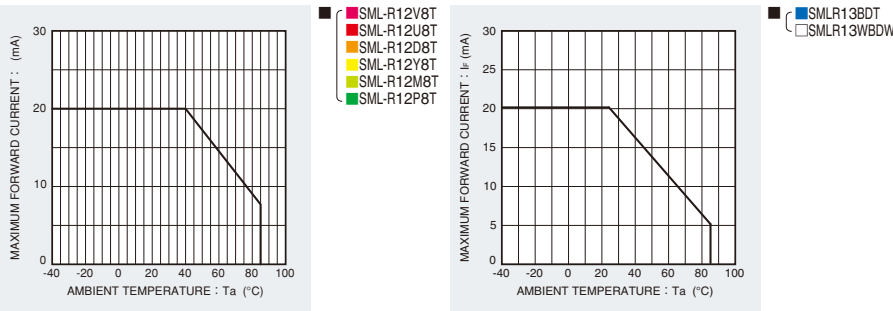
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



SML-R1 Series

Rank Reference of Brightness

Red (V, U)

(Ta=25°C, If=20mA)

	Package size(mm)	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)

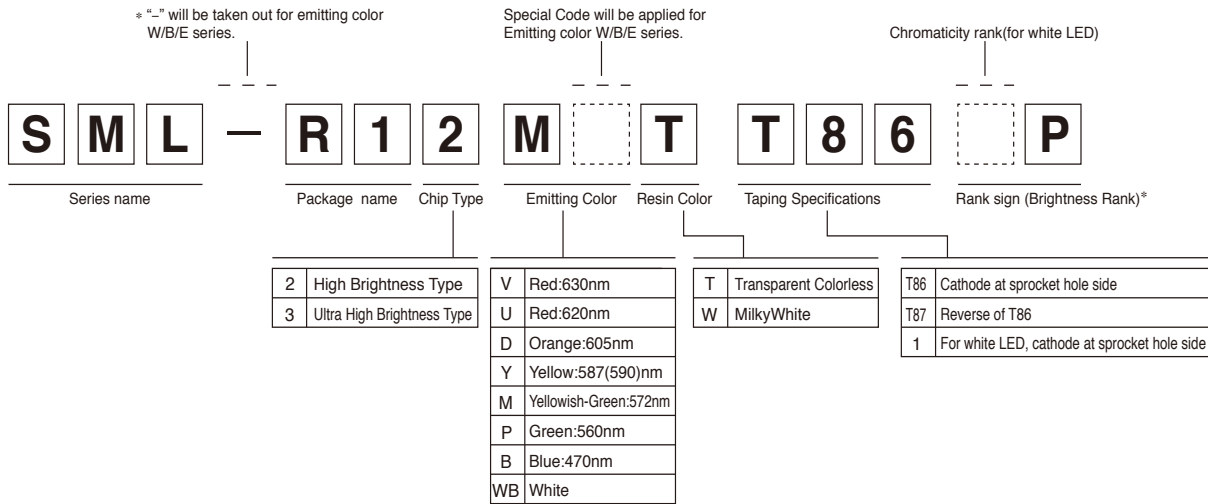
	Package size(mm)	Luminous Intensity (mcd) Height(mm)	G	H	J	K	L	M	N	P	Q	R	S	T	U	V	W
Side View Chip LEDs	16115	0.2	0.9 to 1.4	1.4 to 2.2	2.2 to 3.6	3.6 to 5.6	5.6 to 9.0	9 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900
									SMLR13BDT								

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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