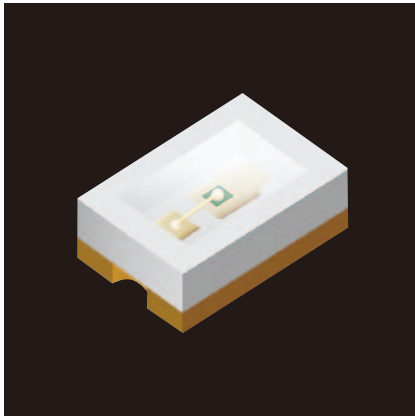




SML-M1 Series

20125(0805)
 2.0 × 1.25mm (t=0.8mm)

Features

- Compact LED with reflector
- Die is located at the center of the package, achieving equivalent distribution of light emission.
- New emitting color, including the pastel colors available upon request.

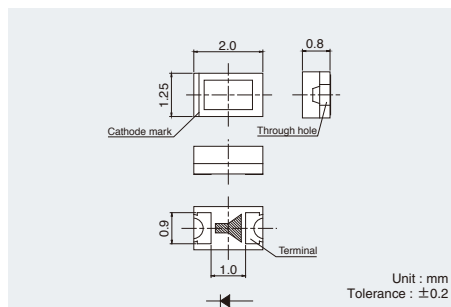
HB GB CB AB SB Warm White

Specifications

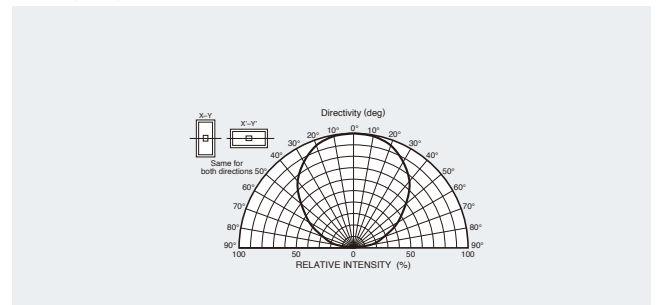
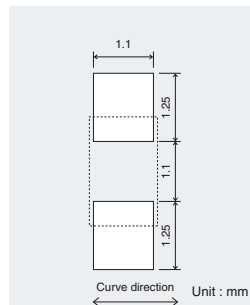
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)						Electrical and Optical Characteristics (Ta=25°C)											
			Power Dissipation Pd(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)	Forward Typ. (V)	Voltage VF If(mA)	Reverse Max. (μA)	Current IR VR(V)	Dominant Wavelength λD (nm)			Min. (mcd)	Typ. (mcd)	Luminous Intensity Iv If(mA)		
■ SML-M13VT	AlGaInP on GaAs	Red	63	25	100*1	5	-40 to +85	-40 to +100	2.0	20*1	10	5	625	630	635	20	40	75	20	
■ SML-M13UT		615											620	625	63		120			
■ SML-M13DT		Orange											602	605	608		100	200		
■ SML-M13YT		Yellow	587	590					593		160									
■ SML-M13MT		Yellowish Green	569	572					575	25	45									
■ SML-M13PT	InGaN	Green	68	30					2.2				557	560	563		6.3	16		
■ SMLM12BC7T		Blue	66	20			-30 to +85		2.9	5*1	100		465	470	475	5	-	36		
□ SMLM12WBC7W		White					-40 to +100			10			(x, y) (0.30, 0.30)		56	100	5			

*1: Duty 1/10 1KHz *2: Reference

Dimensions

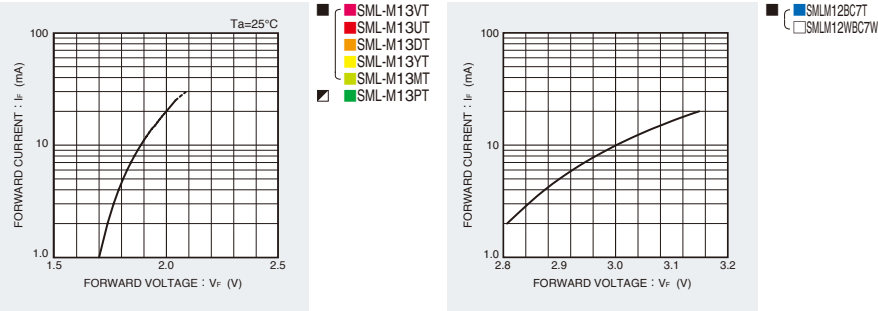


Recommended Solder Pattern Viewing Angle

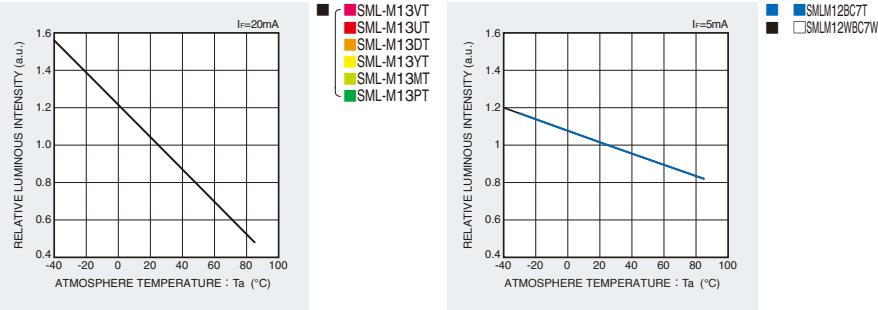


Electrical Characteristics Curves

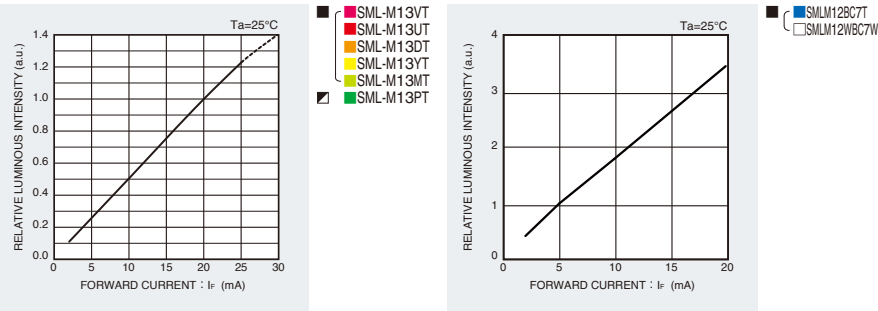
Forward Current-Forward Voltage



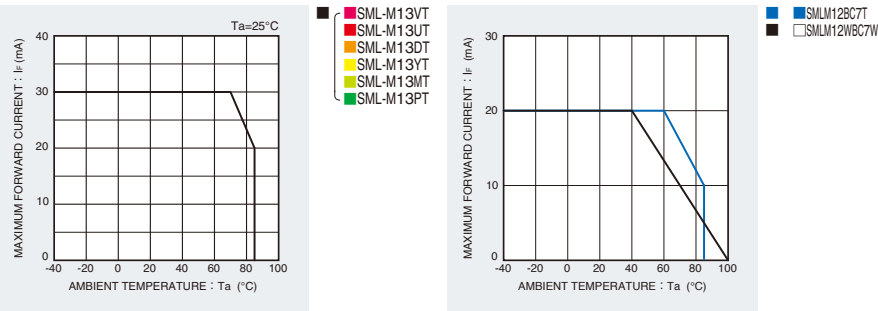
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



SML-M1 Series

Rank Reference of Brightness

Red (V, U)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity (mcd)	K	L	M	N	P	Q	R	S	T	U	V	W	X
Small LEDs with reflector	20125	0.8	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-M13VT		SML-M13UT					

Orange (D)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity (mcd)	K	L	M	N	P	Q	R	S	T	U	V	W	X
Small LEDs with reflector	20125	0.8	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-M13DT					

Yellow (Y)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity (mcd)	K	L	M	N	P	Q	R	S	T	U	V	W	X
Small LEDs with reflector	20125	0.8	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-M13YT					

Green (M, P)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity (mcd)	K	L	M	N	P	Q	R	S	T	U	V	W	X
Small LEDs with reflector	20125	0.8	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-M13PT	SML-M13MT									

Blue (B)

(Ta=25°C, If=5mA)

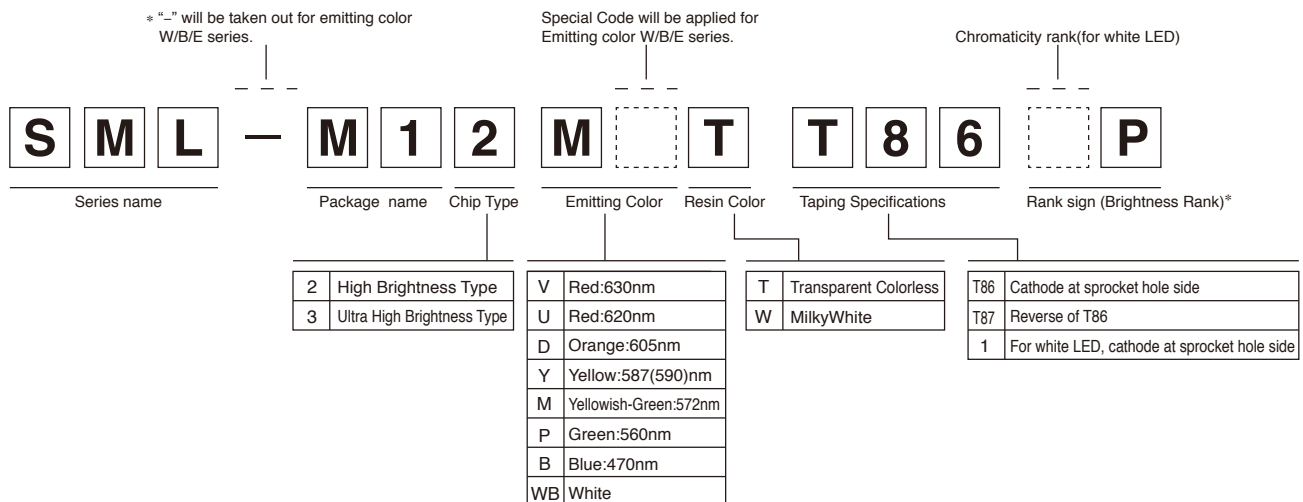
	Package size(mm)	Luminous Intensity (mcd)	K	L	M	N	P	Q	R	S	T	U	V	W
Small LEDs with reflector	20125	0.8	3.6 to 5.6	5.6 to 9.0	9 to 14	14 to 22	22 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900
						SMLM12BC7T								

White (WB)

(Ta=25°C, If=5mA)

	Package size(mm)	Luminous Intensity (mcd)	P	Q	R	S	T	U	V	W
Small LEDs with reflector	20125	0.8	25 to 36	36 to 56	56 to 90	90 to 140	140 to 220	220 to 360	360 to 560	560 to 900
			SMLM12WBC7W							

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.

Notes

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