

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.

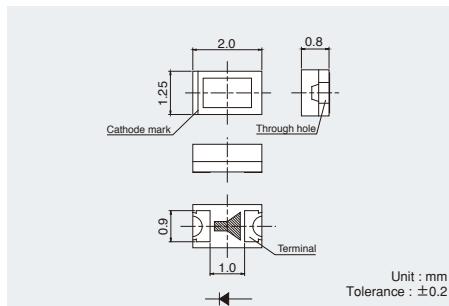


Specifications

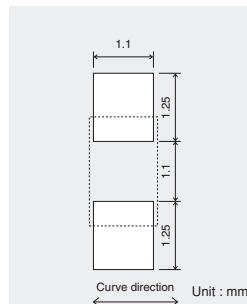
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)										
			Power Dissipation PD(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)	Forward Voltage VF Typ.(V)	Reverse Current IR Max.(μA)	VR(V)	Dominant Wavelength λD Min.(nm)	Max.(nm)	IF(mA)	Luminous Intensity Iv Min.(mcd)	Typ.(mcd)	IF(mA)	
■ SML-M13VT	AlGaNp	Red	75	30		-40 to +85			2.0	20		625	630	635	40	75		
■ SML-M13UT		Orange										615	620	625	63	120		
■ SML-M13DT		Yellow										602	605	608	20	100	200	
■ SML-M13YT		Yellowish Green	81	100 ^{*1}	5	-40 to +100			2.2	10	5	587	590	593	160	20		
■ SML-M13MT		Green										569	572	575	25	45		
■ SML-M13PT		Blue										557	560	563	6.3	16		
■ SMLM12BC7T	InGaN	Blue	66	20	100 ^{*1}	-40 to +100			2.9	5		465	470	475	5	14	36	5
□ SMLM12WBC7W		White										(x, y) (0.30, 0.30)			56	100		
■ SMLM12ABC7W		Blue lagoon										(x, y) (0.17, 0.35)			56	71		
■ SMLM12CBC7W		Ice blue	70	20	100 ^{*1}	-40 to +85			3.0	10		(x, y) (0.188, 0.280)			110	160	10	
■ SMLM12GBC7W		Blue green										(x, y) (0.238, 0.405)			110	180		
■ SMLM12SBC7W		Sapphire blue										(x, y) (0.19, 0.19)			90	180		

*1: Duty1/10 1KHz *2: Reference

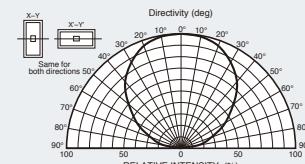
Dimensions



Recommended Solder Pattern

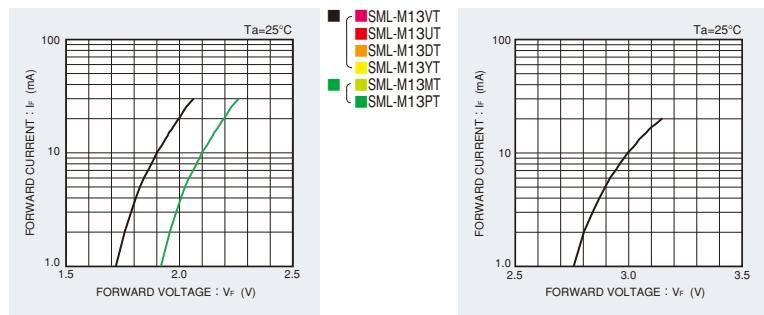


Viewing Angle

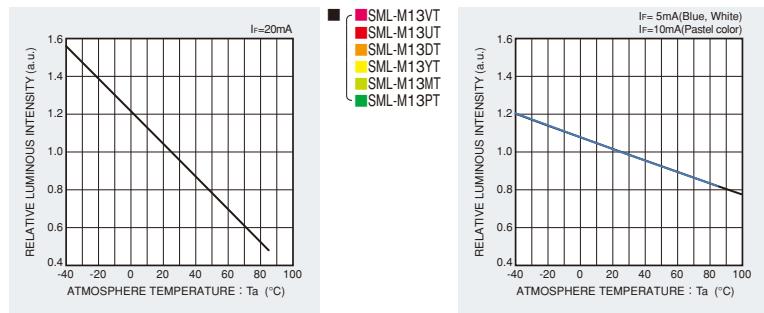


Electrical Characteristics Curves

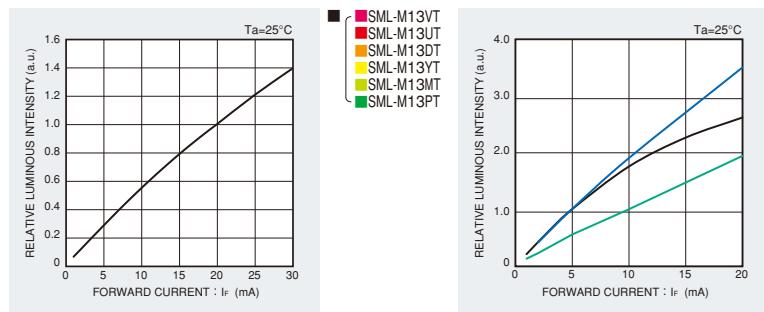
Forward Current-Forward Voltage



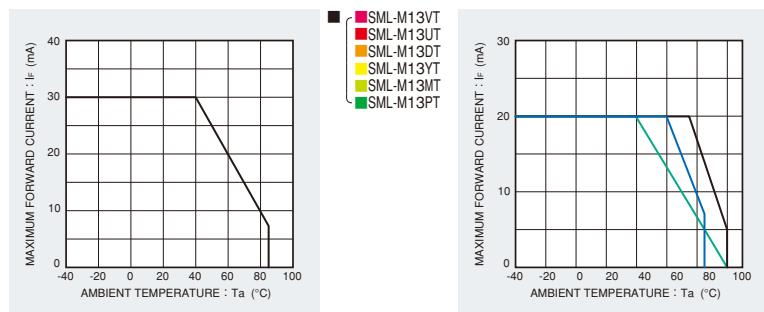
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



SML-M1 series

Rank Reference of Brightness

■ Red (V, U)

Package structure	Package size	Height (mm)	Luminous Intensity I_F (mA) <small>1000</small>	K	L	M	N	P	Q	R	S	T	U	V	W	X
Reflector	20125	0.8	20	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

■ Orange (D)

Package structure	Package size	Height (mm)	Luminous Intensity I_F (mA) <small>1000</small>	K	L	M	N	P	Q	R	S	T	U	V	W	X
Reflector	20125	0.8	20	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

■ Yellow (Y)

Package structure	Package size	Height (mm)	Luminous Intensity I_F (mA) <small>1000</small>	K	L	M	N	P	Q	R	S	T	U	V	W	X
Reflector	20125	0.8	20	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

■ Green (M, P)

Package structure	Package size	Height (mm)	Luminous Intensity I_F (mA) <small>1000</small>	K	L	M	N	P	Q	R	S	T	U	V	W	X
Reflector	20125	0.8	20	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

■ Blue (B)

Package structure	Package size	Height (mm)	Luminous Intensity I_F (mA) <small>1000</small>	K	L	M	N	P	Q	R	S	T	U	V	W
Reflector	20125	0.8	5	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

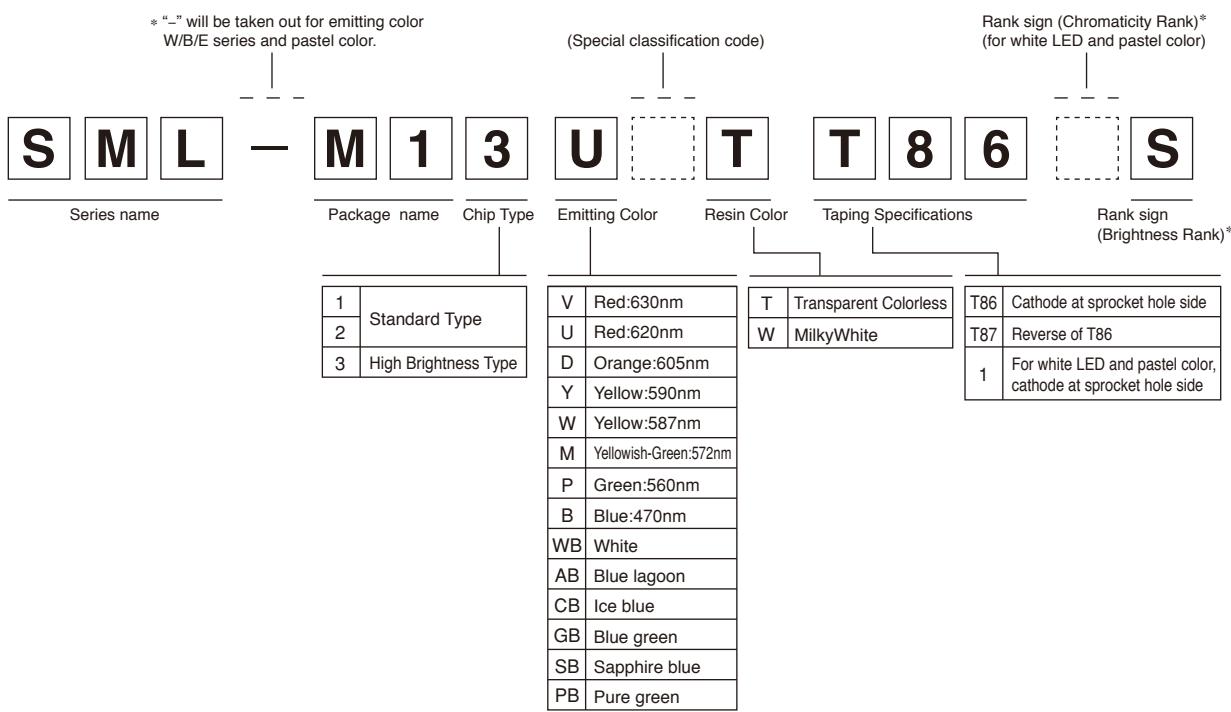
■ White (WB)

Package structure	Package size	Height (mm)	Luminous Intensity I_F (mA) <small>1000</small>	K	L	M	N	P	Q	R	S	T	U	V	W
Reflector	20125	0.8	5	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

■ Pastel Color

Package structure	Package size	Height (mm)	Luminous Intensity I_F (mA) <small>1000</small>	Q1	Q2	R1	R2	S1	S2	T1	T2	U1	U2	V1	V2	W1	W2
Reflector	20125	0.8	10	36 to	45 to	56 to	71 to	90 to	110 to	140 to	180 to	220 to	280 to	360 to	450 to	560 to	710 to

Part No. Construction



* Concerning the Brightness rank

- Please refer to the rank chart above for luminous intensity classification.
- Please refer to the Specification sheet for color 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.

* Please refer to the Specification sheet about Taping specification.

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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