

SML-D1 Series

EXCELED™

1608(0603)
1.6×0.8mm(t=0.55mm)

Features

- Original device technology enables high brightness and high reliability.

Color Type	L	V	U
D	Y	M	P

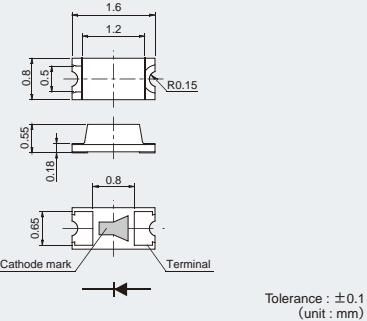
Specifications

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 Min. (nm)	Max. (nm)	Luminous Intensity Iv If(mA)					
■ SML-D12V8W	AlGaNP on GaAs	Red	54	20	100* ¹	5	-40 to +85	-40 to +100	2.2	20	10	625	630	635	16	40			
■ SML-D12U8W		Red																	
■ SML-D12D8W		Orange																	
■ SML-D12Y8W		Yellow																	
■ SML-D12M8W		Yellowish Green																	
■ SML-D12P8W		Green																	
■ SML-D13L8W		Red	50	20	100* ¹	5	-40 to +85	-40 to +100	2.0	20	10	630	635	640	20	16	22	20	
■ SML-D13V8W		Red																	
■ SML-D13U8W		Red	52	54	20	100* ¹	5	-40 to +85	-40 to +100	2.1	20	10	615	620	625	40	70	25	63
■ SML-D13D8W		Orange																	
■ SML-D13Y8W		Yellow																	
■ SML-D13M8W		Yellowish Green																	
■ SML-D13P8W		Green																	

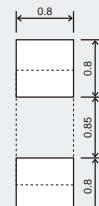
*1:Duty1/10, 1kHz / *2:Reference

☆:Under deveopment

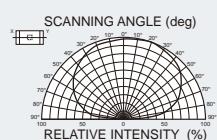
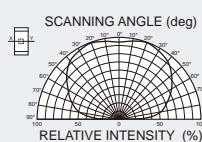
Dimensions



Recommended Solder Pattern



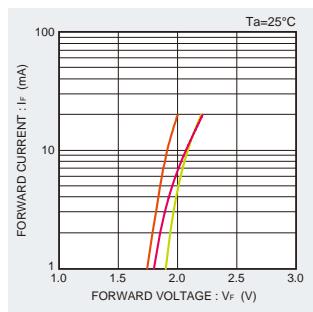
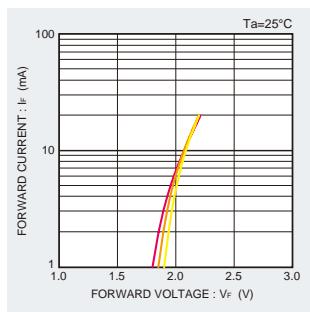
Viewing Angle



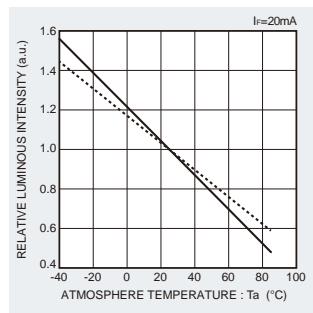
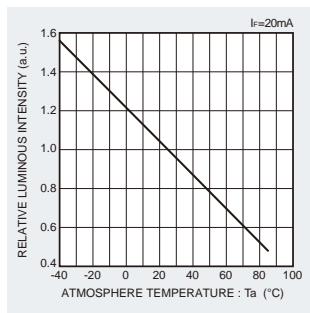
EXCELED™ is ROHME's pending trademark.

Electrical Characteristics Curves

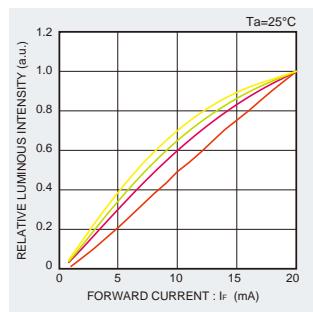
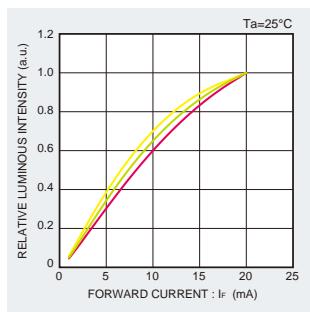
Forward Current-Forward Voltage



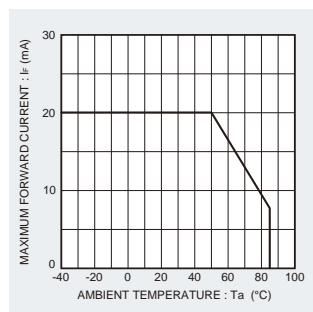
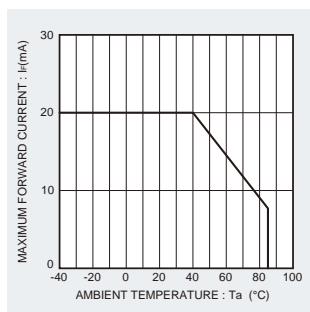
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



SML-D1 Series

Rank Reference of Brightness

■ Red (L, V, U)

■ Orange (D)

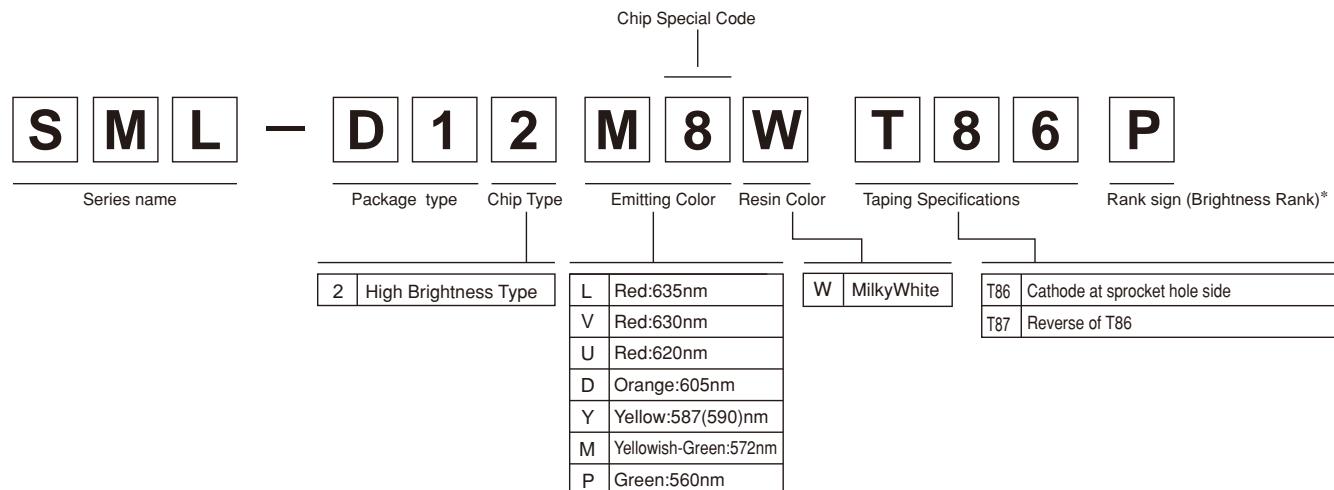
(Ta=25°C, If=20mA)														
Package size(mm)	Height(mm)	Luminous Intensity (mcd)	H	J	K	L	M	N	P	Q	R	S	T	U
		1.6 to 2.5	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400	
Mini-mold Chip LEDs	1608	0.55										SML-D13D8W	SML-D12D8W	

■ Yellow (Y)

(Ta=25°C, If=20mA)														
	Package size(mm)	Luminous Intensity (mcd) Height(mm)	H	J	K	L	M	N	P	Q	R	S	T	U
			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
Mini-mold Chip LEDs	1608	0.55								SML-D13Y8W				
									SML-D12Y8W					

■ Green (M, P)

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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