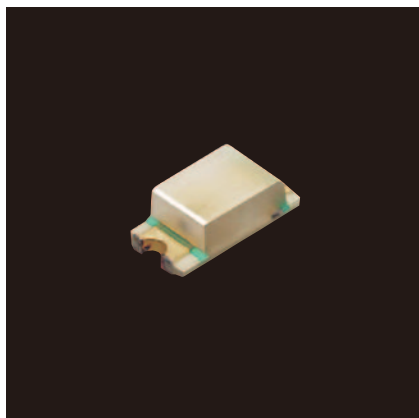




SML-D1 Series

EXCELED™

1608(0603)
 1.6×0.8mm(t=0.55mm)

Features

- Original device technology enables high brightness and high reliability

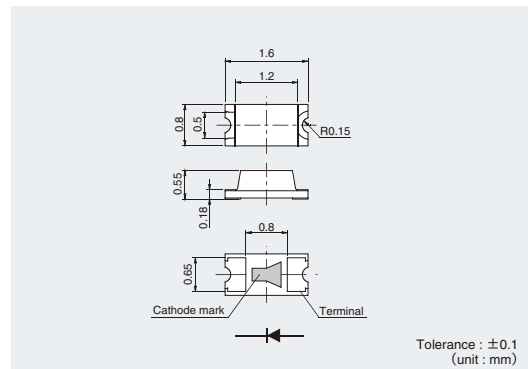
Color Type	V	U	D
Y	M	P	HB

Specifications

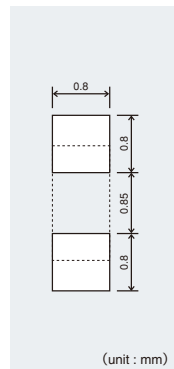
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25℃)						Electrical and Optical Characteristics (Ta=25℃)										
			Power Dissipation Pd(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(℃)	Storage Temperature Tstg(℃)	Forward Voltage VF		Reverse Current IR		Dominant Wavelength λD			Luminous Intensity Iv			
			Min. *2	Typ.	Max. *2	Min. *2	Typ.	Max. *2	Typ. (V)	IF(mA)	Max. (μA)	VR(V)	Min. (nm)	Typ. (nm)	Max. (nm)	IF(mA)	Min. (mcd)	Typ. (mcd)	IF(mA)
■ SML-D12V8W	AlGaInP on GaAs	Red	54	20	100*1	5	-40 to +85	-40 to +100	2.2	20	10	4	625	630	635	20	16	40	20
■ SML-D12U8W		Red											615	620	625		25	63	
■ SML-D12D8W		Orange											602	605	608		40	100	
■ SML-D12Y8W		Yellow											587	590	593		25	63	
■ SML-D12M8W		Yellowish Green											569	572	575		10	25	
■ SML-D12P8W	InGaN	Green	78										557	560	563	5	2.5	6.3	
■ SMLD12HBC7W		Pink											(x, y) (0.47, 0.25)	9.0	22		5		

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

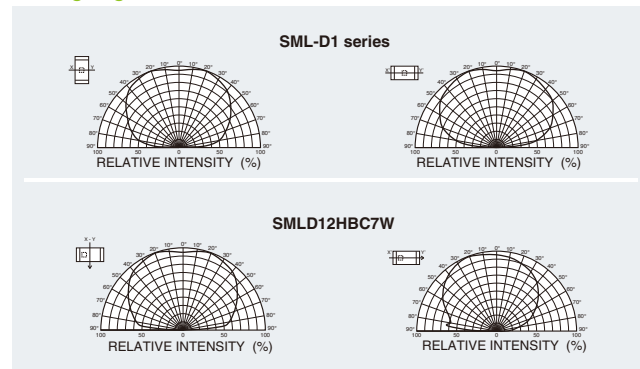
Dimensions



Recommended Solder Pattern



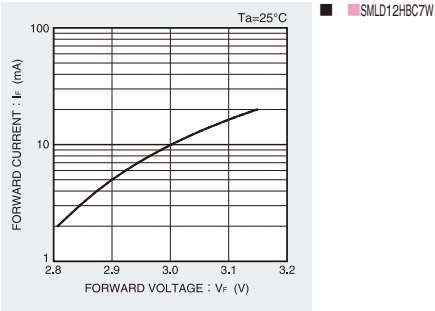
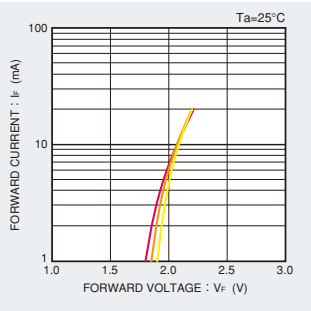
Viewing Angle



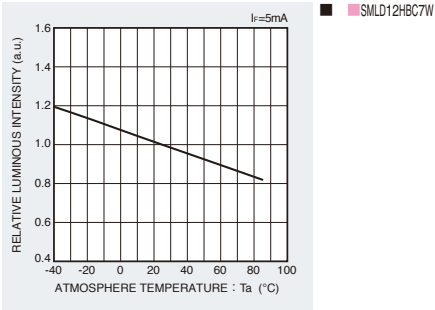
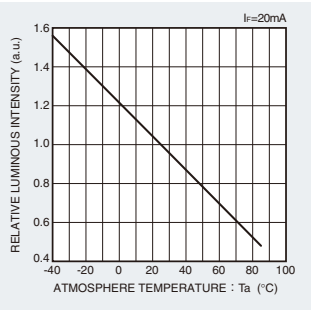
EXCELED™ is ROHME's pending trademark.

Electrical Characteristics Curves

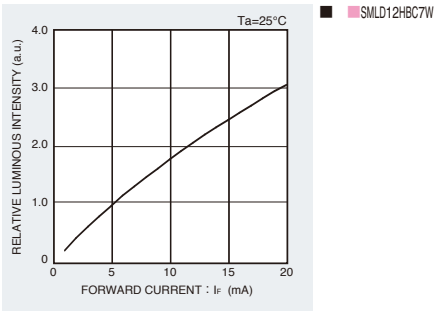
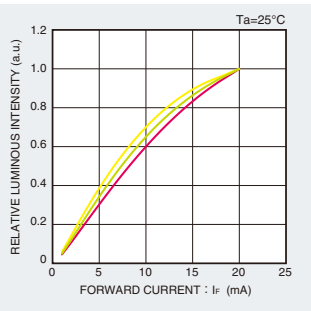
Forward Current-Forward Voltage



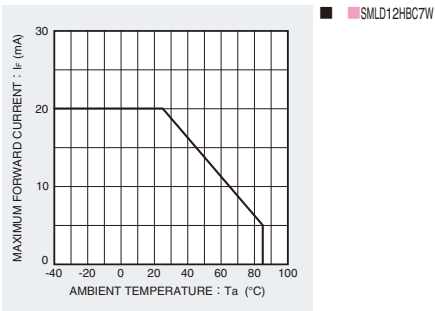
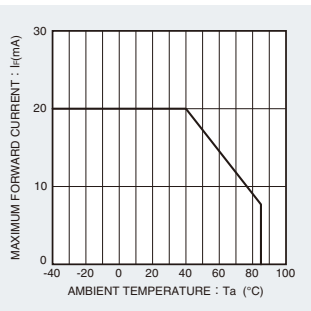
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



SML-D1 Series

Rank Reference of Brightness

Red (V, U)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity Height(mm)	H	J	K	L	M	N	P	Q	R	S	T	U
Mini-mold Chip LEDs	1608	0.55	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
			SML-D12V8W										SML-D12U8W	

Orange (D)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity Height(mm)	H	J	K	L	M	N	P	Q	R	S	T	U
Mini-mold Chip LEDs	1608	0.55	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
			SML-D12D8W											

Yellow (Y)

(Ta=25°C, If=20mA)

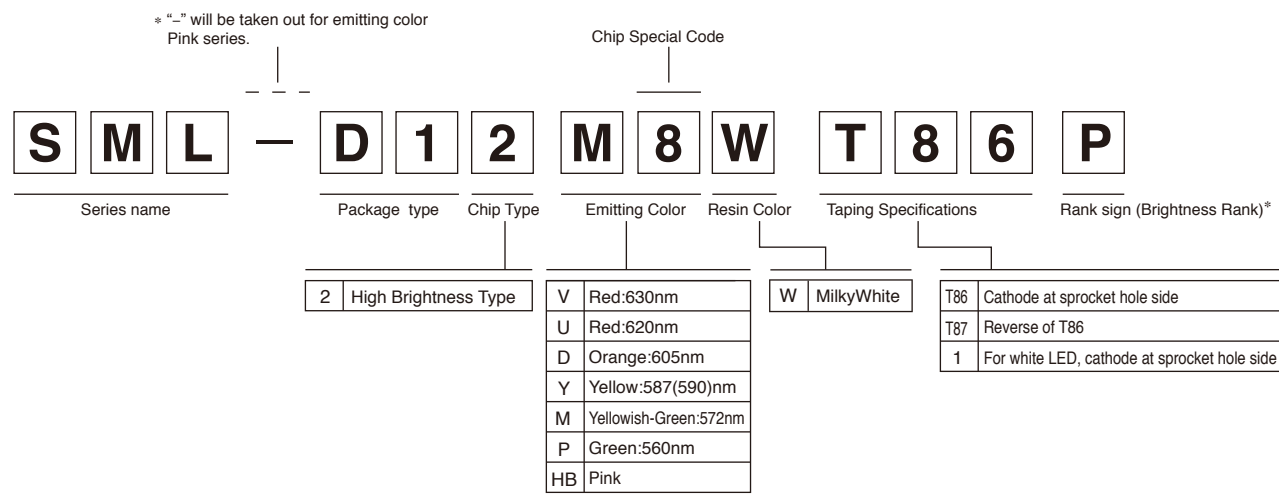
	Package size(mm)	Luminous Intensity Height(mm)	H	J	K	L	M	N	P	Q	R	S	T	U
Mini-mold Chip LEDs	1608	0.55	1.6 to 2.5	2.5 to 4.0	4.0 to 6.3	6.3 to 10	10 to 16	16 to 25	25 to 40	40 to 63	63 to 100	100 to 160	160 to 250	250 to 400
			SML-D12Y8W											

Green (M, P)

(Ta=25°C, If=20mA)

	Package size(mm)	Luminous Intensity Height(mm)	H	J	K	L	M	N	P	Q	R	S	T	U
Mini-mold Chip LEDs	1608	0.55	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
			SML-D12P8W										SML-D12M8W	

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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