

SML-D13(A) Series

1608(0603)
1.6×0.8mm(t=0.55mm)

Features

- Original device technology enables high brightness and high reliability.

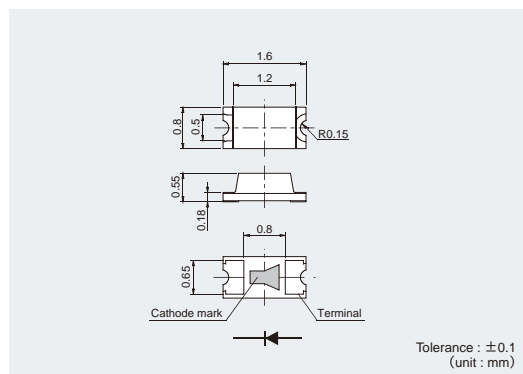
Color Type	V	U	U2	D
Y	W	M	P	F

Specifications

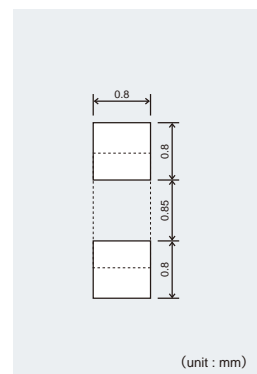
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)						Electrical and Optical Characteristics (Ta=25°C)											
			Power Dissipation Pd(mW)	Forward Current If(mA)	Peak Forward Current Ifp(mA)	Reverse Voltage Vr(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)	Forward Voltage V _F		Reverse Current I _R		Dominant Wavelength λ _D			Luminous Intensity I _v				
									Typ. (V)	If(mA)	Max. (μA)	Vr(V)	Min.*2 (nm)	Typ. (nm)	Max.*2 (nm)	If(mA)	Min. (mcd)	Typ. (mcd)	If(mA)	
<div></div> SML-D13VW(A)	AlGaInP on GaAs	Red							2.0			5	626	630	634		35.5	55		
<div></div> SML-D13UW(A)		Red											616	620	624		56	85		
<div></div> SML-D13U2W(A)		Red											611	615	619		90			
<div></div> SML-D13DW(A)		Orange											602	605	608	20	71	120	20	
<div></div> SML-D13YW(A)		Yellow	75	30	100*1	5	-40 to +85	-40 to +100		20	10	4	587	590	593		90	112		
<div></div> SML-D13WW(A)		Yellow							2.1			5	586	587.5	589		28	45		
<div></div> SML-D13MW(A)		Yellowish Green											568	571	574	4.5	8			
<div></div> SML-D13PW(A)		Green											557	560	563	14	22			
<div></div> SML-D13FW(A)	Green											561	564	567						

* 1:Duty1/10, 1kHz / * 2:Reference
☆:Under development

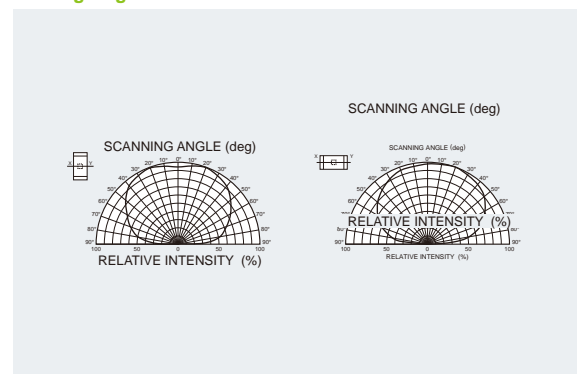
Dimensions



Recommended Solder Pattern

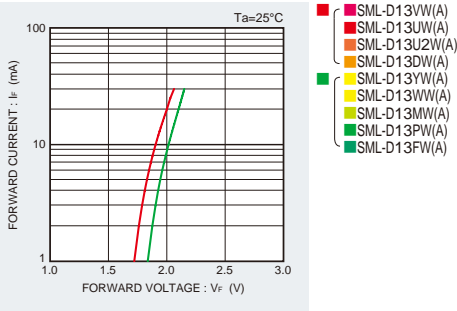


Viewing Angle

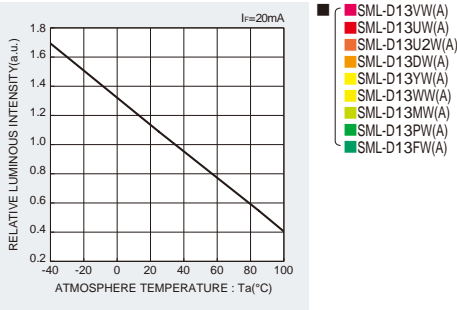


Electrical Characteristics Curves

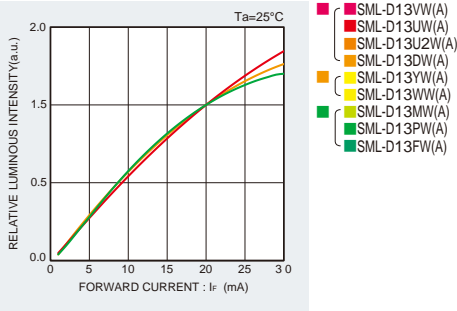
Forward Current-Forward Voltage



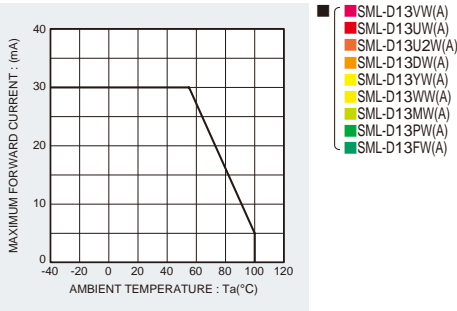
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



SML-D13(A) Series

Rank Reference of Brightness

Red (V, U, U2)

	Package size(mm)	Height (mm)	Luminous Intensity (mcd)	(Ta=25°C)															
				AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU
Mini-mold Chip LEDs	1608	0.55	20	4.5 to 5.6	5.6 to 7.1	7.1 to 9	9 to 11.2	11.2 to 14	14 to 18	18 to 22.4	22.4 to 28	28 to 35.5	35.5 to 45	45 to 56	56 to 71	71 to 90	90 to 112	112 to 140	140 to 180
													SML-D13VW(A)			SML-D13UW(A)			
																SML-D13U2W(A)			

Orange (D)

	Package size(mm)	Height (mm)	Luminous Intensity (mcd)	(Ta=25°C)															
				AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU
Mini-mold Chip LEDs	1608	0.55	20	4.5 to 5.6	5.6 to 7.1	7.1 to 9	9 to 11.2	11.2 to 14	14 to 18	18 to 22.4	22.4 to 28	28 to 35.5	35.5 to 45	45 to 56	56 to 71	71 to 90	90 to 112	112 to 140	140 to 180
																SML-D13DW(A)			

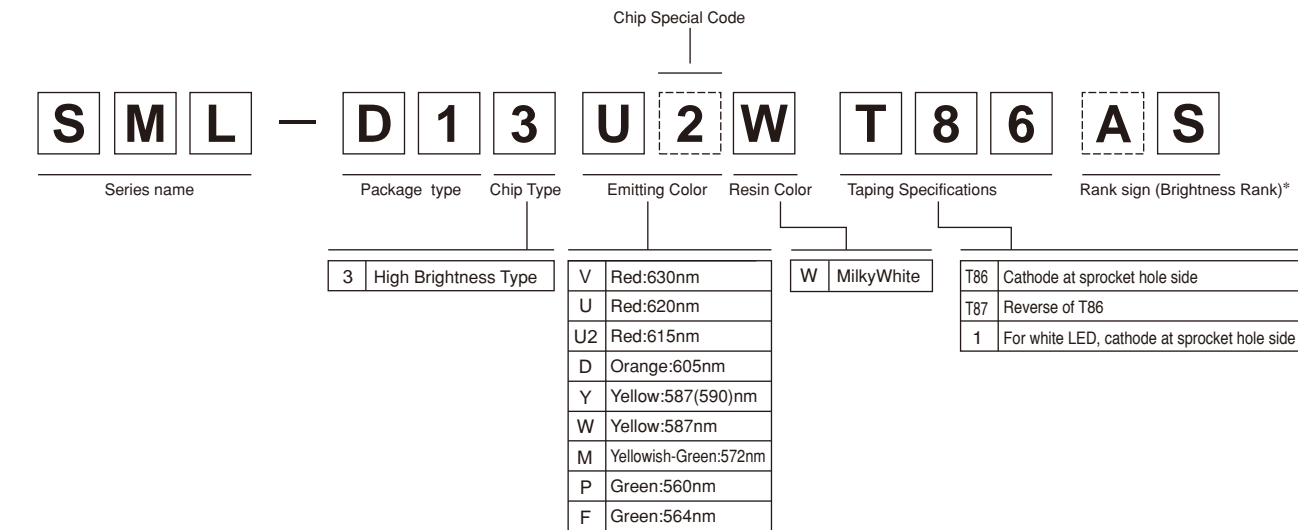
Yellow (Y, W)

	Package size(mm)	Height (mm)	Luminous Intensity (mcd)	(Ta=25°C)															
				AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU
Mini-mold Chip LEDs	1608	0.55	20	4.5 to 5.6	5.6 to 7.1	7.1 to 9	9 to 11.2	11.2 to 14	14 to 18	18 to 22.4	22.4 to 28	28 to 35.5	35.5 to 45	45 to 56	56 to 71	71 to 90	90 to 112	112 to 140	140 to 180
																SML-D13YW(A)			
																SML-D13WW(A)			

Green (M, P, F)

	Package size(mm)	Height (mm)	Luminous Intensity (mcd)	(Ta=25°C)															
				AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU
Mini-mold Chip LEDs	1608	0.55	20	4.5 to 5.6	5.6 to 7.1	7.1 to 9	9 to 11.2	11.2 to 14	14 to 18	18 to 22.4	22.4 to 28	28 to 35.5	35.5 to 45	45 to 56	56 to 71	71 to 90	90 to 112	112 to 140	140 to 180
													SML-D13MW(A)						
					SML-D13PW(A)						SML-D13FW(A)								

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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