

SML-D13(A) Series

1608(0603)
1.6 × 0.8mm (t=0.55mm)

Features

- Original device technology enables high brightness and high reliability.

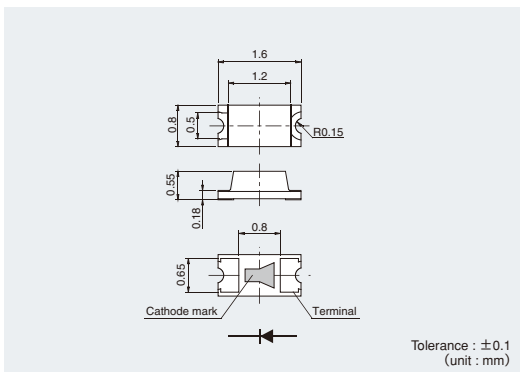


Specifications

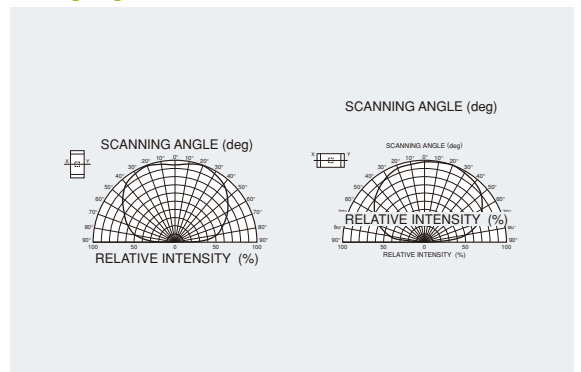
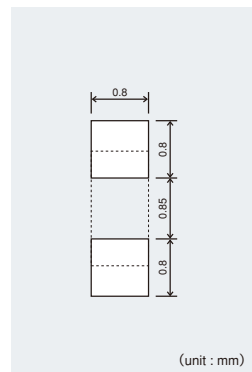
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)												
			Power Dissipation PD (mW)	Forward Current IF (mA)	Peak Forward Current IFP (mA)	Reverse Voltage VR (V)	Operating Temperature Topr (°C)	Storage Temperature Tstg (°C)	Forward Voltage VF Typ. (V)	IF (mA)	Reverse Current IR Max. (μA)	VR (V)	Dominant Wavelength λD Min.*2 (nm)	Typ.*2 (nm)	Max.*2 (nm)	λD (nm)	IF (mA)	Luminous Intensity I _v Min. (mcd)	Typ. (mcd)	IF (mA)
■ SML-D13VV(A)		Red																		
☆ ■ SML-D13UW(A)		Red								2.0		5								
☆ ■ SML-D13U2W(A)		Red																		
☆ ■ SML-D13DW(A)		Orange																		
☆ ■ SML-D13YW(A)	AlGaInP on GaAs	Yellow	75	30	100*1	5	-40 to +85	-40 to +100		20	10	4	587	590	593	20	71	120	20	
■ SML-D13WW(A)		Yellow											586	587.5	589		90	112		
■ SML-D13MW(A)		Yellowish Green								2.1		5	568	571	574		28	45		
■ SML-D13PW(A)		Green											557	560	563		4.5	8		
■ SML-D13FW(A)		Green											561	564	567		14	22		

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

Dimensions

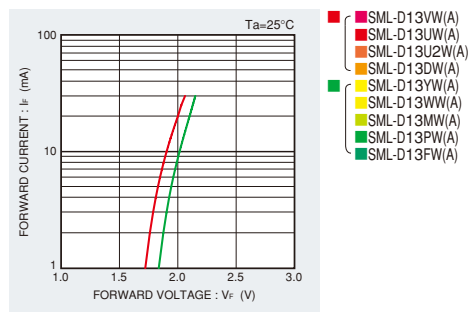


Recommended Solder Pattern Viewing Angle

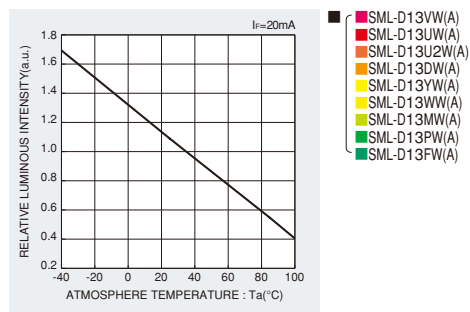


Electrical Characteristics Curves

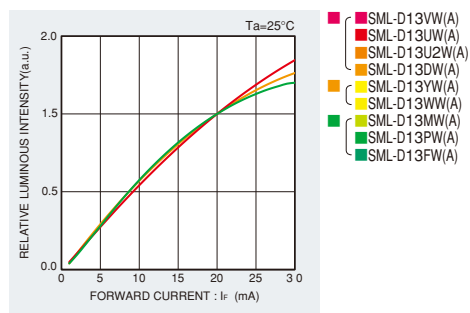
Forward Current-Forward Voltage



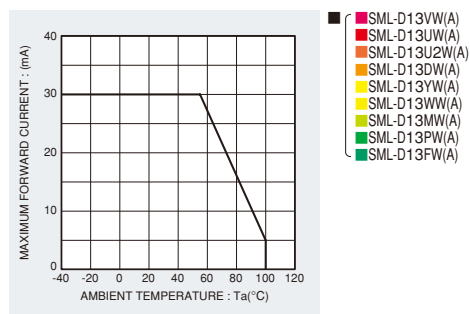
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



SML-D13(A) Series

Rank Reference of Brightness

Red (V, U, U2)

(Ta=25°C)

Package size(mm)	Height (mm)	Luminous Intensity (mcd)	Rank																
			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)

(Ta=25°C)

Package size(mm)	Height (mm)	Luminous Intensity (mcd)	Rank																		
			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)

(Ta=25°C)

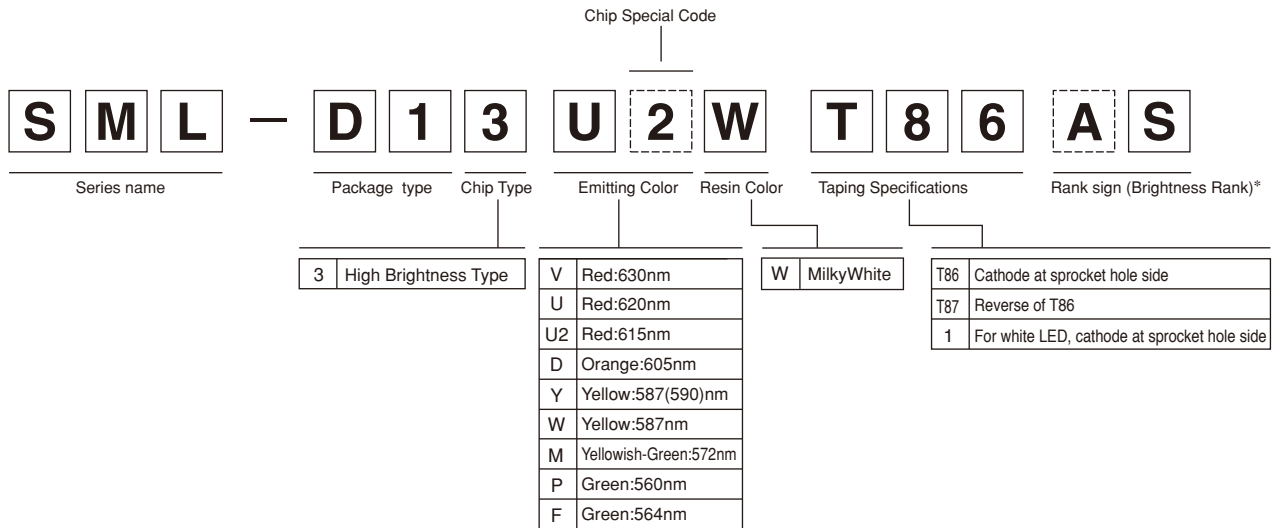
Package size(mm)	Height (mm)	Luminous Intensity (mcd)	Rank																
			AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU	
Mini-mold Chip LEDs	1608	0.55	20	4.5 to 5.6	5.6 to 7.1	7.1 to 9	9 to 11.2	11.2 to 14	14 to 18	18 to 22.4	22.4 to 28	28 to 35.5	35.5 to 45	45 to 56	56 to 71	71 to 90	90 to 112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

Green (M, P, F)

(Ta=25°C)

Package size(mm)	Height (mm)	Luminous Intensity (mcd)	Rank																
			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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