

# SML-D13(A) Series

1608(0603)

 $1.6 \times 0.8$ mm(t=0.55mm)

#### **Features**

·Original device technology enables high brightness and high reliability.







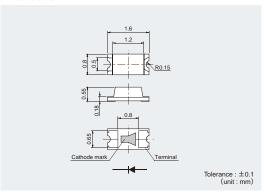


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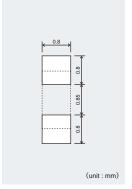
					Abso	lute Maxim				Electric	al and	Optica	l Chara	acterist	ics (Ta=	=25°C)				
	Part No.	Chip Structure	Emitting Color	Power Dissipation PD(mW)	Forward Current I <sub>F</sub> (mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)								th λD IF(mA)		Typ. (mcd)	
	■SML-D13VW(A)		Red		,			,		,		(12.17)		626	630	634		35.5	55	
$\stackrel{\wedge}{\simeq}$	■ SML-D13UW(A)		Red							2.0			5	616	620	624		56	85	
$\stackrel{\wedge}{\simeq}$	SML-D13U2W(A)		Red							2.0			J	611	615	619		30	90	
$\stackrel{\wedge}{\sim}$	SML-D13DW(A)		Orange											602	605	608		71	120	
$\stackrel{\wedge}{\simeq}$	SML-D13YW(A)	AIGaInP on GaAs	Yellow	75	30	100* <sup>1</sup>	5	-40 to +85	-40 to +100		20	10	4	587	590	593	20	7 1	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										J	557	560	563		4.5	8	
	SML-D13FW(A)		Green											561	564	567		14	22	

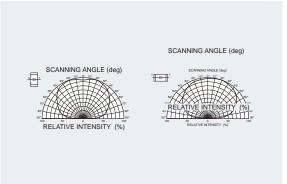
\*1:Duty1/10, 1kHz / \*2:Reference

#### **Dimensions**



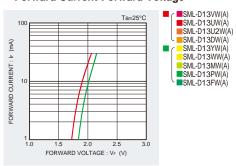
#### Recommended Solder Pattern Viewing Angle



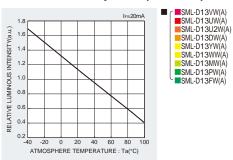


#### **Electrical Characteristics Curves**

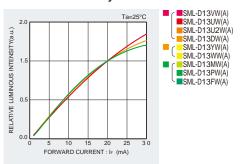
#### Forward Current-Forward Voltage



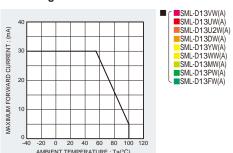
#### Luminous Intensity-Atmosphere Temperature



#### Luminous Intensity-Forward Current



### Derating



#### **Rank Reference of Brightness**

#### Red (V, U, U2)

																					(Ta=25°C)
Г		Package	Height		Luminous Intensity	AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU
ı		Package size(mm)	(mm)	I <sub>F</sub> (mA)	(mcd)	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
Г	N 40 - 1 - 1 - 1 - 1														SM	L-D13VW	(A)				
1	Mini-mold Chip LEDs	1608	0.55	2	20													SML-D1	3UW(A)		
L	Onip ELD3																	SML-D1	3U2W(A)		

#### Orange (D)

- Orani	ge (D)	'																	(	(Ta=25°C)
	Package size(mm	e Height		uminous Intensity	AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU
		) (mm)	I <sub>F</sub> (mA)	(mcd)	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
Mini-mol	d s 1608	0.55	20															SML-D1	3DW(A)	

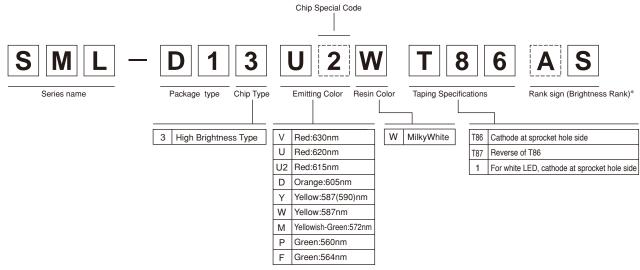
#### Yellow (Y, W)

_ 1011011	(.,.	-,																(	(Ta=25°C)
	Package	Height	Luminous	AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU
	size(mm)	(mm)	I <sub>F</sub> (mA) (mcd)	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
Mini-mold	1608	0.55	20														SML-D1	3YW(A)	
Chip LEDs	1008	0.35	20														SML-D1	3WW(A)	

#### Green (M, P, F)

																				(Ta=25°C)
Package size(mm)		Height		Luminous	AD	AE	AF	AG	AH	AJ	AK	AL	AM	AN	AP	AQ	AR	AS	AT	AU
	size(mm)	(mm)	I <sub>F</sub> (mA)		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-D1	3MW(A)					
Mini-mold Chip LEDs	1608	0.55	2	20	SML-D		13PW(A)													
Only LLD3											SML-D1	3FW(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 distributer if necessary.

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