

●Features

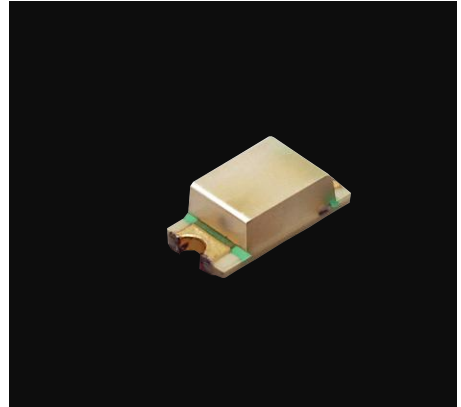
- Original device technology enables high brightness and high reliability
- Single Rank products

●Size

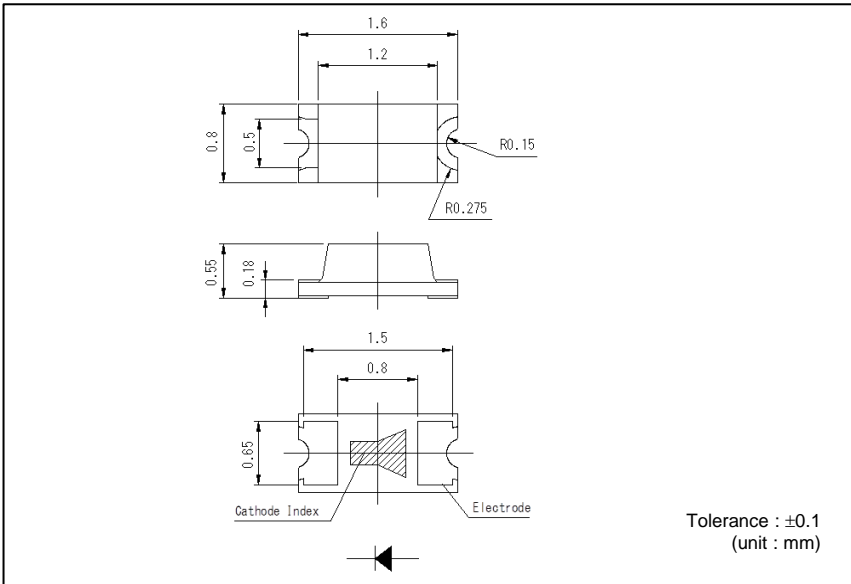
1608 (0603)
1.6 × 0.8mm (t=0.55mm)



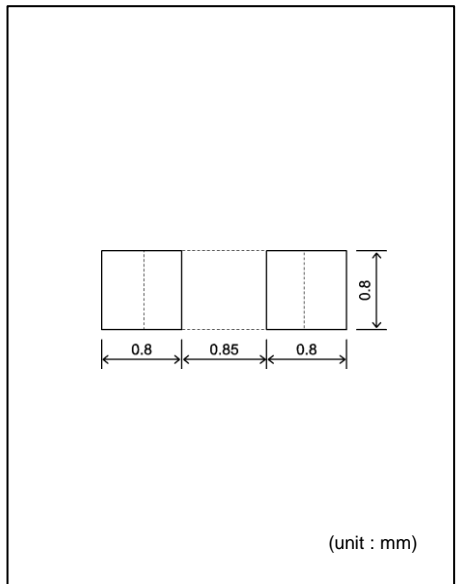
●Outline



●Dimensions



●Recommended Solder Pattern



●Specifications

Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)											
			Power Dissipation P _D (mW)	Forward Current I _F (mA)	Peak Forward Current I _{FP} (mA)	Reverse Voltage V _R (V)	Operating Temp. Topr(°C)	Storage Temp. Tstg(°C)	Forward Voltage V _F (V)	Reverse Current I _R (μA)	Dominant Wavelength λ _D (nm)			Luminous Intensity I _v (mcd)					
SML-D15VW	AlGaInP	Red	84	35	100*1	5	-40 to +100	-40 to +100	2.0	20	10	5	627	630	634	20	71	90	20
SML-D15UW													616	620	624		90	112	
SML-D15U2W		Orange	35	100*1	5	-40 to +100	-40 to +100	2.0	20	10	5	612	615	618	112	140			
SML-D15DW												602	605	608	180	224			
SML-D15YW		Yellow	87	35	100*1	5	-40 to +100	-40 to +100	2.1	20	10	5	587	590	593	56	71		
SML-D15MW		Yellowish Green											568	571	574	56	71		

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

●Electrical Characteristics Curves

reference

Fig.1 Forward Current - Forward Voltages

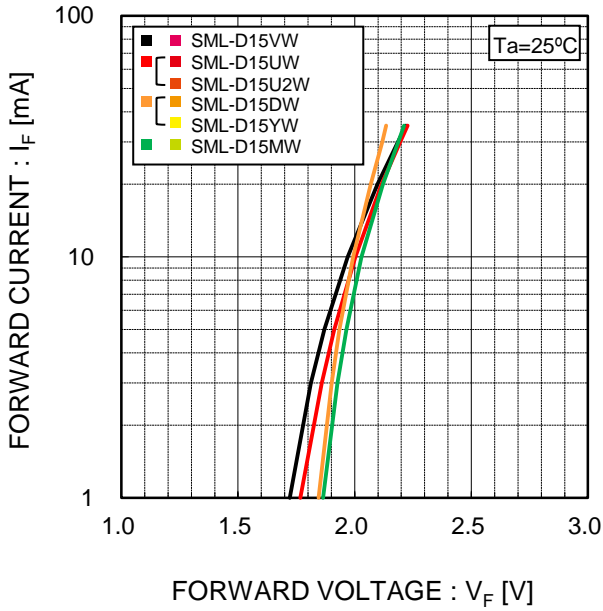


Fig.2 Luminous Intensity - Atmosphere Temperature

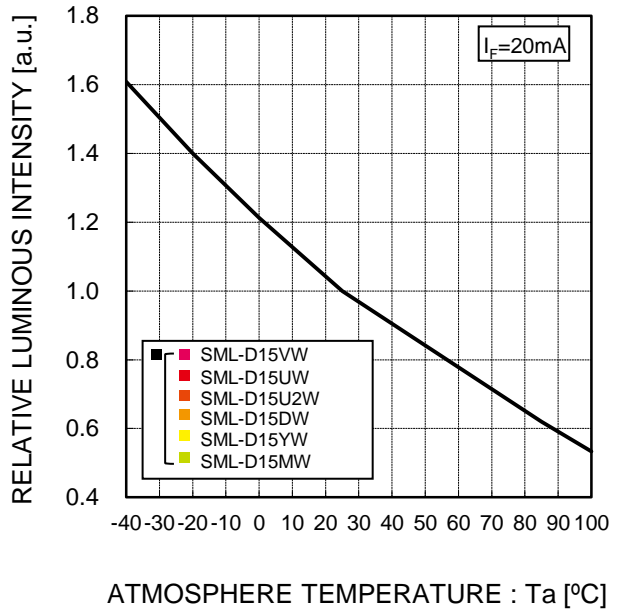


Fig.3 Luminous Intensity - Forward Current

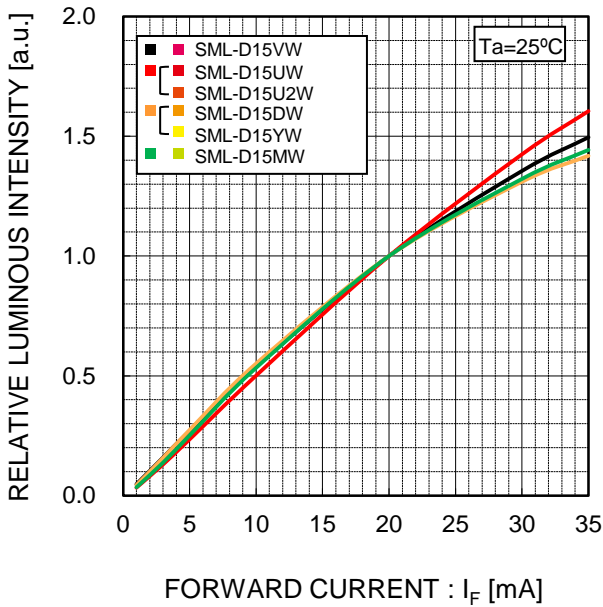
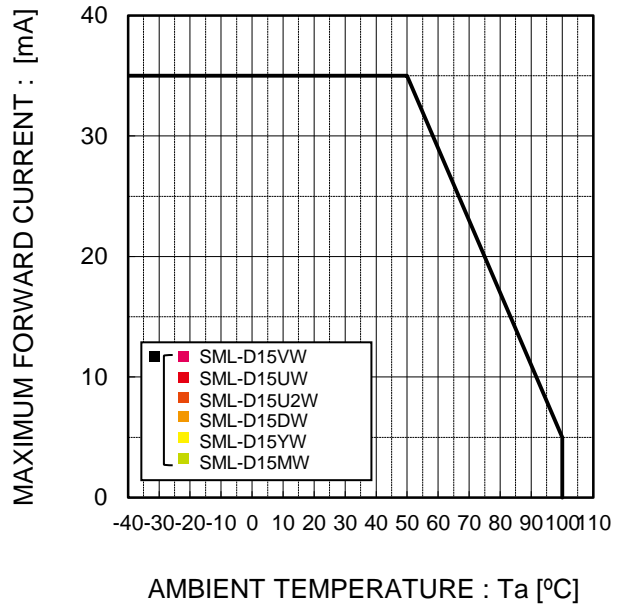


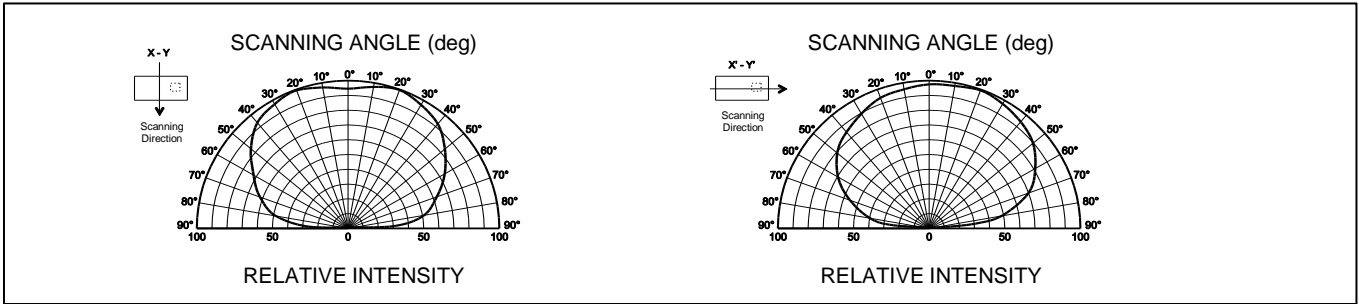
Fig.4 Derating



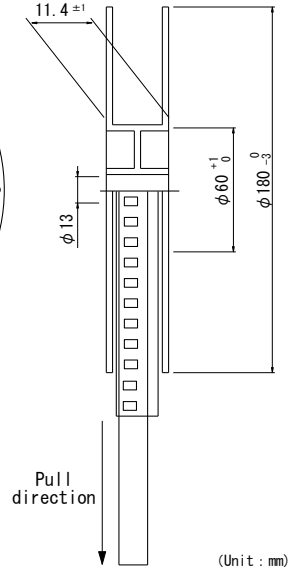
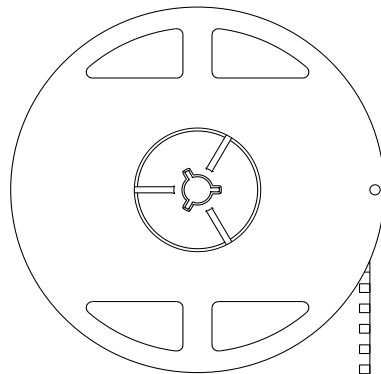
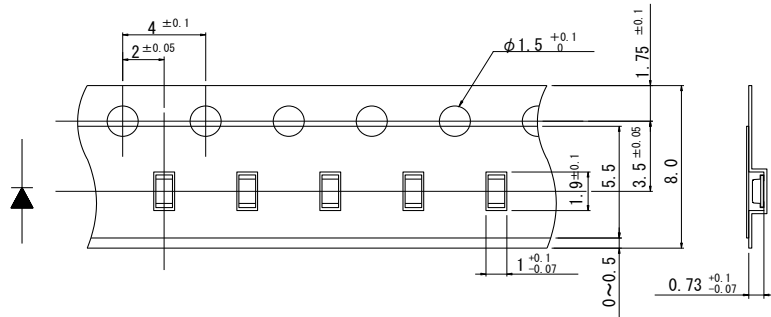
TjMax ... 110°C
 *Cu foil : 1.5mm × 1.0mm t=0.035mm
 Cathode PCB : FR4 t=0.8mm

reference

●Viewing Angle



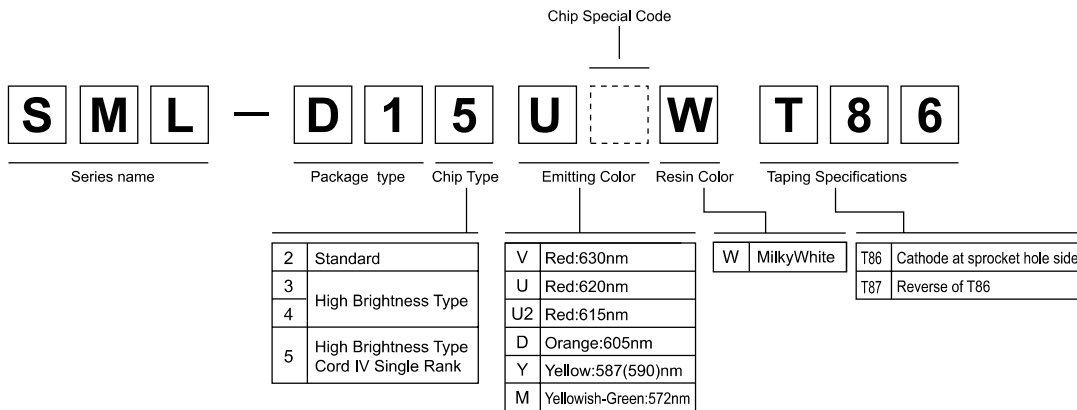
●Taping [T86]



(Unit : mm)

(Note) Tolerance is within $\pm 0.2\text{mm}$, unless otherwise specified.

●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

- 1) The information contained herein is subject to change without notice.
- 2) Before you use our Products, please contact our sales representative and verify the latest specifications :
- 3) Although ROHM is continuously working to improve product reliability and quality, semiconductors can break down and malfunction due to various factors.
Therefore, in order to prevent personal injury or fire arising from failure, please take safety measures such as complying with the derating characteristics, implementing redundant and fire prevention designs, and utilizing backups and fail-safe procedures. ROHM shall have no responsibility for any damages arising out of the use of our Products beyond the rating specified by ROHM.
- 4) Examples of application circuits, circuit constants and any other information contained herein are provided only to illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.
- 5) The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM or any other parties. ROHM shall have no responsibility whatsoever for any dispute arising out of the use of such technical information.
- 6) The Products are intended for use in general electronic equipment (i.e. AV/OA devices, communication, consumer systems, gaming/entertainment sets) as well as the applications indicated in this document.
- 7) The Products specified in this document are not designed to be radiation tolerant.
- 8) For use of our Products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a ROHM representative : transportation equipment (i.e. cars, ships, trains), primary communication equipment, traffic lights, fire/crime prevention, safety equipment, medical systems, servers, solar cells, and power transmission systems.
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SML-D15VW - Web Page



Part Number	SML-D15VW
Package	SML-D15
Unit Quantity	3000
Minimum Package Quantity	3000
Packing Type	Taping
Constitution Materials List	inquiry
RoHS	Yes