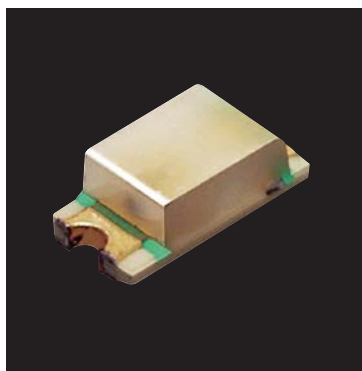


# High Brightness Single Rank 1608-Size Chip LEDs

## SML-D15 Series



### Optimized design delivers stable brightness with minimal variations

#### Product Outline

In automotive applications such as car audio and navigation systems, it is common to specify a particular brightness rank in order to suppress brightness variations. ROHM developed the SML-D15 series using advanced original process technology that enables stable production of single rank products, ensuring minimal brightness variations in end applications.

### Key Features

- 1608-size package
- Single brightness rank offered
- 2-3x brighter than conventional products (SML-D12x8W)
- AEC-Q101 (automotive reliability standard) qualified

### Single Rank Advantages

- Brightness variations minimized between individual LEDs in customer sets
- No need to select different resistances (for current control) for each rank, significantly reducing design man-hours
- No inventory management required for multiple ranks
- Eliminates the need specify ranks

### SML-D15 Lineup

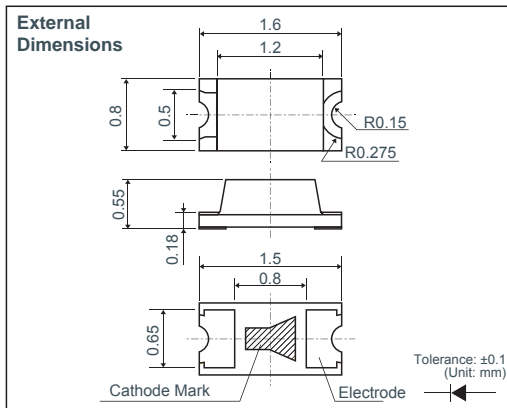
Part No.	Absolute Maximum Ratings						Electrical-Optical Characteristics										
	Permissible Loss Pd (mW)	Forward Current If (mA)	Peak Forward Current Ifp (mA) (at Duty1 /10.1kHz)	Reverse Voltage Vr (V)	Operating Temp. Topr (°C)	Storage Temp. Tstg (°C)	Forward Voltage Vf		Reverse Current Ir		Dominant Wavelength λd		Brightness IV <sup>1</sup>				
							Typ. (V)	If (mA)	Max. (μA)	V (V)	Typ. (nm)	If (mA)	Min. (mcd)	Max. (mcd)	If (mA)		
■ SML-D15VW	84	35	100	5	-40 to +100	-40 to +100	2.0	20	10	5	20	630	71	112	20		
■ SML-D15UW												620				90	140
■ SML-D15U2W												615				112	180
■ SML-D15DW												605				180	280
■ SML-D15YW	87						2.1					590	56	90			
■ SML-D15MW												571					

\*1: Measurement tolerance ±10%

#### Brightness Range (If=20mA)

Color	Brightness (mcd)	10~16	16~25	25~40	40~63	63~100	100~160	160~250	250~400
■ V (Red)			SML-D12		SML-D13				
■ U (Red)			SML-D12				SML-D15		
■ U2 (Red)						SML-D13			
■ D (Orange)				SML-D12				SML-D15	
■ Y (Yellow)			SML-D12					SML-D15	
■ M (Yellow-Green)		SML-D12		SML-D13					

Measurement tolerance ±10%



The content specified herein is for the purpose of introducing ROHM's products (hereinafter "Products"). If you wish to use any such Product, please be sure to refer to the specifications, which can be obtained from ROHM upon request. Great care was taken in ensuring the accuracy of the information specified in this document. However, should you incur any damage arising from any inaccuracy or misprint of such information, ROHM shall bear no responsibility for such damage. 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 and other parties. ROHM shall bear no responsibility whatsoever for any dispute arising from the use of such technical information. If you intend to export or ship overseas any Product or technology specified herein that may be controlled under the Foreign Exchange and the Foreign Trade Law, you will be required to obtain a license or permit under the Law. The content specified in this document is correct as of 19th November, 2015.

**ROHM Co., Ltd.**

21 Saini Mizosaki-cho, Ukyo-ku,  
Kyoto 615-8585 Japan  
TEL: +81-75-311-2121  
www.rohm.com

