

SMLK19 series

PSML2

4520(1808)
4.5×2.0mm(t=0.6mm)

Features

- High heat radiation package from ROHM original flat flame structure.
- Low current LED type. High Reliability from high heat radiation.

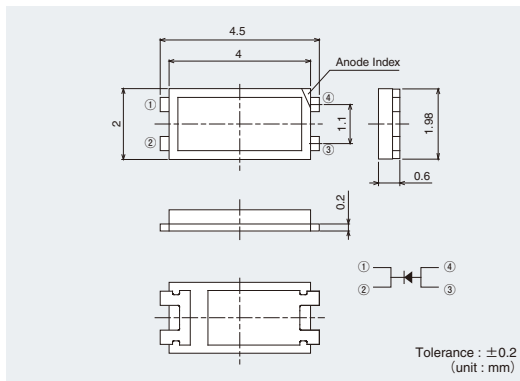
Color Type WB

Specifications

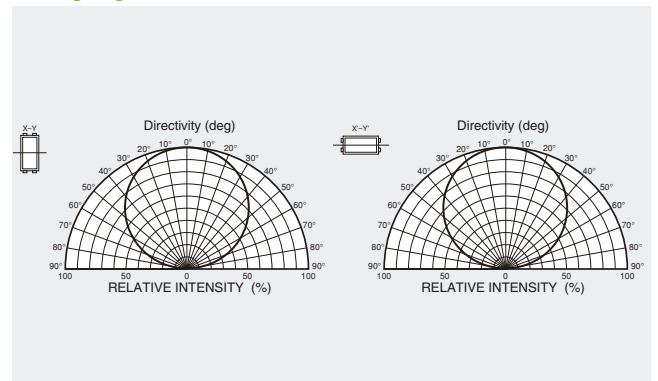
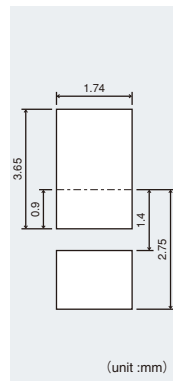
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)							
			Power Dissipation Pd(mW)	Forward Current If(mA)	Peak Forward Current Ifp(mA)	Reverse Voltage Vr(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)	Forward Voltage Vf Typ.(V)	Forward Current If(mA)	Chromaticity Coordinates (x, y)	Luminous Intensity Iv If(mA)	Min. (mcd)	Typ. (mcd)	Luminous Flux Φv Typ. (lm)
<input type="checkbox"/> SMLK19WBCEW	InGaN on SiC	White High color rendering index (5000K)	220	50	200*	-	-40 to +100	-40 to +100	3.2	20	(0.30, 0.28)	20	1100	20	20
<input type="checkbox"/> SMLK19WBEDW											(0.34, 0.34)				
<input type="checkbox"/> SMLK19WBEAW											(0.345, 0.351)				
<input type="checkbox"/> SMLK19WBEBW											(0.444, 0.406)				

*Duty1/10≤10ms (): Reference

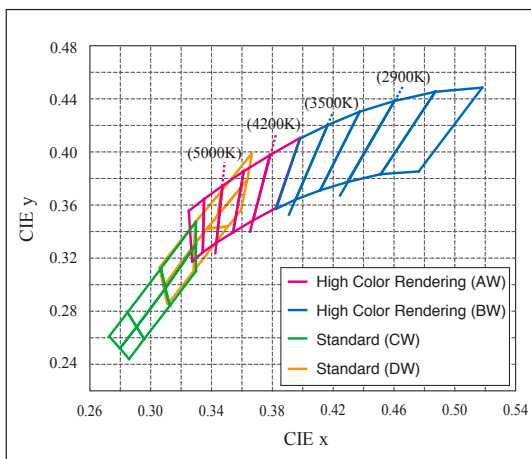
Dimensions



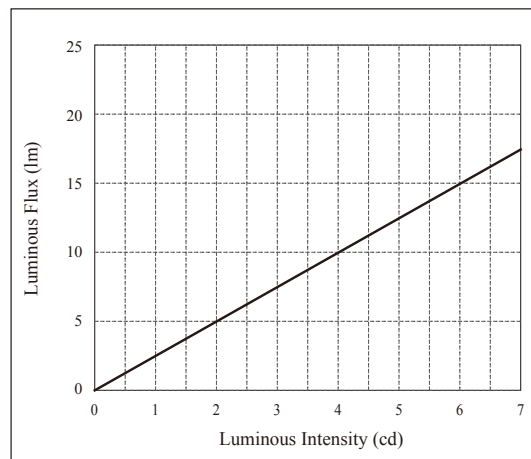
Recommended Solder Pattern Viewing Angle



Chromaticity Diagram

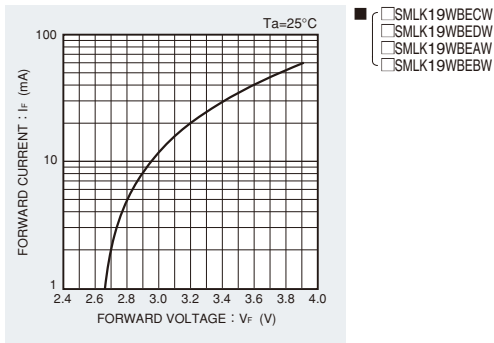


IV-θv



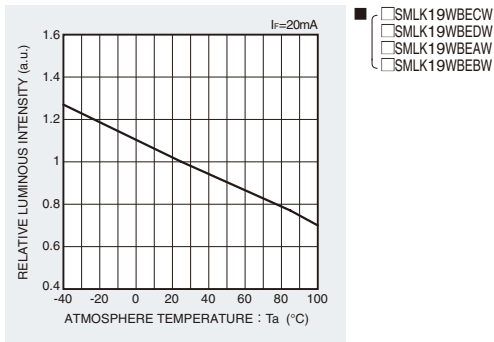
Electrical Characteristics Curves

Forward Current-Forward Voltage



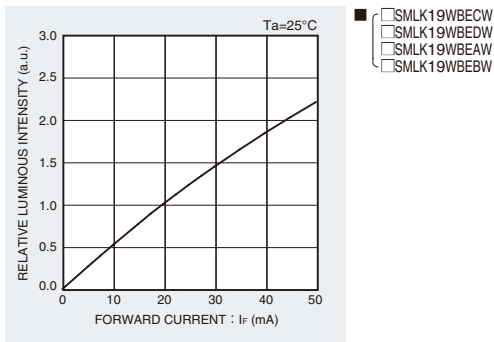
- SMLK19WBECW
- SMLK19WBEDW
- SMLK19WBEAW
- SMLK19WBEBW

Luminous Intensity-Atmosphere Temperature



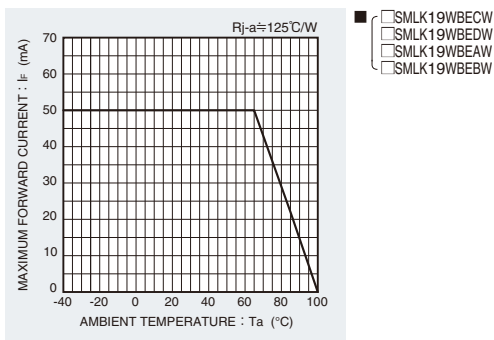
- SMLK19WBECW
- SMLK19WBEDW
- SMLK19WBEAW
- SMLK19WBEBW

Luminous Intensity-Forward Current



- SMLK19WBECW
- SMLK19WBEDW
- SMLK19WBEAW
- SMLK19WBEBW

Derating



- SMLK19WBECW
- SMLK19WBEDW
- SMLK19WBEAW
- SMLK19WBEBW

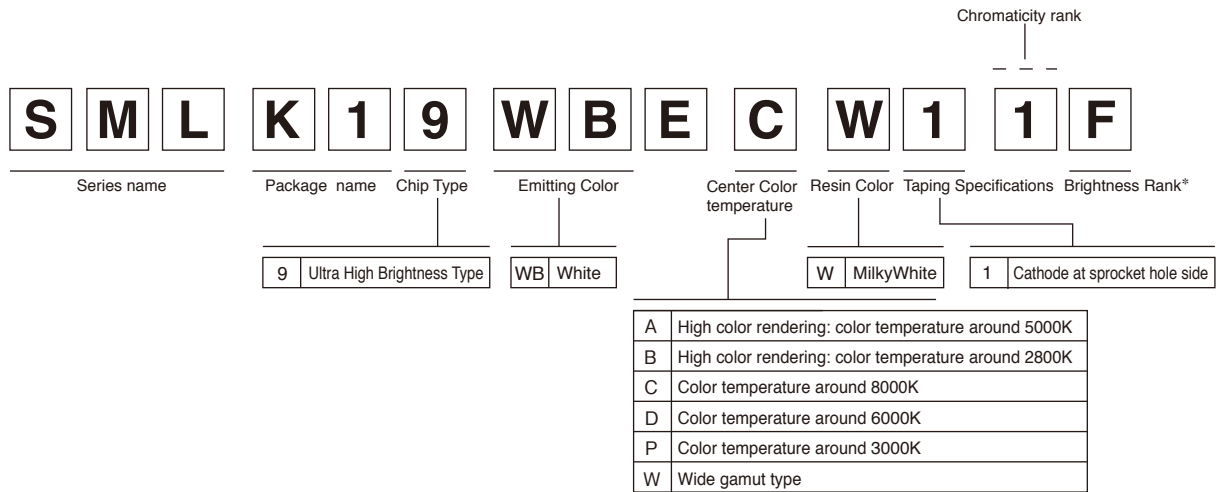
Rank Reference of Brightness

White (WB)

(Ta=25°C, If=20mA)

	Package size (mm)	Height (mm)	Luminous intensity (mcd)	X1	X2	Y1	Y2	Z1	Z2		
				900 to 1100	1100 to 1400	1400 to 1800	1800 to 2200	2200 to 2800	2800 to 3600		
High power	4520	0.6		SMLK19WBEAW							
				SMLK19WBEBW							
				SMLK19WBECW							
				SMLK19WBEDW							

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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Examples of application circuits, circuit constants and any other information contained herein illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.

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Please be sure to implement in your equipment using the Products safety measures to guard against the possibility of physical injury, fire or any other damage caused in the event of the failure of any Product, such as derating, redundancy, fire control and fail-safe designs. ROHM shall bear no responsibility whatsoever for your use of any Product outside of the prescribed scope or not in accordance with the instruction manual.

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