

SML-K19 series

PSML2

Features

- High luminosity white LEDs
- Flat-frame high heat dissipation package

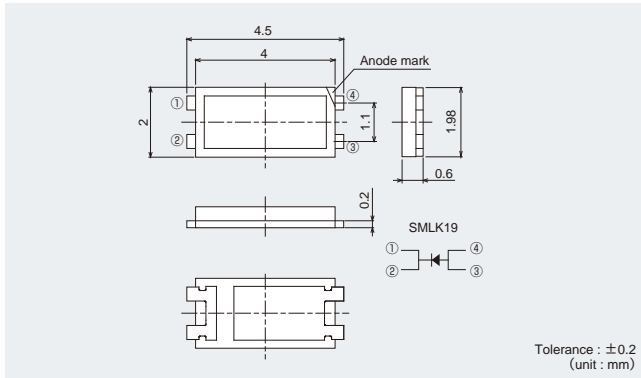
Color Type WB

Specifications

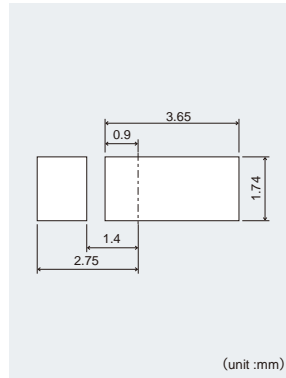
| Part No. | Chip Structure | Emitting Color | Absolute Maximum Ratings (Ta=25°C) | | | | | | Electrical and Optical Characteristics (Ta=25°C) | | | | | | | | | |
|--------------------------------------|----------------|----------------|------------------------------------|------------------------|------------------------------|-----------------------|--------------------------------|------------------------------|--|------------------------|-----------------------------|-----------------------|---------------------|--------|---------------------------------|-----------|---------------------------|--------|
| | | | 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) | Reverse Current Ir Max.(μA) | Reverse Voltage Vr(V) | Chromaticity (x, y) | If(mA) | Luminous Intensity Iv Min.(mcd) | Typ.(mcd) | Luminous Flux Φv Typ.(lm) | Iv(mA) |
| <input type="checkbox"/> SMLK19WBECW | InGaN on SiC | White | 190 | 50 | 100 [※] | 5 | -40 to +85 | -40 to +100 | 3.2 | 20 | 10 | 5 | (0.30, 0.28) | 20 | 1100 | 20 | (5) | 20 |
| <input type="checkbox"/> SMLK19WBEDW | | | | | | | | | | | | | (0.34, 0.34) | | | | (4.5) | |
| <input type="checkbox"/> SMLK19WBEAW | | White (5000K) | | | | | | | | | | | 1400 | | | | (4.5) | |
| <input type="checkbox"/> SMLK19WBEBW | | White (3000K) | | | | | | | | | | | 1400 | | | | (4.5) | |

※Duty 1/10, 10ms Max. ():Reference

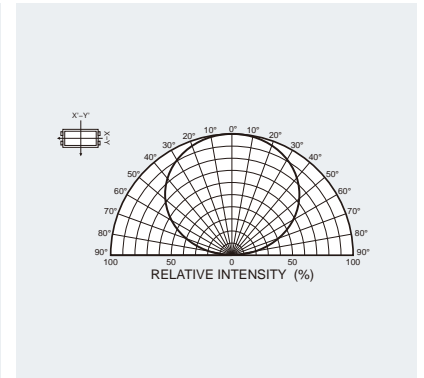
Dimensions



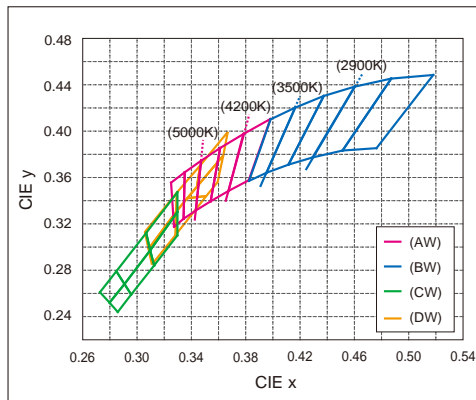
Recommended Solder Pattern



Viewing Angle

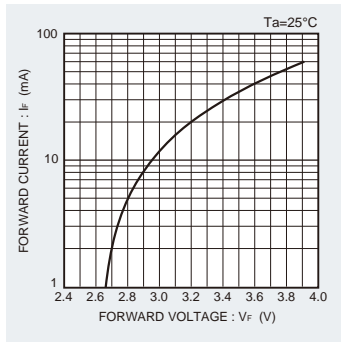


Chromaticity Diagram



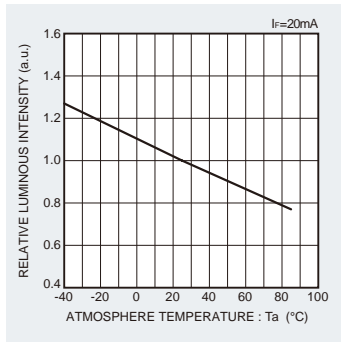
Electrical Characteristics Curves

Forward Current-Forward Voltage



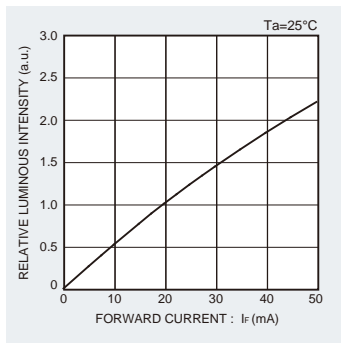
- SMLK19WBECW
- SMLK19WBEDW
- SMLK19WBEAW
- SMLK19WBEBW

Luminous Intensity-Atmosphere Temperature



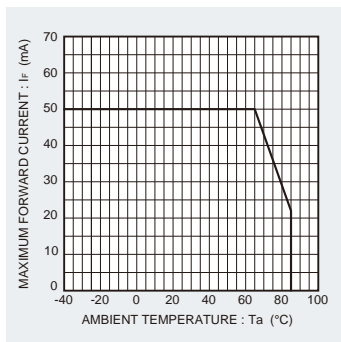
- SMLK19WBECW
- SMLK19WBEDW
- SMLK19WBEAW
- SMLK19WBEBW

Luminous Intensity-Forward Current



- SMLK19WBECW
- SMLK19WBEDW
- SMLK19WBEAW
- SMLK19WBEBW

Deratings



- SMLK19WBECW
- SMLK19WBEDW
- SMLK19WBEAW
- SMLK19WBEBW

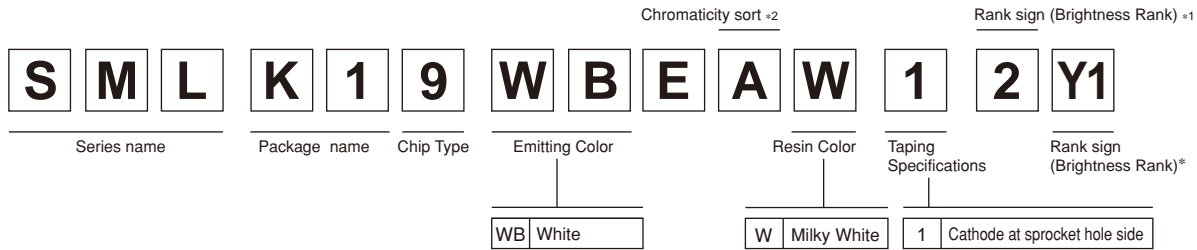
Rank Reference of Brightness

■ White (WB)

| Package structure | Package size | Height (mm) | Luminous Intensity (cd) | I _f (mA) | S1 | S2 | T1 | T2 | U1 | U2 | V1 | V2 | W1 | W2 | X1 | X2 | Y1 | Y2 | Z1 | Z2 | | | |
|-------------------|--------------|-------------|-------------------------|---------------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|--------|-------------|--------------|--------------|--------------|--------------|--------------|--|--|--|
| | | | | | 90 to 110 | 110 to 140 | 140 to 180 | 180 to 220 | 220 to 280 | 280 to 360 | 360 to 450 | 450 to 560 | 560 to 710 | 710 to | 900 to 1100 | 1100 to 1400 | 1400 to 1800 | 1800 to 2200 | 2200 to 2800 | 2800 to 3600 | | | |
| PSML2 | 4520 | 0.6 | 90 | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | |

※Brightness on specification sheet include tolerance of within ± 10%.

Part No. Construction



- * Concerning the Brightness rank
- Please refer to the rank chart above for luminous intensity classification.
- Please refer to the Specification sheet for color 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.

* *2: Please refer to Chromaticity diagram.

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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