SMLXA series

(PSML-S)

4022（1608）
4.0×2.2mm(t=2.15mm)

Features

・High brightness side-view white LEDs
・High heat radiation

Color Type | WB

Specifications

Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25℃)						Electrical and Optical Characteristics (Ta=25℃)								
			Power Dissipation P$_D$(mW)	Forward Current I$_F$(mA)	Peak Forward Current I$_{FP}$(mA)	Reverse Voltage V$_R$(V)	Operating Temperature Topr(℃)	Storage Temperature Tstg(℃)	Forward Voltage V$_F$ Typ.(V)	I$_F$(mA)	Reverse Current I$_R$ Max.(μA)	V$_R$(V)	Chromaticity (x, y)	I$_F$(mA)	Luminous Intensity Iv Min.(mcd)	Typ.(mcd)	I$_F$(mA)
□SMLXA4WBECW(A)	InGaN	White	195	50	100※	5	-40 to +100	-40 to +100	3.2	20	10	5	(0.30, 0.28)	20	1,100	2,100	20
□SMLXA4WBZTW			114	30		-			3.2	20	-	-	(0.31, 0.31)		900	1,800	

※Duty1/10, 1kHz

Dimensions

(4)
3.5   2.2
Cathode mark
(2.15)
SMLXA4WBECW
SMLXA4WBZTW

Tolerance : ±0.1
(unit : mm)
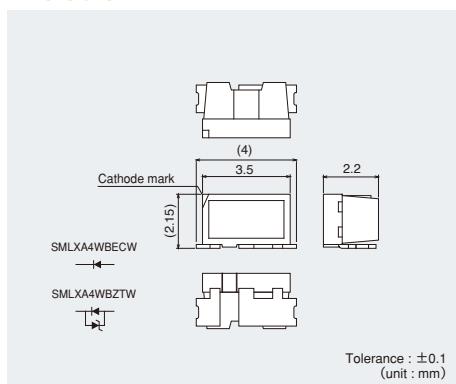
Recommended Solder Pattern

1.7   3.05
1.7
2.6   2.6

(unit : mm)

Viewing Angle

SCANNING ANGLE (deg)
X-Y
X-Y'
RELATIVE INTENSITY (%)
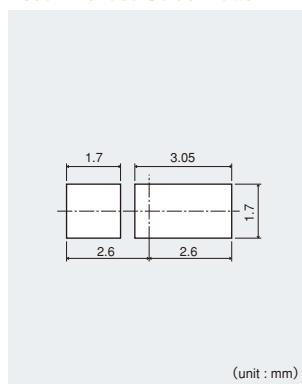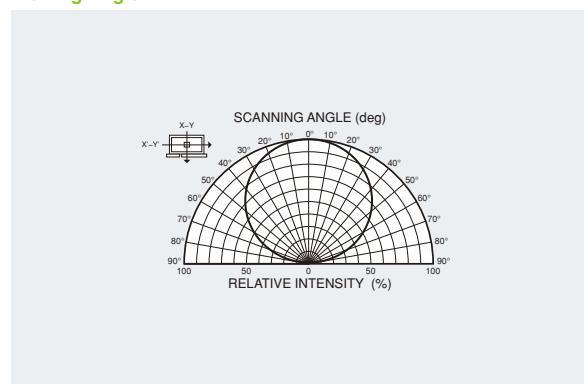
Electrical Characteristics Curves

■ Forward Current-Forward Voltage

Ta=25°C
FORWARD CURRENT : I$_F$ (mA)
FORWARD VOLTAGE : V$_F$ (V)

■ □SMLXA4WBECW(A)
☑ □SMLXA4WBZTW
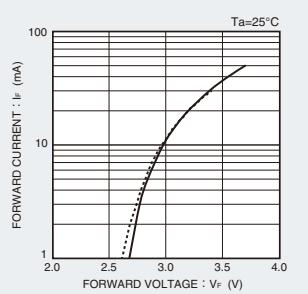
■ Luminous Intensity-Atmosphere Temperature

I$_F$=20mA
RELATIVE LUMINOUS INTENSITY (a.u.)
ATMOSPHERE TEMPERATURE : Ta (°C)

■ □SMLXA4WBECW(A)
□SMLXA4WBZTW
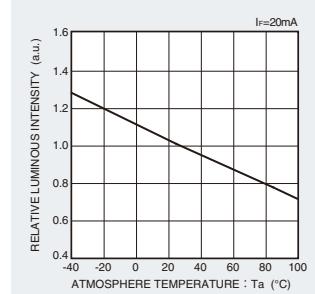
■ Luminous Intensity-Forward Current
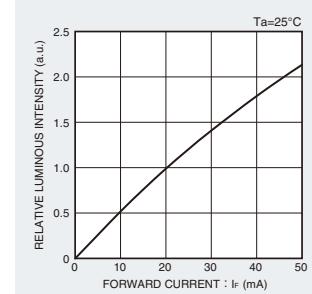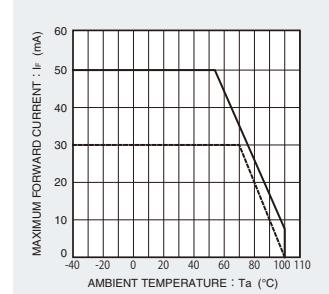
Ta=25°C
RELATIVE LUMINOUS INTENSITY (a.u.)
FORWARD CURRENT : I$_F$ (mA)

■ □SMLXA4WBECW(A)
□SMLXA4WBZTW

■ Derating

MAXIMUM FORWARD CURRENT : I$_F$ (mA)
AMBIENT TEMPERATURE : Ta (°C)

■ □SMLXA4WBECW(A)
☑ □SMLXA4WBZTW

Rank Reference of Brightness

■ White (WB)

| Package structure	Package size	Height (mm)	Luminous Intensity I_F(mA) (mcd)	S1	S2	T1	T2	U1	U2	V1	V2	W1	W2	X1	X2	Y1	Y2	Z1	Z2
				90 to	110 to	140 to	180 to	220 to	280 to	360 to	450 to	560 to	710 to	900 to 1100	1100 to 1400	1400 to 1800	1800 to 2200	2200 to 2800	2800 to 3600
Side View (Reflector)	4022	2.15	20												SMLXA4WBECW(A)*				

*Please note that the brightness of some products may fall between ranks (half rank).

Package structure	Package size	Height (mm)	Luminous Intensity I_F(mA) (mcd)	S	T	U	V	W	X	Y	Z
				90 to	140 to	220 to	360 to	560 to	710 to	1400 to	2200 to 3600
Side View (Reflector)	4022	2.15	20						SMLXA4WBZTW		

Chromaticity Rank

Part No. Construction

Chromaticity sort *2

(Special Code)   Rank sign (Chromaticity Rank) *1

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S  M  L    X  A  4    W  B    E    C  W    1    A    2  Y1
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Series name   Package name   Chip Type   Emitting Color   Resin Color   Taping Specifications   Rank sign (Brightness Rank) *1

WB	White

W	MilkyWhite

1	Cathode at sprocket hole side
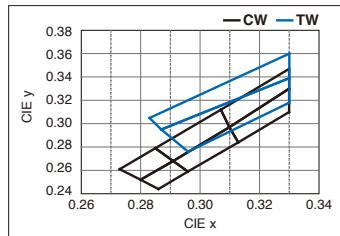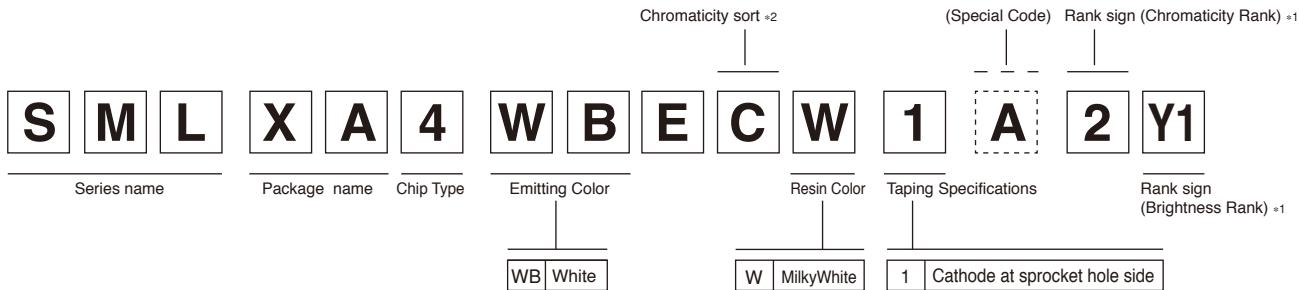
*1: Concerning the Brightness rank
- Please refer to the rank chart above for luminous intensity classification.
- Please refer to the Specification sheet for color classification.
- Part name is individual for each rank.
- When shipped as sample, the part name will be a representative part name.
  General products are free of ranks. Please contact sales if rank appointment is needed.

*2: Please refer to Chromaticity diagram.
* Please refer to the Specification sheet about Taping specification.

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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