Side View Chip LEDs $0605 < 1.6 \times 1.15 t = 0.55 mm > High Brightness Type$



SMLA13WB *** Series

Side View



note) "-" will be taken out for emitting color B/E series.

■ Absolute Maximum Ratings (Ta=25°C)

Part No.		Emitting color	Power dissipation P _D (mW)	Forward current IF (mA)	Peak forward current IFP* (mA)	Reverse voltage V _R (V)	Operating temperature Topr (°C)	Storage temperature T _{stg} (°C)
SM	ILA13WBDW	White	74	20	100	5	-30 to +85	-40 to +100

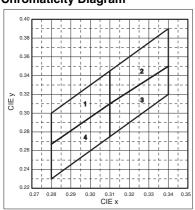
*:Duty ≦ 1/10 1kHz

■ Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin	Forward voltage V _F		Reverse current In		Chromaticity coordinates			Brightness Iv		
		Typ. (V)	lF* (mA)	Max. (µA)	VR (V)	x	у	lF* (mA)	Min. (mcd)	Typ. (mcd)	IF* (mA)
SMLA13WBDW	Phosphor included	3.1	10	100	5	0.31	0.31	10	8.5	170	10

^{*}Pulse width : 30ms

■Chromaticity Diagram

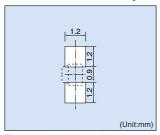


Chromaticity Coordinates (Ta=25°C, IF=10mA)

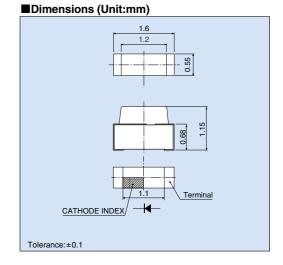
	1		2	:	3	4		
х	у	х	у	х	у	х	у	
0.280	0.267	0.310	0.345	0.340	0.320	0.280	0.230	
0.280	0.300	0.340	0.390	0.310	0.275	0.280	0.267	
0.310	0.345	0.340	0.350	0.310	0.310	0.310	0.310	
0.010	0.010	0.010	0.010	0.040	0.050	0.010	0.075	

Measurement tolerance:±0.02

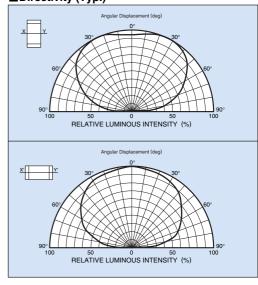
■ Recommended Pad Layout



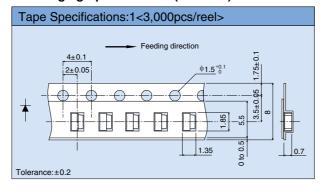
The recommended thickness of the screen mask for soldering is more than 150µm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

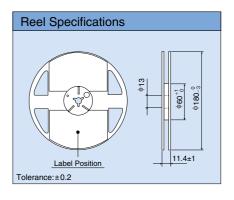


■Directivity (Typ.)



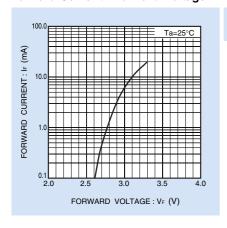
■ Packaging Specifications (Unit:mm)





■Electrical Characteristic Curves

Forward Current - Forward Voltage

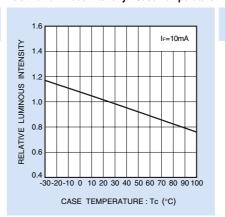


Relative Luminous Intensity - Case Temperature

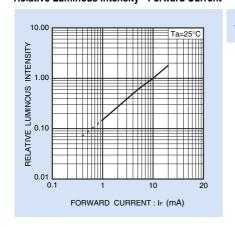
SMLA13WBDW

SMLA13WBDW

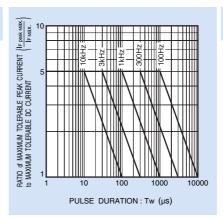
SMLA13WBDW



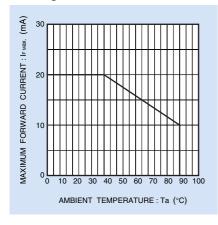
Relative Luminous Intensity - Forward Current



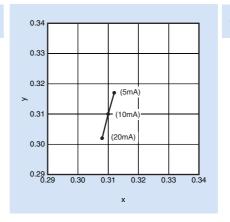
Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



Forward Current - Chromaticity Diagram



SMLA13WBDW

SMLA13WBDW

SMLA13WBDW

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Appendix1-Rev2.0

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