

# Side View Chip LEDs 0605 <1.6×1.15 t=0.55mm> High Brightness Type



## SMLA13WB \*\*\* Series Side View

Emitting Color	White
Material	InGaN on SiC
Package Size(mm)	 1611(0605) 1.6×1.15(t=0.55)
Part No.	SMLA13WBDW

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

### Absolute Maximum Ratings (Ta=25°C)

Part No.	Emitting color	Power dissipation P <sub>D</sub> (mW)	Forward current I <sub>F</sub> (mA)	Peak forward current I <sub>FP</sub> * (mA)	Reverse voltage V <sub>R</sub> (V)	Operating temperature T <sub>opr</sub> (°C)	Storage temperature T <sub>stg</sub> (°C)
SMLA13WBDW	White	74	20	100	5	-30 to +85	-40 to +100

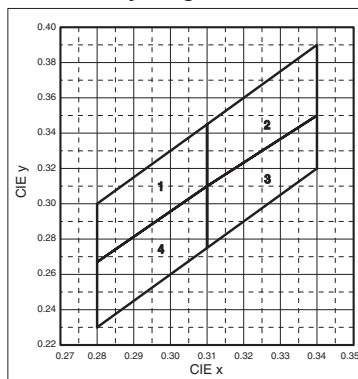
\*:Duty ≤ 1/10 1kHz

### Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin	Forward voltage V <sub>F</sub>		Reverse current I <sub>R</sub>		Chromaticity coordinates			Brightness I <sub>v</sub>		
		Typ. (V)	I <sub>F</sub> * (mA)	Max. (μA)	V <sub>R</sub> (V)	x	y	I <sub>F</sub> * (mA)	Min. (mcd)	Typ. (mcd)	I <sub>F</sub> * (mA)
SMLA13WBDW	Phosphor included	3.1	10	100	5	0.31	0.31	10	8.5	170	10

\*Pulse width : 30ms

### Chromaticity Diagram

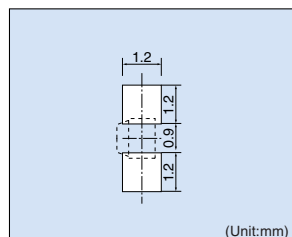


Chromaticity Coordinates (Ta=25°C, I<sub>F</sub>=10mA)

1		2		3		4	
x	y	x	y	x	y	x	y
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
0.310	0.310	0.310	0.310	0.340	0.350	0.310	0.275

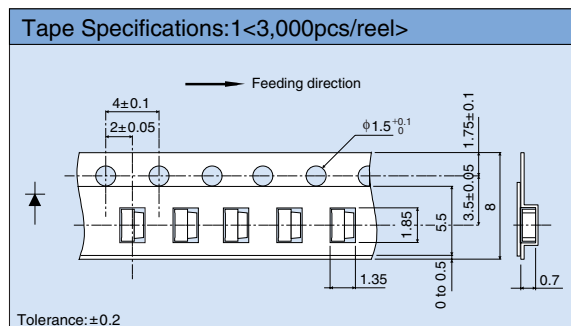
Measurement tolerance:±0.02

### Recommended Pad Layout



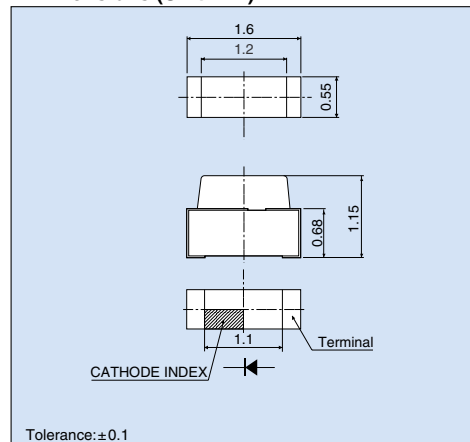
The recommended thickness of the screen mask for soldering is more than 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

### Packaging Specifications (Unit:mm)



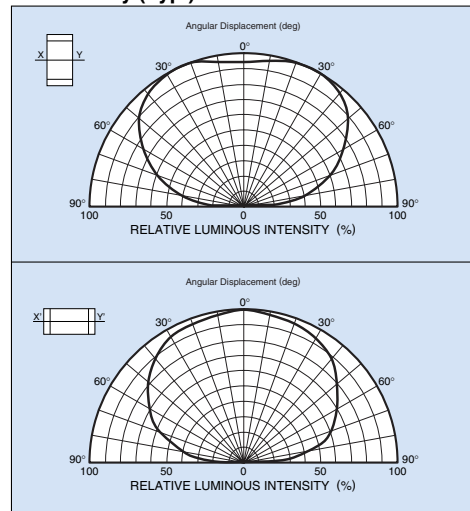
Tolerance: ±0.2

### Dimensions (Unit:mm)

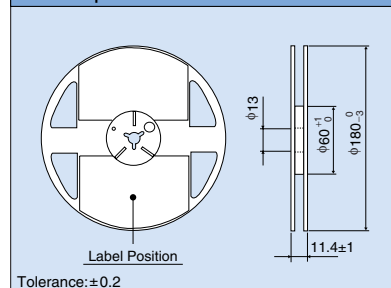


Tolerance: ±0.1

### Directivity (Typ.)



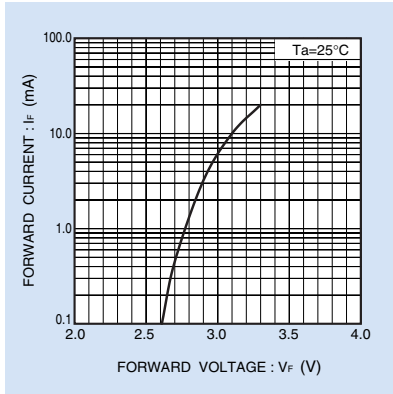
### Reel Specifications



Tolerance: ±0.2

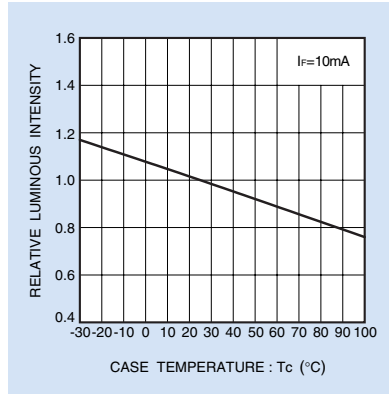
## Electrical Characteristic Curves

### Forward Current - Forward Voltage



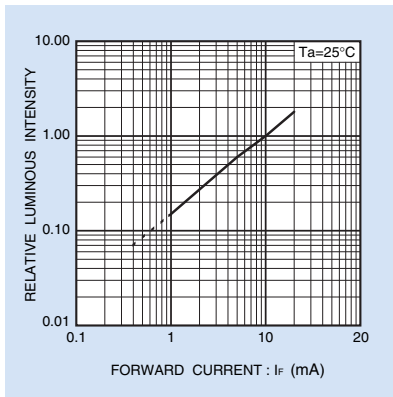
— SMLA13WBDW

### Relative Luminous Intensity - Case Temperature



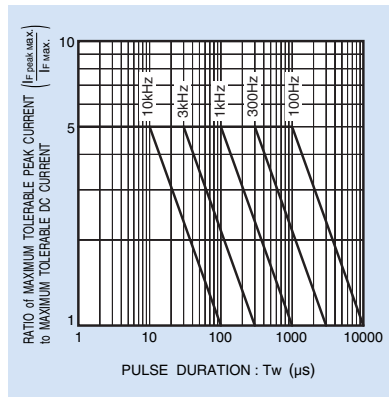
— SMLA13WBDW

### Relative Luminous Intensity - Forward Current



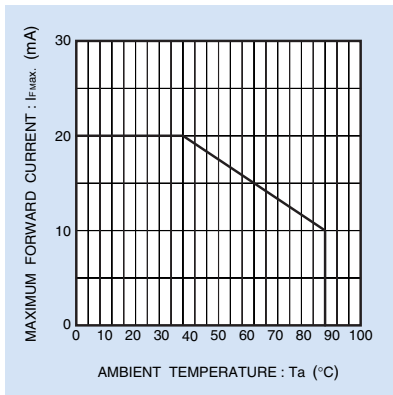
— SMLA13WBDW

### Ratio of Maximum Tolerable Peak Current - Pulse Duration



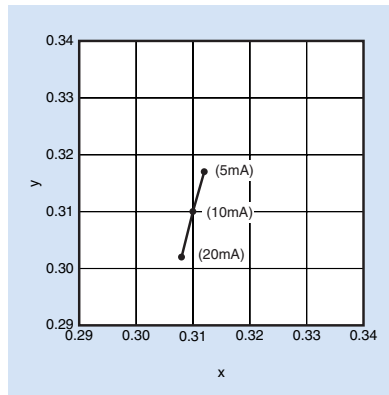
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### Derating



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### Forward Current - Chromaticity Diagram



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