

Side View Chip LEDs 0605 <1.6×1.15 t=0.55mm> Low Current Type(I_F ≤ 10mA)

SMLA12WB *** Series

Side View

Emitting Color	White
Material	InGaN on SiC
Package Size(mm)	
	
1611(0605) 1.6×1.15(t=0.55)	
Part No.	SMLA12WBC7W

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

Absolute Maximum Ratings (Ta=25°C)

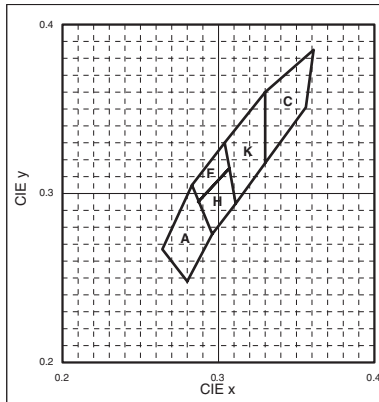
Part No.	Emitting color	Power dissipation P _D (mW)	Forward current I _F (mA)	Peak forward current I _{FP} * (mA)	Reverse voltage V _R (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
SMLA12WBC7W	White	66	20	100	5	-30 to +85	-40 to +100

*:Duty ≤ 1/10 1kHz

Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin	Forward voltage V _F		Reverse current I _R		Brightness I _v			Chromaticity coordinates		
		Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	Min. (mcd)	Typ. (mcd)	I _F (mA)	x	y	I _F (mA)
SMLA12WBC7W	Phosphor included	2.9	5	100	5	22	56	5	0.30	0.30	5

Chromaticity Diagram

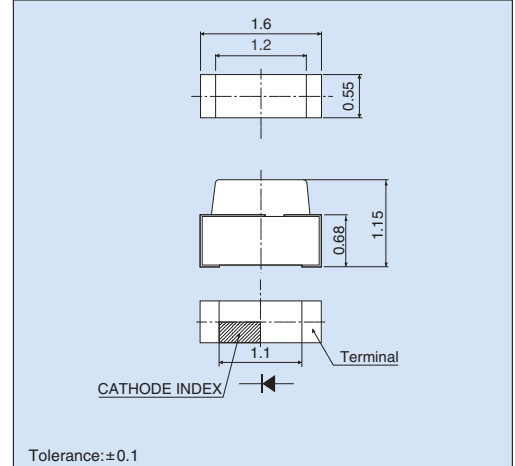


Chromaticity Coordinates (Ta=25°C, I_F=5mA)

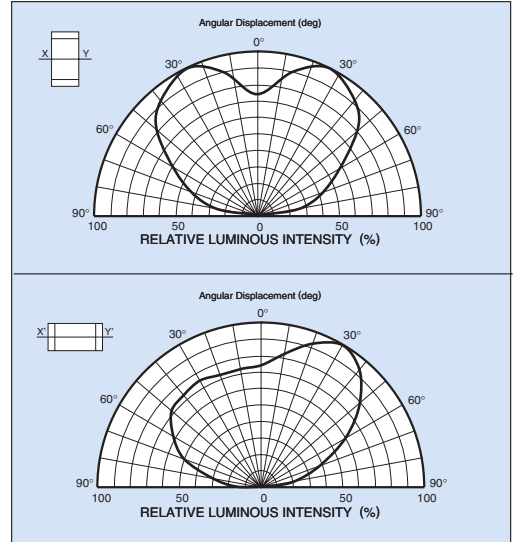
A		F		H		K		C	
x	y	x	y	x	y	x	y	x	y
0.280	0.248	0.283	0.305	0.287	0.295	0.304	0.330	0.330	0.318
0.296	0.276	0.304	0.330	0.307	0.315	0.330	0.360	0.356	0.351
0.283	0.305	0.307	0.315	0.311	0.294	0.330	0.318	0.361	0.385
0.264	0.267	0.287	0.295	0.296	0.276	0.311	0.294	0.330	0.360

Measurement tolerance:±0.02

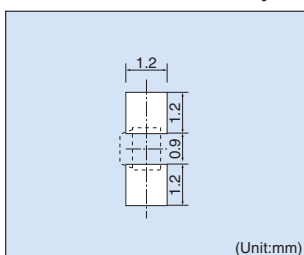
Dimensions (Unit:mm)



Directivity (Typ.)

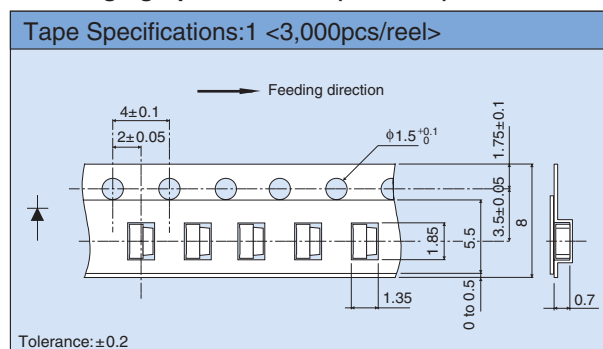


Recommended Pad Layout

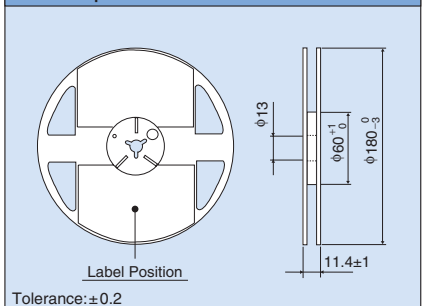


The recommended thickness of the screen mask for soldering is more than 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)

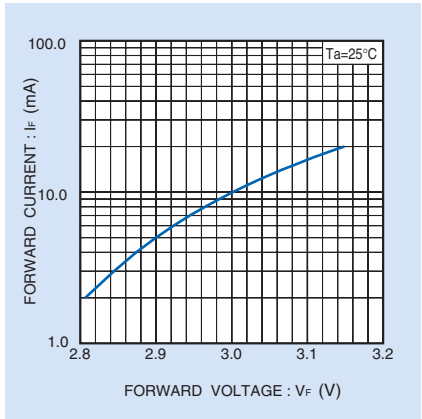


Reel Specifications



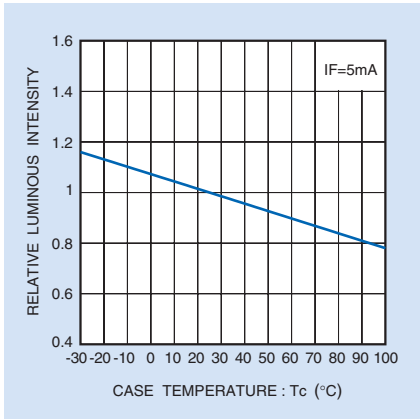
■Electrical Characteristic Curves

Forward Current - Forward Voltage



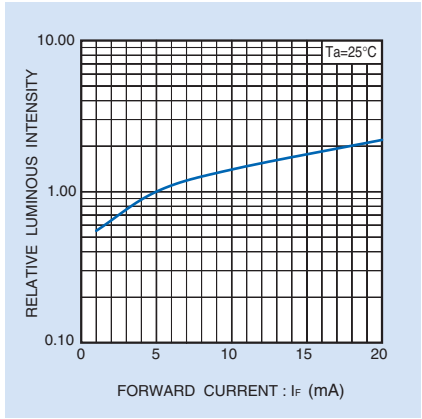
— SMLA12WBC7W

Relative Luminous Intensity - Case Temperature



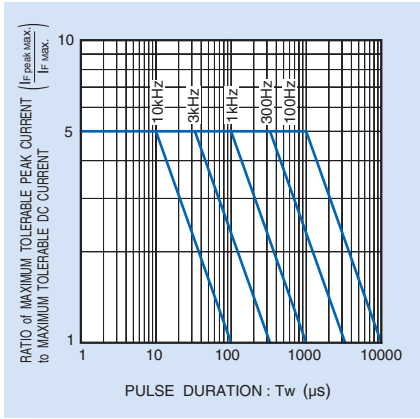
— SMLA12WBC7W

Relative Luminous Intensity - Forward Current



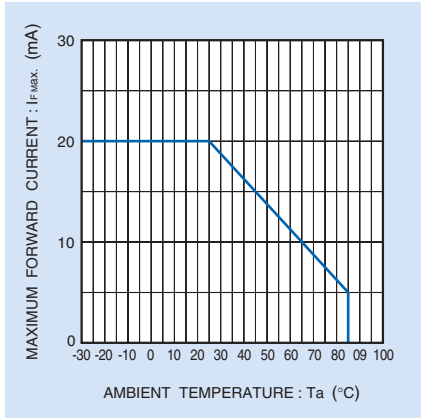
— SMLA12WBC7W

Ratio of Maximum Tolerable Peak Current - Pulse Duration



— SMLA12WBC7W

Derating



— SMLA12WBC7W

Notes

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