0603 <1.6×0.8 t=0.36mm>
Low Current Type(I_F≦10mA)

SMLE12WB ＊＊＊ Series

Emitting Color	White
Material	InGaN on SiC
Package Size(mm)	1608(0603) 1.6×0.8(t=0.36)
Part No.	**SMLE12WBC7W**

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

■Absolute Maximum Ratings (Ta=25°C)

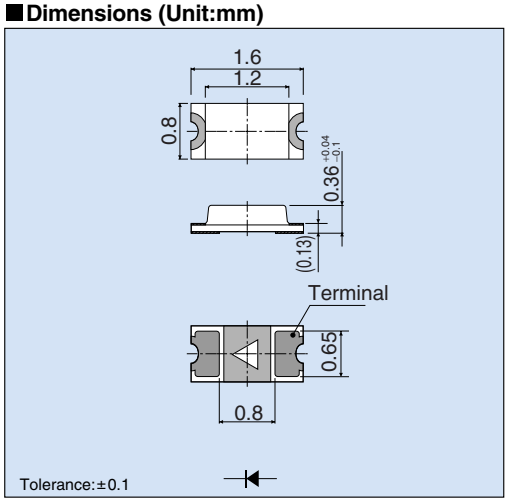
Part No.	Emitting color	Power dissipation P_D (mW)	Forward current I_F (mA)	Peak forward current I_{FP}* (mA)	Reverse voltage V_R (V)	Operating temperature T_{opr} (C)	Storage temperature T_{stg} (C)
SMLE12WBC7W	White	66	20	100	5	-30 to +85	-40 to +100

＊:Duty ≦1/10, 1kHz.

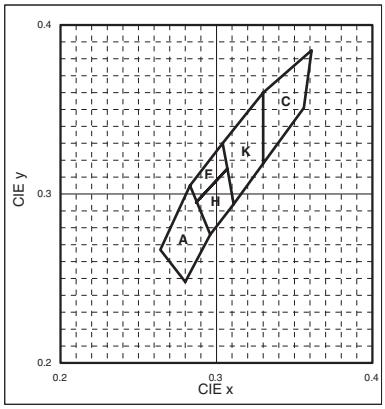
■Electrical Optical Characteristics (Ta=25°C)

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)
SMLE12WBC7W	Phosphor included	2.9	5	100	5	22	71	5	0.30	0.30	5

■Dimensions (Unit:mm)



■Chromaticity Diagram

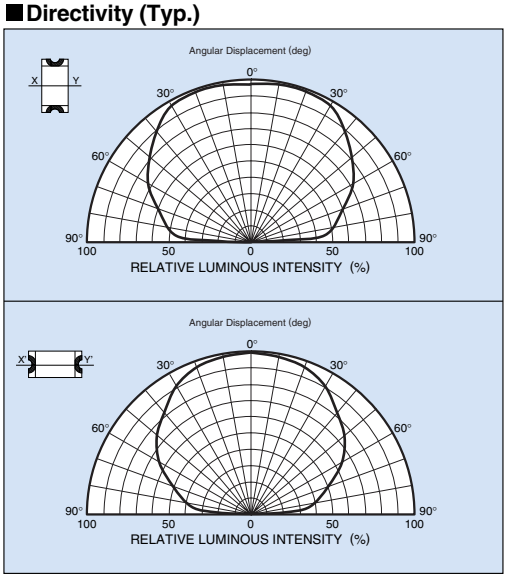


Chromaticity Coordinates (Ta=25˚C, IF=5mA)

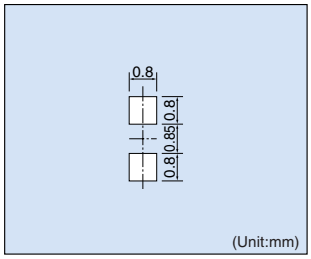
A		F		H		K		C	
x	y	x	y	x	y	x	y	x	y
0.280	0.248	0.283	0.305	0.287	0.295	0.304	0.330	0.330	0.318
0.296	0.276	0.304	0.330	0.307	0.315	0.330	0.360	0.356	0.351
0.283	0.305	0.307	0.315	0.311	0.294	0.330	0.318	0.361	0.385
0.264	0.267	0.287	0.295	0.296	0.276	0.311	0.294	0.330	0.360

Measurement tolerance:±0.02

■Directivity (Typ.)



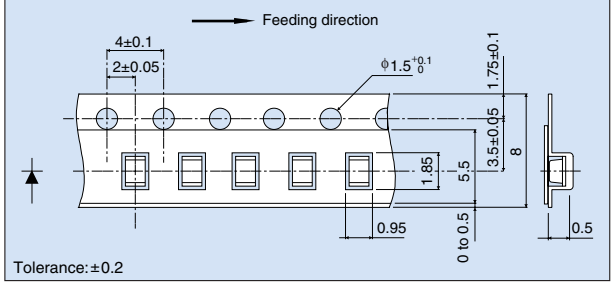
■Recommended Pad Layout



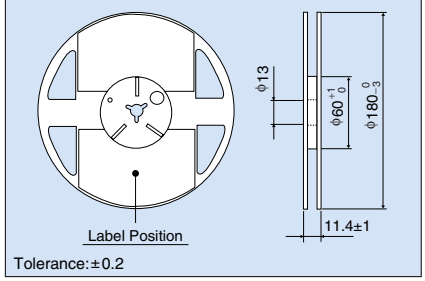
The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

■Packaging Specifications (Unit:mm)

Tape Specifications : 1 <5,000pcs/reel>

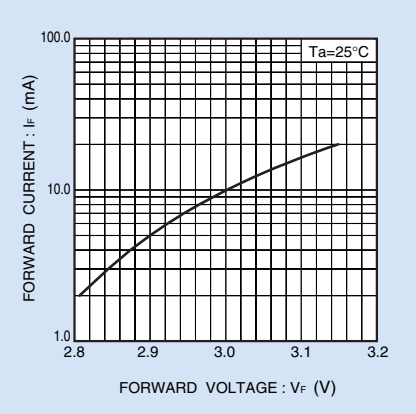


Reel Specifications



■Electrical Characteristic Curves

Forward Current - Forward Voltage



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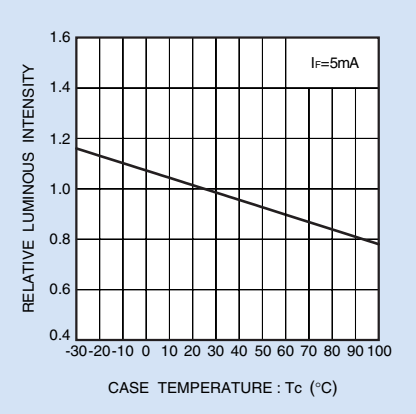
Relative Luminous Intensity - Case Temperature



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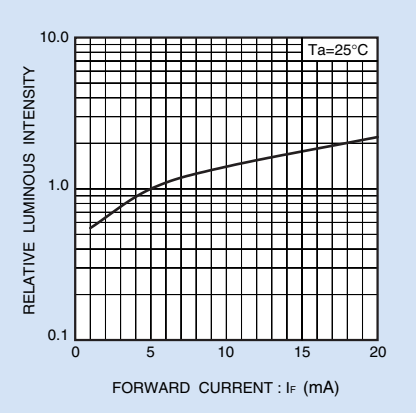
Relative Luminous Intensity - Forward Current



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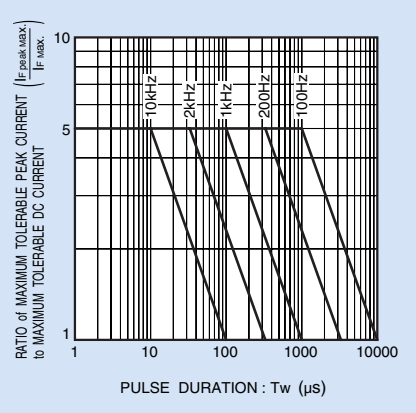
Ratio of Maximum Tolerable Peak Current - Pulse Duration



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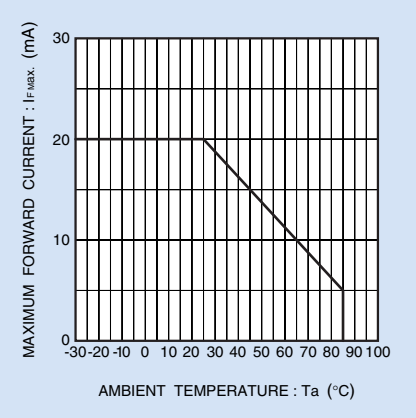
Derating



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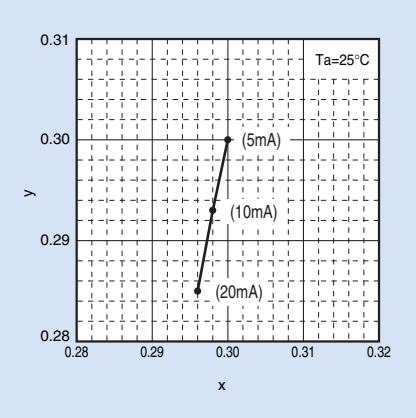
Forward Current - Chromaticity Diagram



— SMLE12WBC7W

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