

Pb Free
 ROHM Electronic Components

RoHS
 Directive Compliance

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

Part No.	Emitting color	Power dissipation P_D (mW)	Forward current I_F (mA)	Peak forward current I_{F^*} (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

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

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

Technical drawing of a stepped shaft. The shaft has a total length of 100 mm. It consists of three sections: a left section with a diameter of 0.8 mm and a length of 0.8 mm, a middle section with a diameter of 0.85 mm and a length of 0.8 mm, and a right section with a diameter of 0.8 mm and a length of 0.8 mm. The dimensions are indicated by arrows and numerical values.

(Unit:mm)

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

Technical drawing of a component with the following dimensions and features:

- Top view: Overall width 1.6, inner width 1.2, height 0.8.
- Side view: Height 0.36, thickness 0.13.
- Front view: Overall width 0.8, height 0.65, with a central triangular feature and a terminal on the right.

Tolerance: ± 0.1

Figure 10 consists of two photometric diagrams, (a) and (b), showing the beam spread and relative luminous intensity of a luminaire. Both diagrams use a semi-circular grid with angular displacement in degrees (0° to 90°) and relative luminous intensity in percent (0% to 100%).

Diagram (a) shows a luminaire with a rectangular body and a central light source. The beam spread is 60 degrees, indicated by the 60° marks on the grid. The relative luminous intensity is 100% at 0 degrees and decreases to 0% at 90 degrees.

Diagram (b) shows a luminaire with a rectangular body and a central light source. The beam spread is 60 degrees, indicated by the 60° marks on the grid. The relative luminous intensity is 100% at 0 degrees and decreases to 0% at 90 degrees.

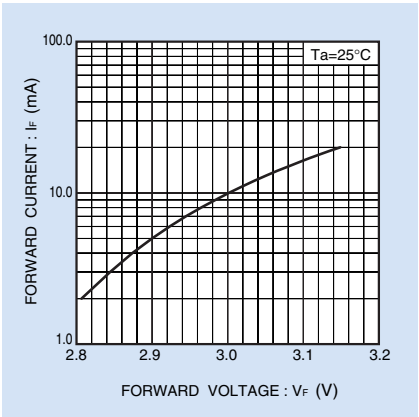
Technical drawing of a stepped shaft. The shaft has a total length of 100 mm. It consists of three sections: a left section with a diameter of 0.8 mm and a length of 0.8 mm, a middle section with a diameter of 0.85 mm and a length of 0.8 mm, and a right section with a diameter of 0.8 mm and a length of 0.8 mm. The dimensions are indicated by arrows and numerical values.

(Unit:mm)

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

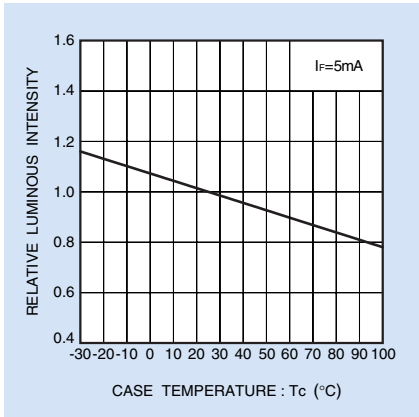
■Electrical Characteristic Curves

Forward Current - Forward Voltage



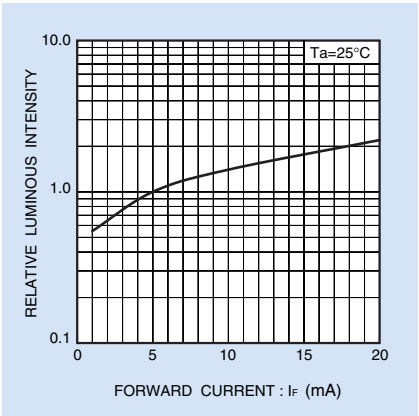
— SMLE12WBC7W

Relative Luminous Intensity - Case Temperature



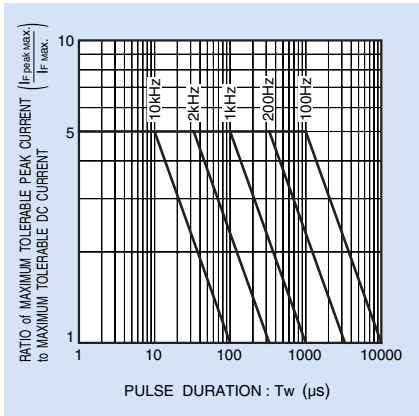
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Relative Luminous Intensity - Forward Current



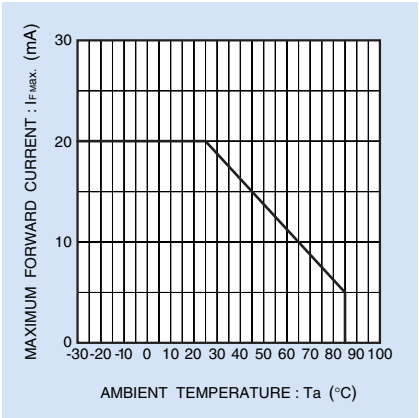
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Ratio of Maximum Tolerable Peak Current - Pulse Duration



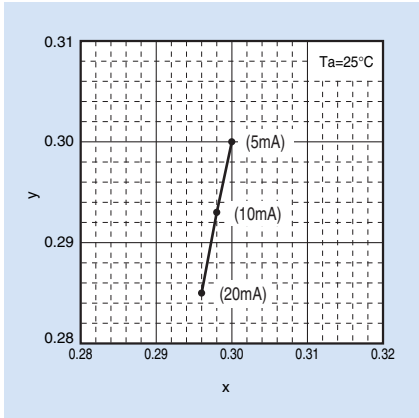
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Derating



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Forward Current - Chromaticity Diagram



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Notes

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