

# 0603 <1.6×0.8 t=0.36mm> Low Current Type(I<sub>F</sub>≤10mA)

## SMLE12 Series

Emitting Color	Blue	Green
Material	InGaN on SiC	
Package Size(mm)		
Part No.	SMLE12BC7T	SMLE12EC6T

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

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

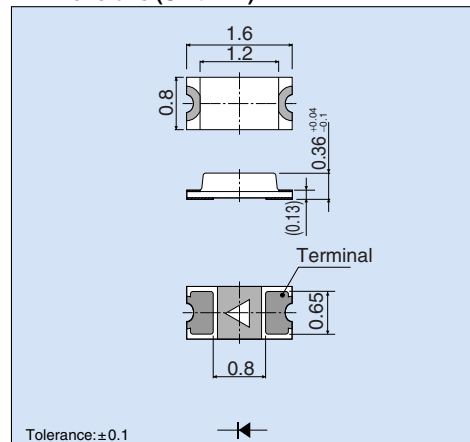
Part No.	Emitting color	Power dissipation P <sub>D</sub> (mW)	Forward current I <sub>F</sub> (mA)	Peak forward current *I <sub>FP</sub> (mA)	Reverse voltage V <sub>R</sub> (V)	Operating temperature T <sub>opr</sub> (°C)	Storage temperature T <sub>stg</sub> (°C)
SMLE12BC7T	Blue	66	20	100	5	-30 to +85	-40 to +100
SMLE12EC6T	Green	68	20	100	5	-30 to +85	-40 to +100

※:Duty ≤1/10, 1kHz.

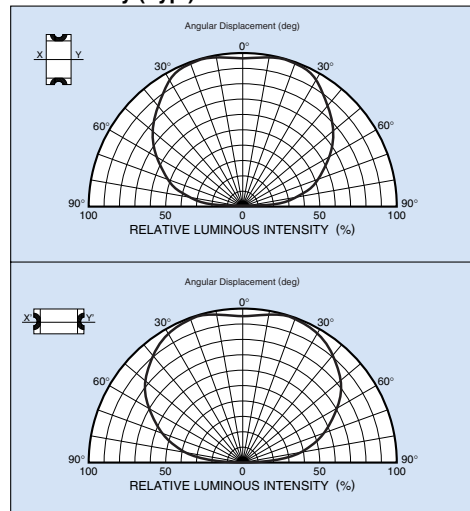
### Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V <sub>F</sub>		Reverse current I <sub>R</sub>		Light wavelength			Brightness I <sub>v</sub>		
		Typ. (V)	I <sub>F</sub> (mA)	Max. (μA)	V <sub>R</sub> (V)	Peak λ <sub>p</sub> (nm)	Half-wave Δλ (nm)	I <sub>F</sub> (mA)	Min. (mcd)	Typ. (mcd)	I <sub>F</sub> (mA)
SMLE12BC7T	Transparent	2.9	5	100	5	468	26	5	9.0	22	5
SMLE12EC6T	Colorless	3.0	5	100	5	521	35	5	36	85	5

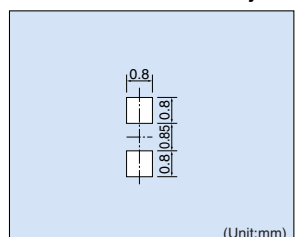
### Dimensions (Unit:mm)



### Directivity (Typ.)

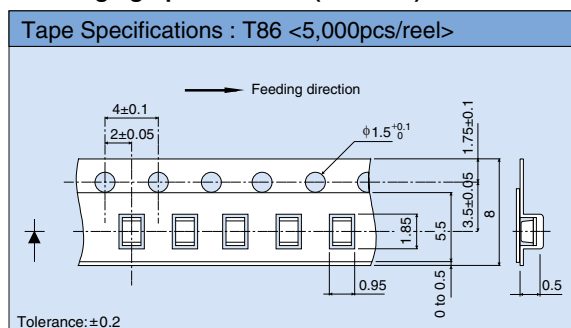


### Recommended Pad Layout



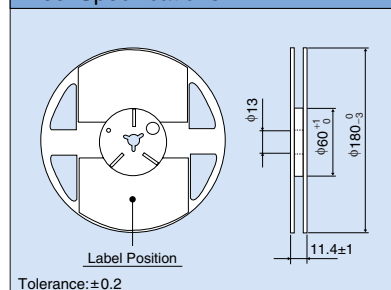
The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

### Packaging Specifications (Unit:mm)



Tolerance: ±0.2

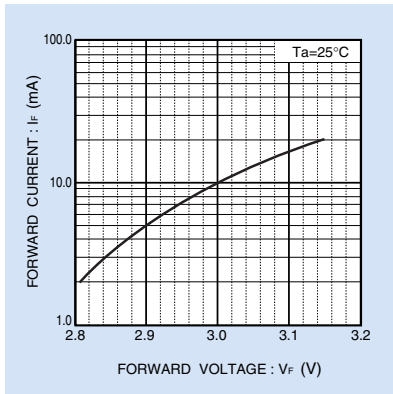
### Reel Specifications



Tolerance: ±0.2

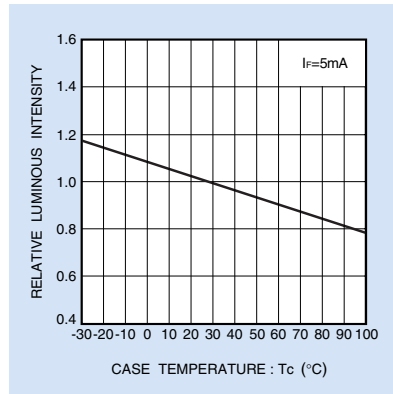
## Electrical Characteristic Curves

### Forward Current - Forward Voltage



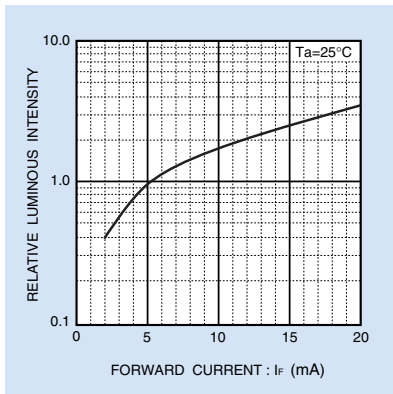
— SML12BC7T  
— SML12EC6T

### Relative Luminous Intensity - Case Temperature



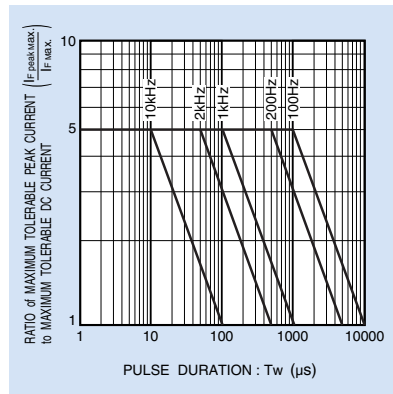
— SML12BC7T  
— SML12EC6T

### Relative Luminous Intensity - Forward Current



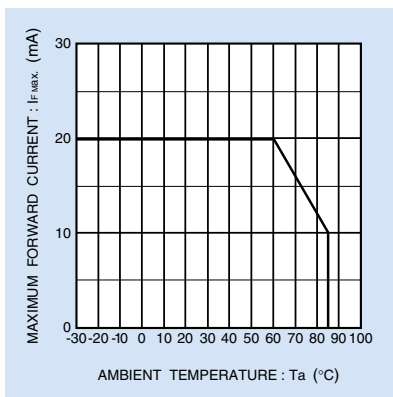
— SML12BC7T  
— SML12EC6T

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



— SML12BC7T  
— SML12EC6T

## Derating



— SML12BC7T  
— SML12EC6T

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