# Reverse Mount Chip LEDs 1305 <3.4×1.25 t=1.1mm> High Brightness Type



# SML-812 Series

Emitting Color	Blue	Green(Yellowish Green)
Material	InGaN on SiC	AlGaInP on GaAs
Package Size(mm)		
Part No.	New SML-812BCT	SML-812MT

## Absolute Maximum Ratings (Ta=25°C)

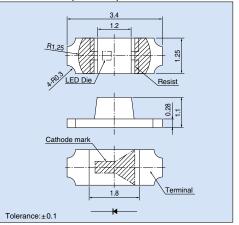
Part No.	Emitting color	Power dissipation Po (mW)	Forward current IF (mA)	Peak forward current IFP (mA)	Reverse voltage VR (V)	Operating temperature T <sub>opr</sub> (°C)	Storage temperature Tstg (°C)	
SML-812BCT	Blue	80	20	100* <sup>1</sup>	5	-30 to +85	-40 to +85	
SML-812MT	Green (Yellowish Green)	65	25	60* <sup>2</sup>	4	-30 10 +05	-40 10 +00	

\*1:Duty ≤ 1/10, 1kHz.
\*2:Duty ≤ 1/5, pulse width ≤ 1ms.

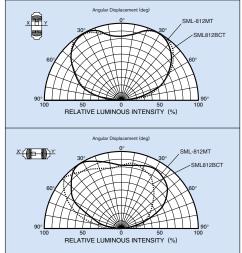
## Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current In		Light wavelength Peak Half-wave λρ Δλ			Brightness Iv		
		Typ. (V)	lF (mA)	Max. (µA)	Vr (V)	Typ. (nm)	Typ. (nm)	lF (mA)	Min. (mcd)	Typ. (mcd)	lF (mA)
SML-812BCT	Transparent	3.3	20	100	5	468	26	20	22	56	20
SML-812MT	Colorless	2.1			4	570	18		14	40	

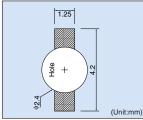
#### Dimensions (Unit:mm)



## Directivity (Typ.)

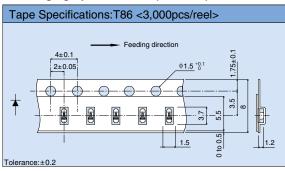


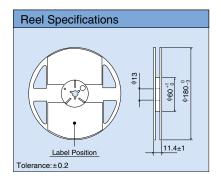
#### Recommended Pad Layout



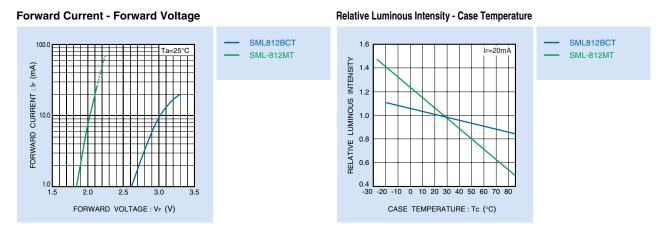
The recommended thickness of the screen mask for soldering is between 100 and 150 $\mu\text{m}.$  The hole size of the screen mask should be same as the recommended land pattern or smaller.

#### Packaging Specifications (Unit:mm)

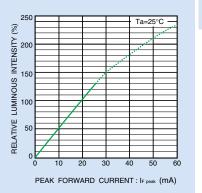




#### Electrical Characteristic Curves

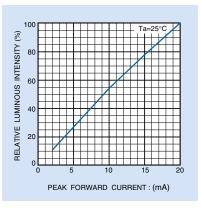


**Relative Luminous Intensity - Forward Current** 

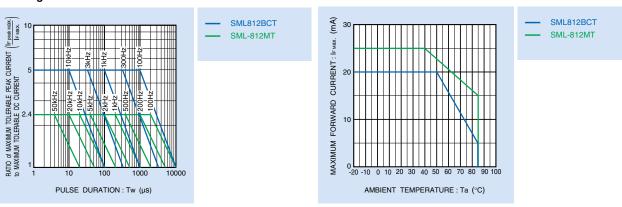




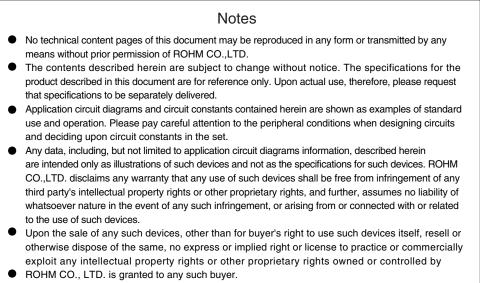
Ratio of Maximum Tolerable Peak Current - Pulse Duration



#### Derating



SML812BCT



• Products listed in this document are no antiradiation design.

The products listed in this document are designed to be used with ordinary electronic equipment or devices (such as audio visual equipment, office-automation equipment, communications devices, electrical appliances and electronic toys).

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Appendix1-Rev2.0