

Reverse Mount Chip LEDs

1305 <3.4×1.25 t=1.1mm> High Brightness Type

SML-812 Series

Reverse Mount

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 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)
SML-812BCT	Blue	78	20	100*1	5	-30 to +85	-40 to +85
SML-812MT	Green (Yellowish Green)	65	25	60*2	4		

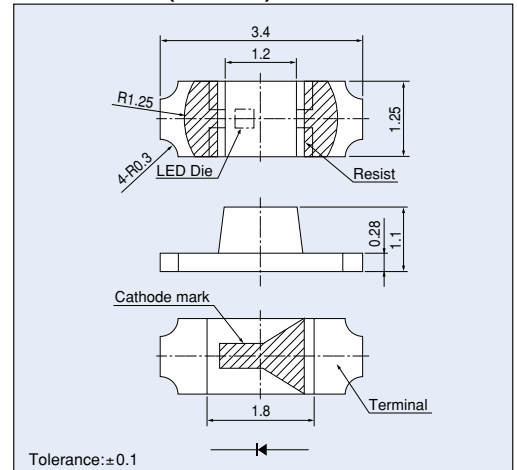
*1:Duty ≤ 1/10, 1kHz.

*2:Duty ≤ 1/5, pulse width ≤ 1ms.

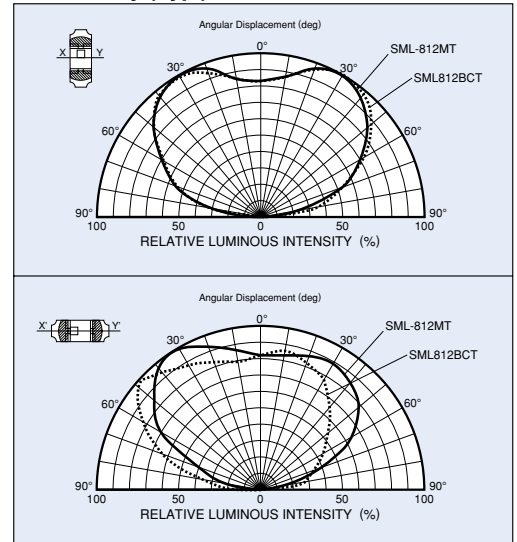
Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V _F		Reverse current I _R		Light wavelength			Brightness I _v		
		Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	Peak λ _p (nm)	Half-wave Δλ (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)
SML-812BCT	Transparent	3.3	20	100	5	468	22	20	22	56	20
SML-812MT	Colorless	2.1			4	570	18		14	40	

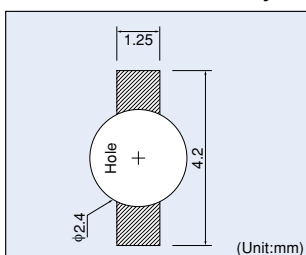
Dimensions (Unit:mm)



Directivity (Typ.)

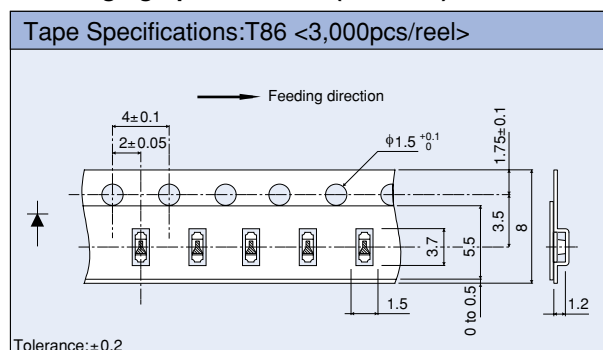


Recommended Pad Layout

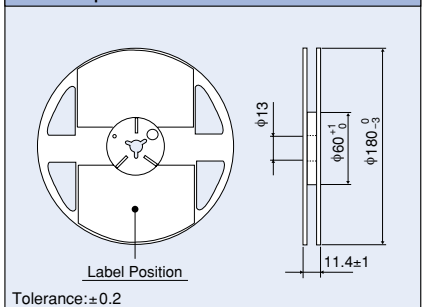


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be the same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)

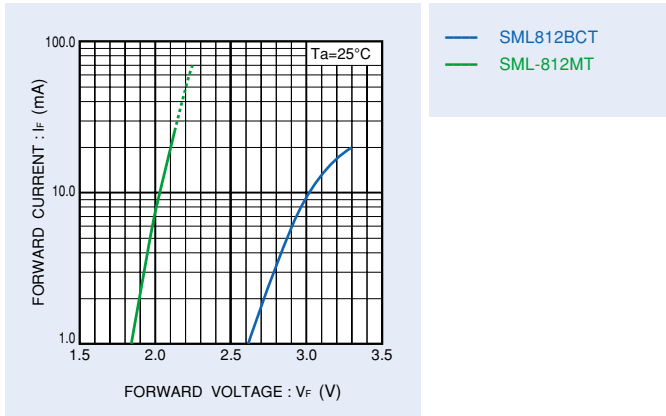


Reel Specifications

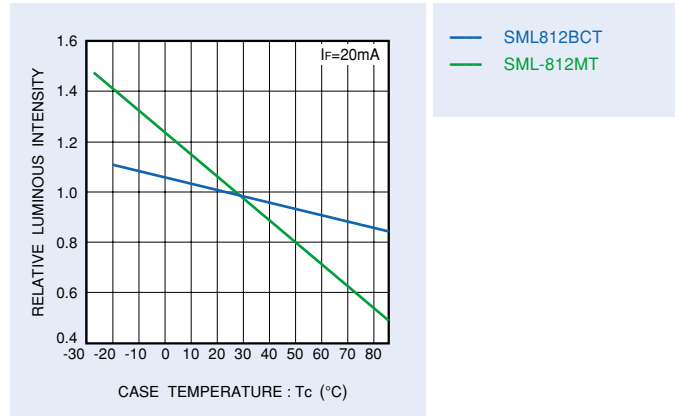


Electrical Characteristic Curves

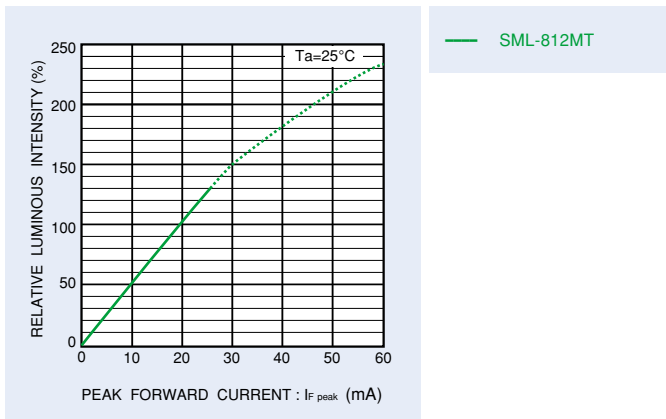
Forward Current - Forward Voltage



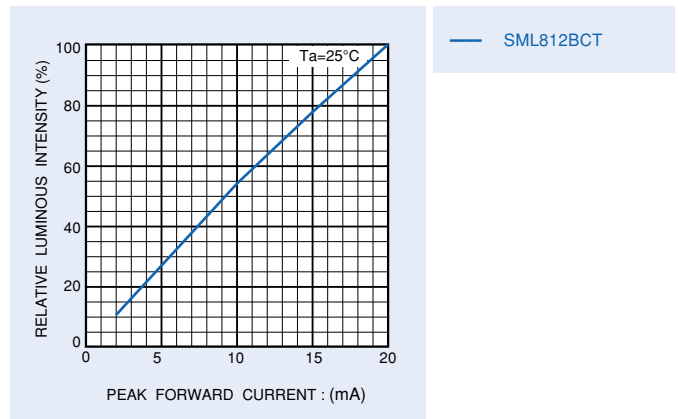
Relative Luminous Intensity - Case Temperature



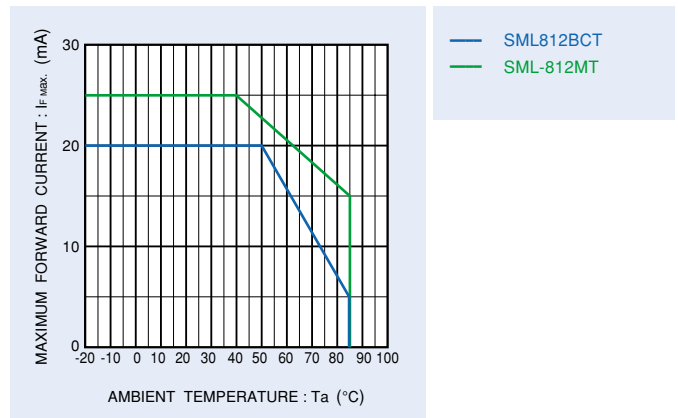
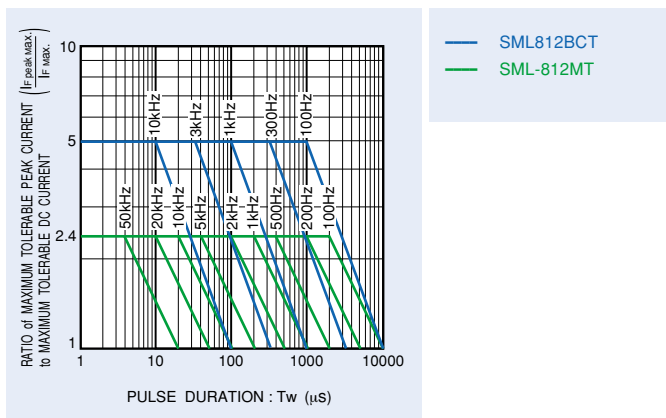
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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