



0603<1.6×0.8 t=0.8mm> High Brightness Type

SML31□ Series

Emitting Color	Blue		Green	
Material	InGaN on SiC			
Package Size(mm)				
	1608(0603) 1.6×0.8(t=0.8)			
Part No.	SML312BC4T	SML312BCT	SML312EC4T	SML312ECT

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

Absolute Maximum Ratings (Ta=25°C)

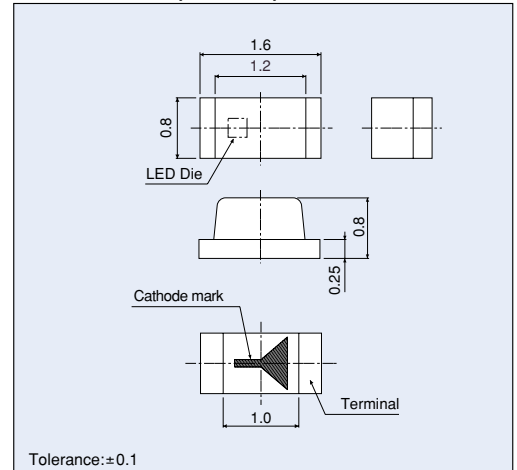
Part No.	Emitting color	Power dissipation Pd (mW)	Forward current IF (mA)	Peak forward current * I _{FP} (mA)	Reverse voltage VR (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
SML312BC4T	Blue	84	20	100	5	-30 to +85	-40 to +100
SML312BCT							
SML312EC4T	Green	84	20	100	5	-30 to +85	-40 to +100
SML312ECT							

*:Duty ≤ 1/10, 1kHz.

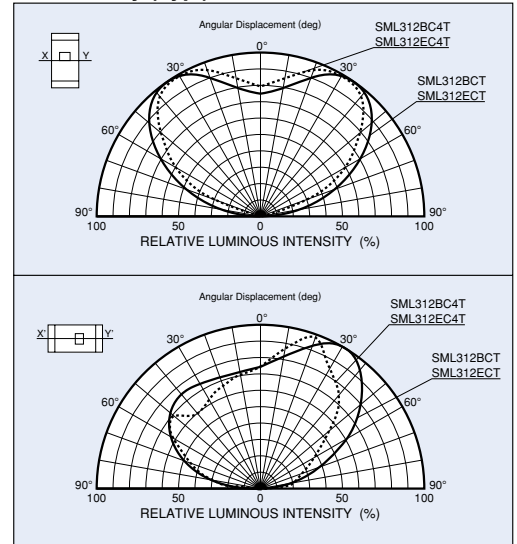
Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength			Brightness Iv		
		Typ. (V)	IF (mA)	Max. (μA)	VR (V)	Peak λp (nm)	Half-wave Δλ (nm)	IF (mA)	Min. (mcd)	Typ. (mcd)	IF (mA)
SML312BC4T	Transparent Colorless	3.2	20	100	5	468	26	20	22	46	20
SML312BCT		3.3							22	63	
SML312EC4T		3.2							36	90	
SML312ECT		3.3							90	200	

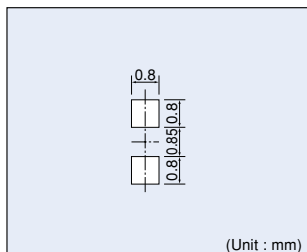
Dimensions (Unit:mm)



Directivity (Typ.)

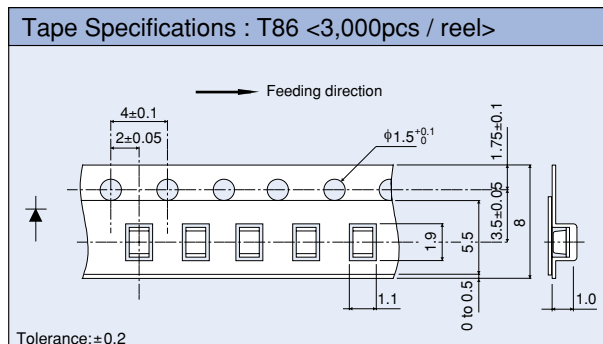


Recommended Pad Layout

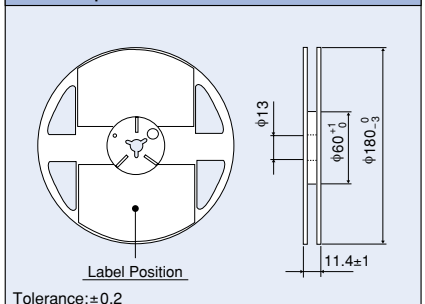


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit : mm)

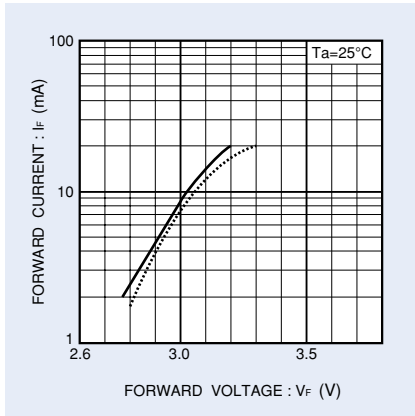


Reel Specifications



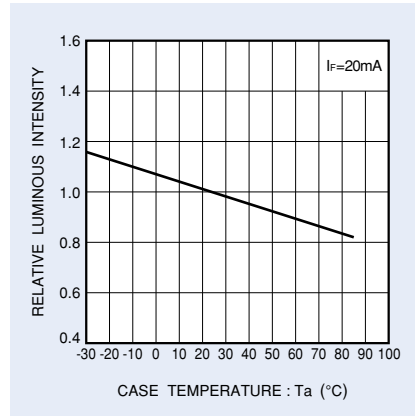
Electrical Characteristic Curves

Forward Current - Forward Voltage



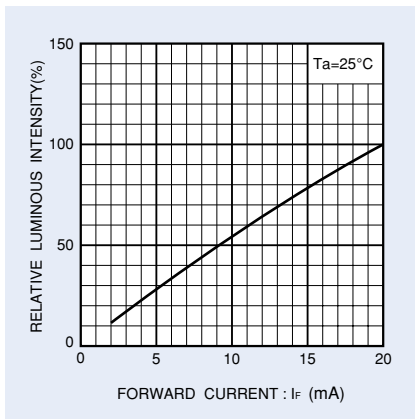
..... SML312BCT
SML312ECT
— SML312BC4T
SML312EC4T

Relative Luminous Intensity - Case Temperature



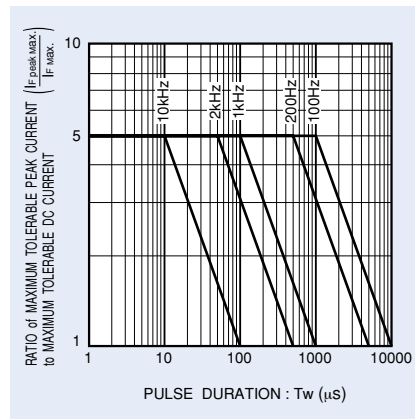
— SML312BC4T
SML312BCT
SML312EC4T
SML312ECT

Relative Luminous Intensity - Forward Current



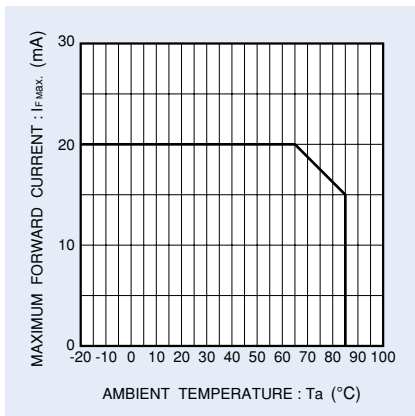
— SML312BC4T
SML312BCT
SML312EC4T
SML312ECT

Ratio of Maximum Tolerable Peak Current - Pulse Duration



— SML312BC4T
SML312BCT
SML312EC4T
SML312ECT

Derating



— SML312BC4T
SML312BCT
SML312EC4T
SML312ECT

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