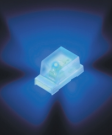
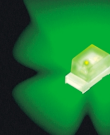


High Brightness Type Mini-molded chip LEDs

SML31 * Series

Package Size (mm)	Blue			Green	
	GaN on SiC	InGaN on SiC			
	428nm	468nm		525nm	
1608 (0603) 1.6×0.8 t=0.8					
	SML310BAT	SML311BBT	SML312BCT	SML311EBT	SML312ECT

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

Absolute Maximum Ratings (Ta=25°C)

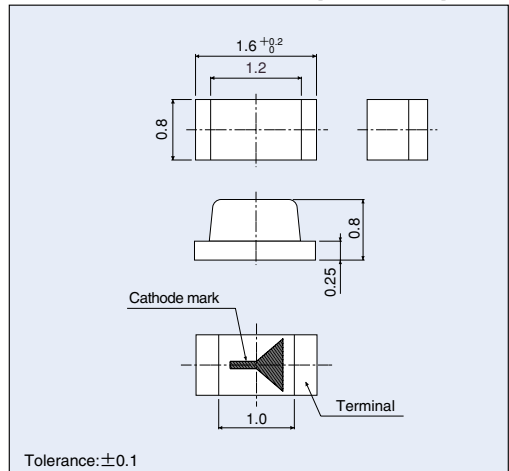
Part No.	Emitting color	Power dissipation P _D (mW)	Forward current I _F (mA)	Peak forward current * I _{FP} (mA)	Reverse voltage V _R (V)	Operating temperature T _{opr} (°C)	Stotage temperature T _{stg} (°C)				
SML310BAT	Blue	94	20	70	5	-30 to +85	-40 to +100				
SML311BBT		84		100							
SML312BCT											
SML311EBT	Green	84	20	100	5	-30 to +85	-40 to +100				
SML312ECT											

* IFP measured under duty ≤ 1/10, 1kHz.

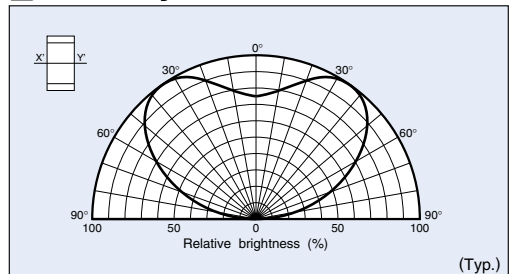
Electrical Optical Characteristics (Ta=25°C)

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	Half-wave Δλ	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)	
						Typ. (nm)	Typ. (nm)					
SML310BAT	Transparent Clear	3.8	20	100	5	428	65	20	1.4	3.6	20	
SML311BBT						468	26			14		22
SML312BCT		3.5								22		63
SML311EBT						523	36			36		90
SML312ECT		3.8					518		36			90

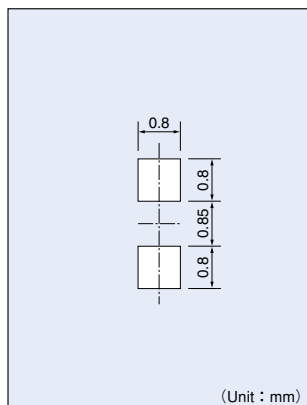
External Dimensions (Unit : mm)



Directivity

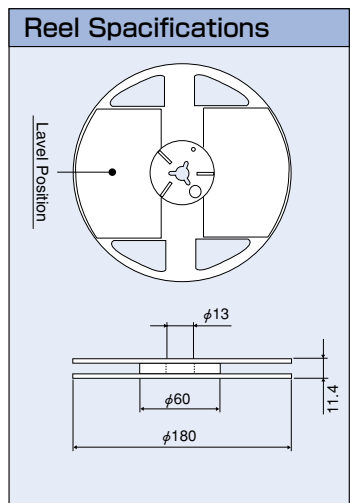
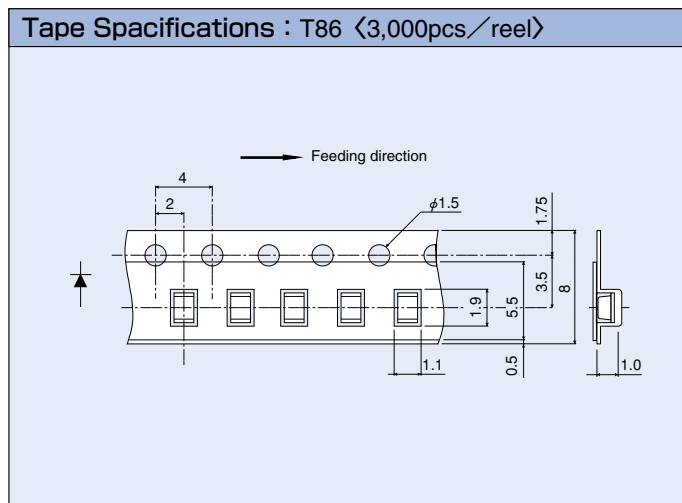


Recommended Pad Layout



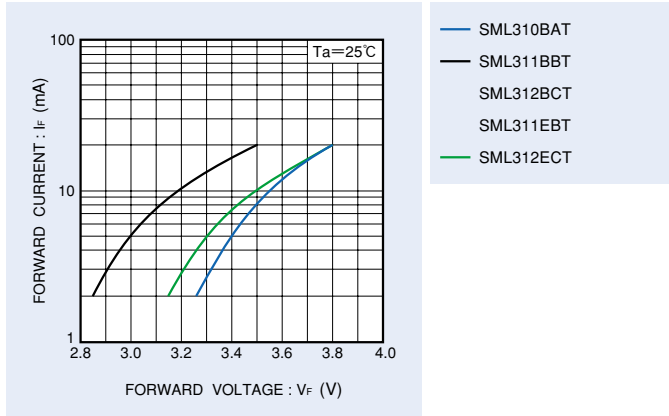
The recommended thickness of the screen mask for soldering is between 100 and 200 μm. The hole size of the screen mask should be the same as the recommended land pattern or smaller.

Packaging Specifications (Unit : mm)

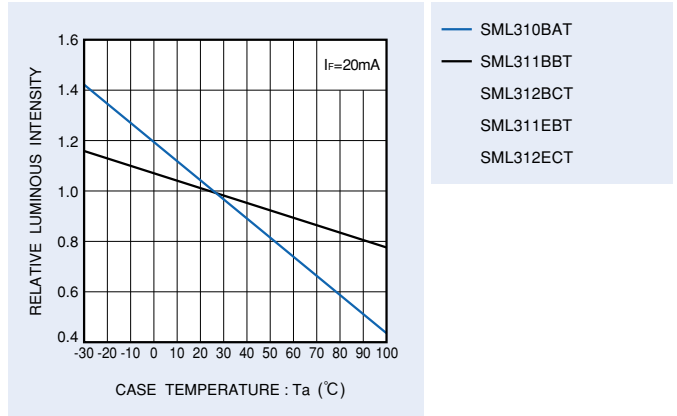


Electrical Characteristic Curves

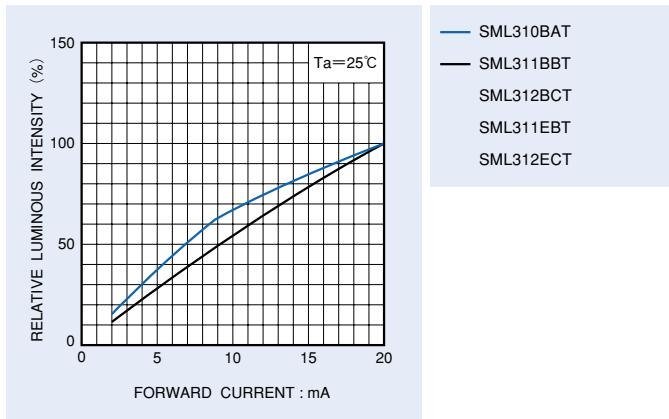
Forward Current - Forward Voltage



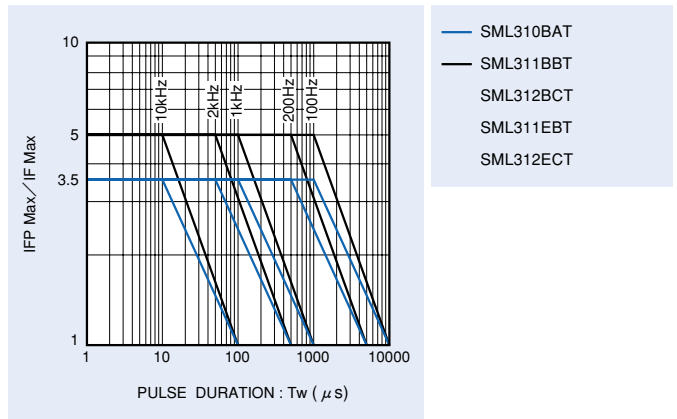
Relative Luminous Intensity - Case Temperature



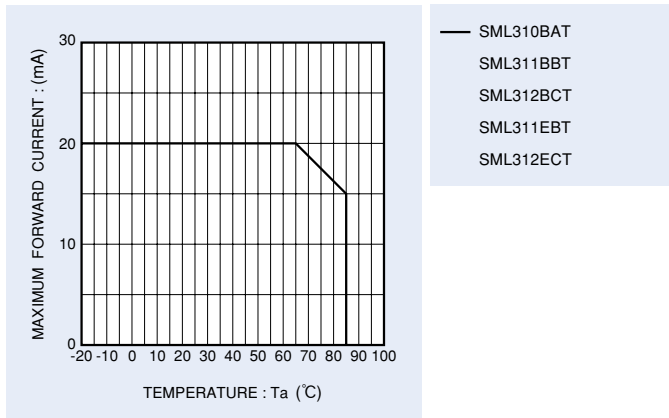
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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