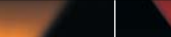


Chip LEDs with Reflector 1208<3.0×2.0 t=1.3mm> Medium / High Brightness Type

SML-01 * Series

Emitting Color	Blue			Green			Yellow			Orange		Red			
Material	InGaN on SiC									AlGaInP on GaAs					
Package Size(mm)															
 3020(1208) 3.0×2.0(t=1.3)															
Part No.	SML012BC4T	SML012BCT	SML013BDT	SML012EC4T	SML012ECT	SML-012PT (A)	SML-011YT	SML-012YT	SML-012WT (A)	SML-011DT	SML-012DT	SML-011UT	SML-012UT	SML-012VT(A)	SML-013UT

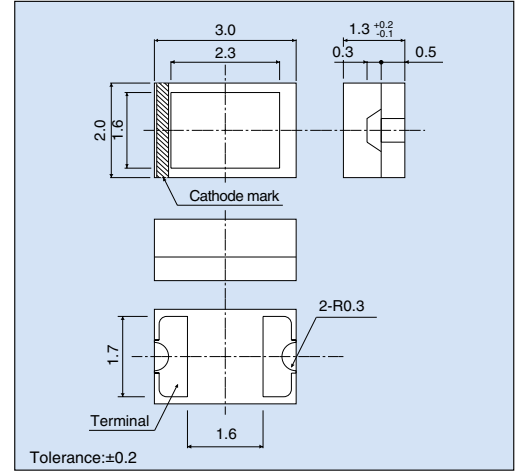
note) "*" will be taken out for emitting color B/E series.

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)	Storage temperature T _{stg} (°C)
SML012BC4T	Blue	84	20	100		-30 to +85	
SML012BCT		78					
SML013BDT		78					
SML012EC4T	Green	84	25	60		-30 to +85	
SML012ECT		62					
SML-012PT (A)							
SML-011YT	Yellow				5	-40 to +100	
SML-012YT							
SML-012WT (A)							
SML-011DT	Orange	75	30	100		-40 to +100	
SML-012DT							
SML-011UT	Red					-30 to +85	
SML-012UT							
SML-012VT (A)							
SML-013UT							

*: Duty ≤ 1/10, 1kHz.

Dimensions (Unit:mm)



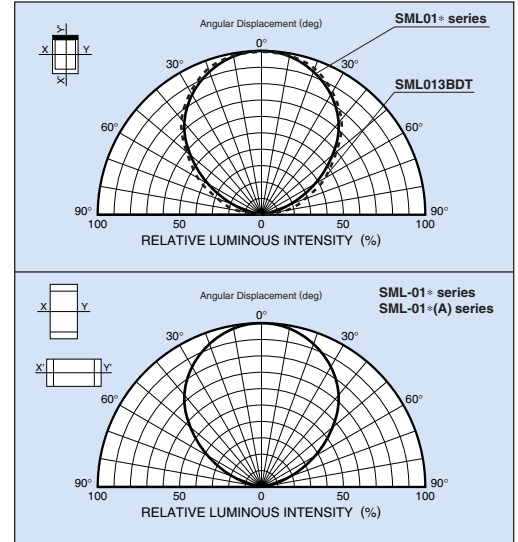
Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V _F		Reverse current I _R		Light wavelength Peak λ _p Half-wave Δλ			Brightness I _v		
		Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	Typ. (nm)	Typ. (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)
SML012BC4T	Transparent Colorless	3.2	20	100	5	468	26	20	22	36	20
SML012BCT		3.3							36	100	
SML013BDT		3.2							90	250	
SML012EC4T		3.2				523	36		56	140	
SML012ECT		3.3				518	35		140	360	
SML-012PT (A)		2.1		565	—	9.0	18				
SML-011YT			2.0	10		611	17		22	63	
SML-012YT									36	100	
SML-012WT (A)									140	280	
SML-011DT									22	63	
SML-012DT								36	100		
SML-011UT								22	63		
SML-012UT								36	100		
SML-012VT (A)						639	—		35.5	71	
SML-013UT		20*1				620*2	—	20*1	90	220	20*1

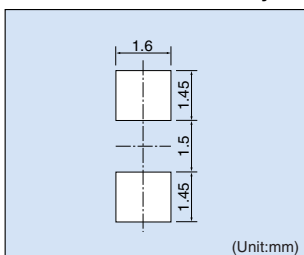
*1: Pulse width : 30ms

*2 : Dominant λD light wavelength

Directivity (Typ.)

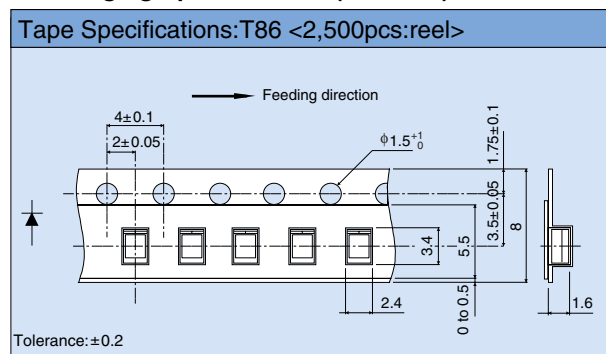


Recommended Pad Layout

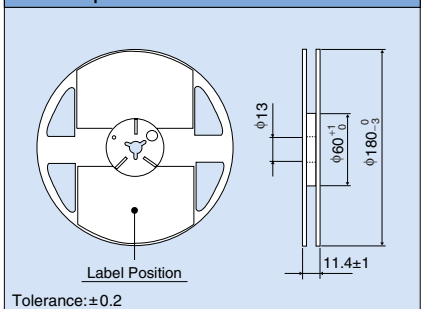


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)

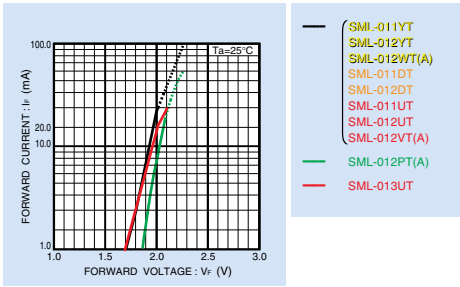
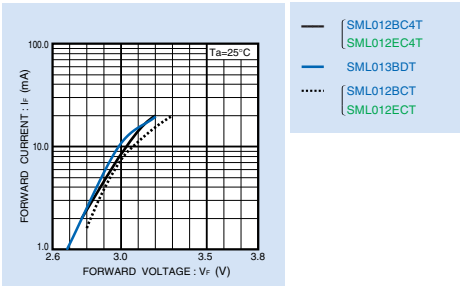


Reel Specifications

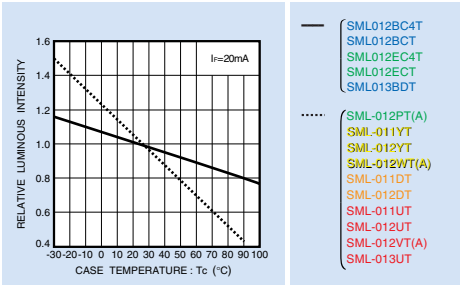


■Electrical Characteristic Curves

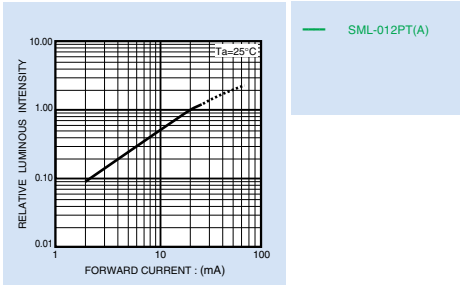
Forward Current - Forward Voltage



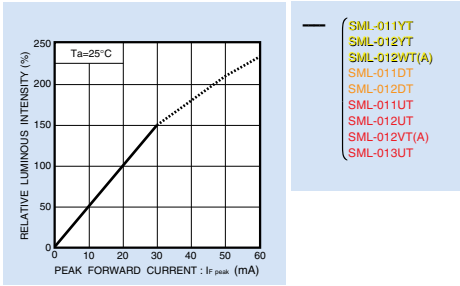
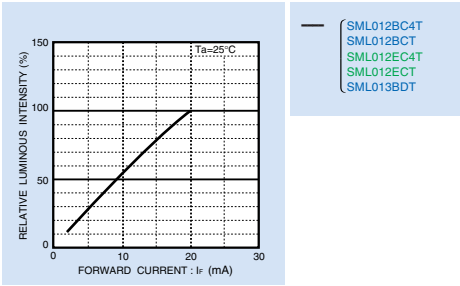
Relative Luminous Intensity - Case Temperature



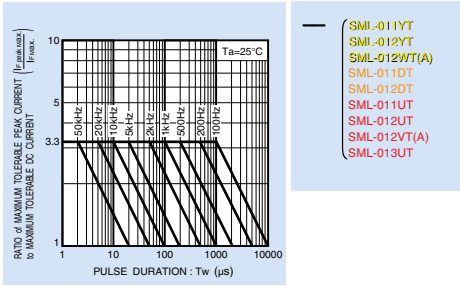
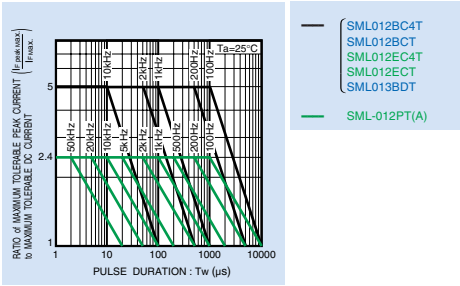
Relative Luminous Intensity - Forward Current



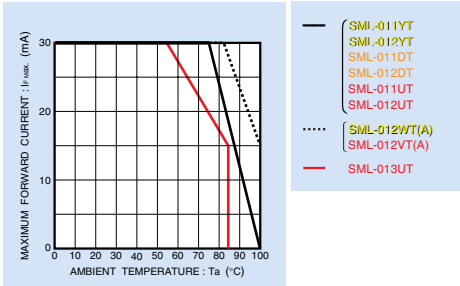
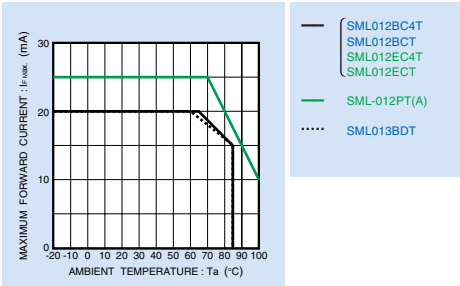
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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