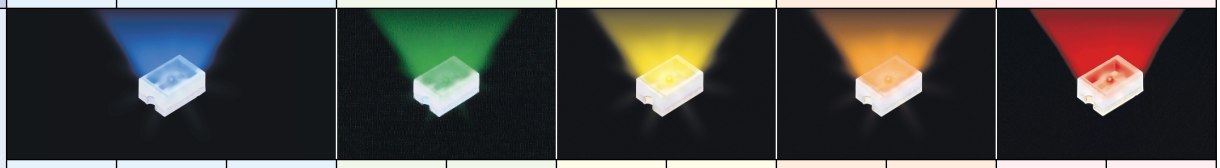
High Brightness Type　Chip LEDs with reflector

SML-01＊ Series

Package Size (mm)	Blue			Green		Yellow		Orange		Red	
	GaN on SiC	InGaN on SiC						AlGaInP on GaAs			
	428nm	468nm		525nm		590nm		611nm		630nm	
3216 (1206) 3.0×2.0 t=1.3											
	SML010BAT	SML011BBT	SML012BCT	SML011EBT	SML012ECT	SML-011YT	SML-012YT	SML-011DT	SML-012DT	SML-011UT	SML-012UT

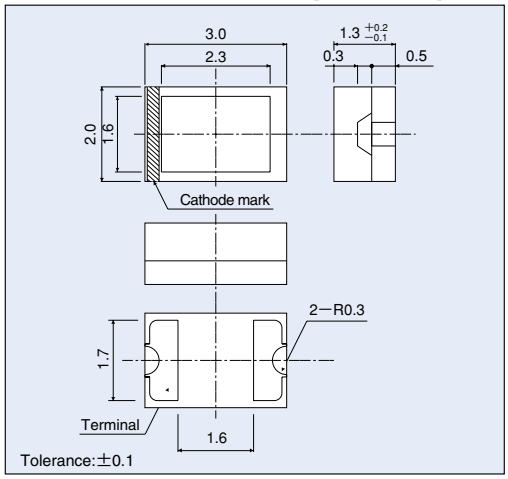
Note) "-" will be taken out for emitting color B/E series.

■ Absolute Maximum Ratings (Ta=25℃)

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)
SML010BAT	Blue	94	20	70	5	-30 to +85	-40 to +100
SML011BBT		84		100			
SML012BCT							
SML011EBT	Green						
SML012ECT							
SML-011YT	Yellow						
SML-012YT							
SML-011DT	Orange	75	30	100		-40 to +100	-40 to +100
SML-012DT							
SML-011UT	Red						
SML-012UT							

＊ I_{FP} measured under duty ≦1/10,1kHz.

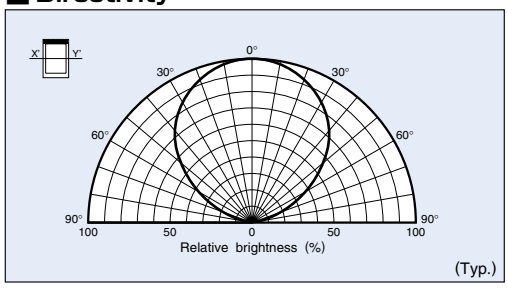
■ External Dimensions (Unit : mm)



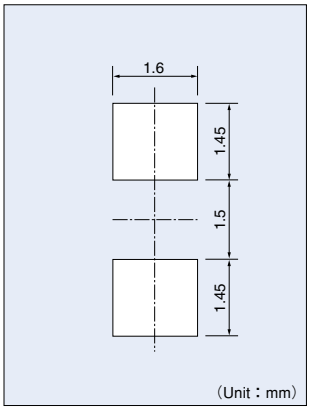
■ Electrical Optical Characteristics (Ta=25℃)

Part No.	Resin Color	Forward voltage V_F Typ. (V)	Forward voltage I_F (mA)	Reverse current I_R Max. (μA)	Reverse current V_R (V)	Light wavelength Peak λp Typ. (nm)	Light wavelength Half-wave Δλ Typ. (nm)	Light wavelength I_F (mA)	Brightness Iv Min. (mcd)	Brightness Iv Typ. (mcd)	Brightness I_F (mA)
SML010BAT	Transparent Clear	3.8	20	100	5	428	65	20	3.6	9	20
SML011BBT		3.5				468	26		22	36	
SML012BCT									36	100	
SML011EBT						523	36		56	140	
SML012ECT		3.8				518	35		140	360	
SML-011YT						590	15		22	63	
SML-012YT									36	100	
SML-011DT		2.0		10		611	17		22	63	
SML-012DT									36	140	
SML-011UT						630	18		22	63	
SML-012UT									36	100	

■ Directivity



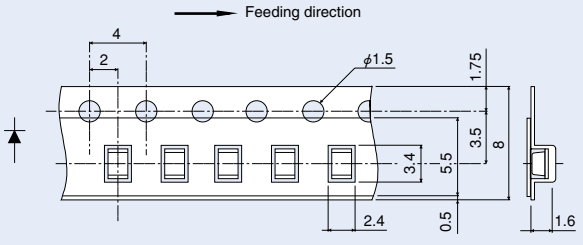
■ Recommemded Pad Layout



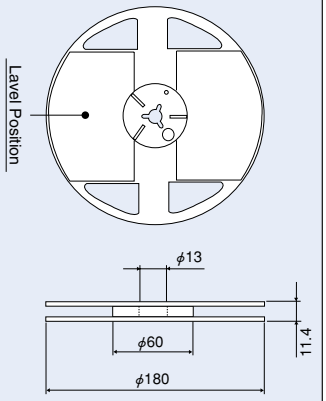
The recommended thickness of the screen mask for soldering is between 100 and 200μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

■ Packaging Spacifications (Unit : mm)

Tape Spacifications : T86 〈2,500pcs／reel〉

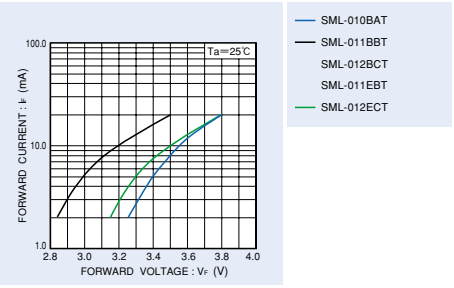


Reel Spacifications

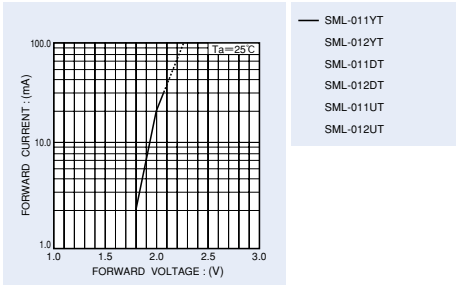


■ Electrical Characteristic Curves

Forward Current - Forward Voltage

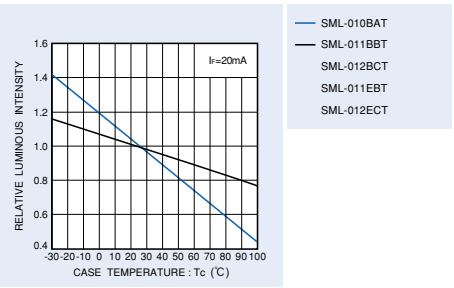


SML-010BAT
SML-011BBT
SML-012BCT
SML-011EBT
SML-012ECT

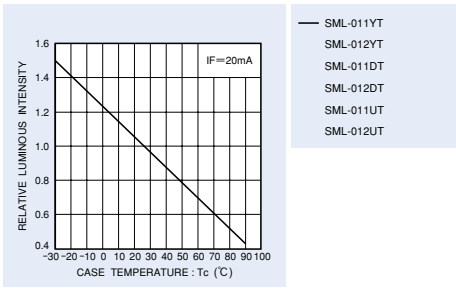


SML-011YT
SML-012YT
SML-011DT
SML-012DT
SML-011UT
SML-012UT

Relative Luminous Intensity - Case Temperature

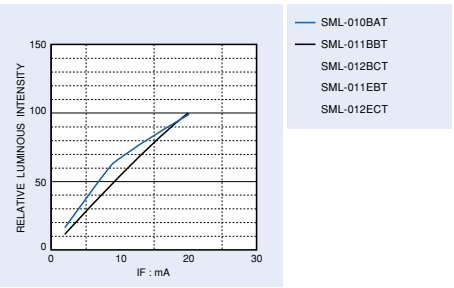


SML-010BAT
SML-011BBT
SML-012BCT
SML-011EBT
SML-012ECT

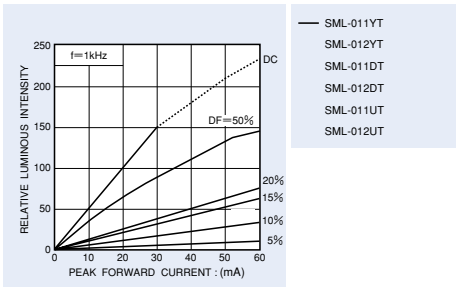


SML-011YT
SML-012YT
SML-011DT
SML-012DT
SML-011UT
SML-012UT

Relative Luminous Intensity - Forward Current

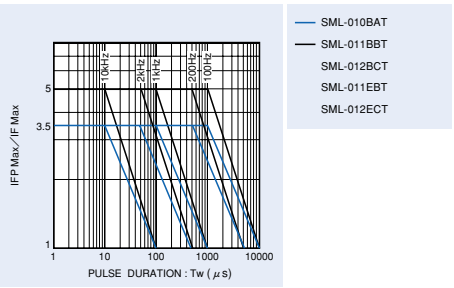


SML-010BAT
SML-011BBT
SML-012BCT
SML-011EBT
SML-012ECT

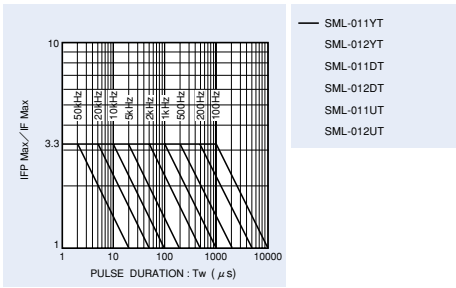


SML-011YT
SML-012YT
SML-011DT
SML-012DT
SML-011UT
SML-012UT

Ratio of Maximum Tolerable Peak Current - Pulse Duration

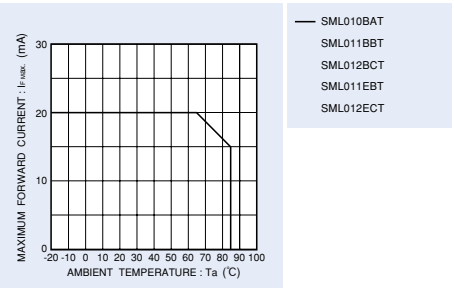


SML-010BAT
SML-011BBT
SML-012BCT
SML-011EBT
SML-012ECT

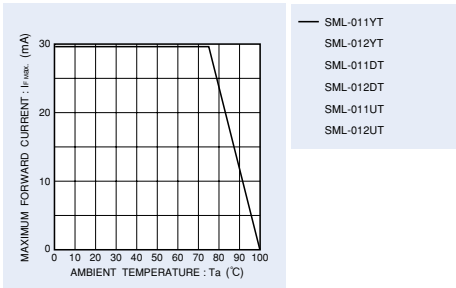


SML-011YT
SML-012YT
SML-011DT
SML-012DT
SML-011UT
SML-012UT

Derating



SML010BAT
SML011BBT
SML012BCT
SML011EBT
SML012ECT



SML-011YT
SML-012YT
SML-011DT
SML-012DT
SML-011UT
SML-012UT

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