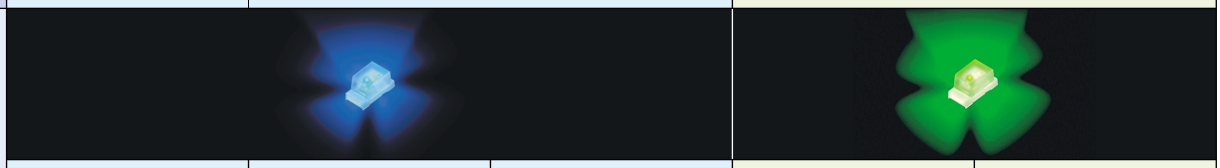
High Brightness Type　Mini-molded chip LEDs

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℃)

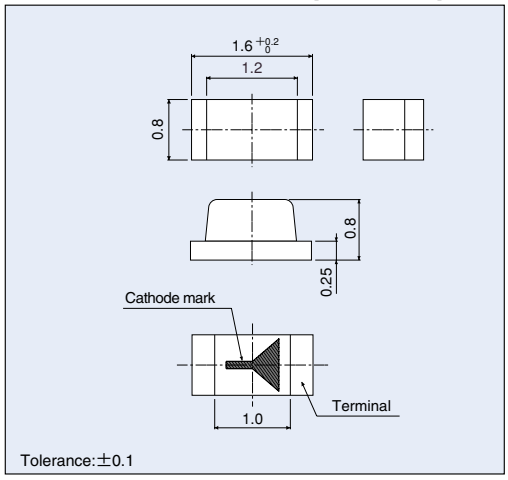
Part No.	Emitting color	Power dissipation P_D (mW)	Forward current I_F (mA)	Peak forward current ＊I_{FP} (mA)	Reverse voltage V_R (V)	Operating temperature T_{opr} (°C)	Stotage temperature T_{stg} (°C)
SML310BAT	Blue	94	20	70	5	-30 to +85	-40 to +100
SML311BBT		84		100			
SML312BCT							
SML311EBT	Green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

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

■ Electrical Optical Characteristics (Ta=25℃)

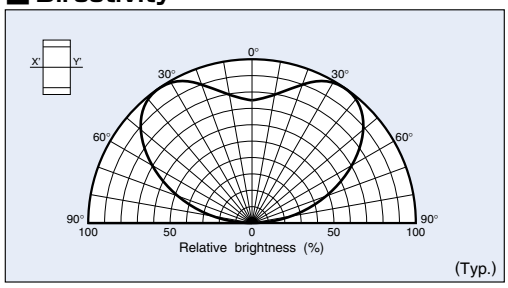
Part No.	Resin Color	Forward voltage V_F		Reverse current I_R		Light wavelength Peak λp	Light wavelength Half-wave $\Delta\lambda$		Brightness I_V		
		Typ. (V)	I_F (mA)	Max. (μA)	V_R (V)	Typ. (nm)	Typ. (nm)	I_F (mA)	Min. (mcd)	Typ. (mcd)	I_F (mA)
SML310BAT	Transparent Clear	3.8	20	100	5	428	65	20	1.4	3.6	20
SML311BBT		3.5				468	26		14	22	
SML312BCT									22	63	
SML311EBT						523	36		36	90	
SML312ECT		3.8				518	36		90	200	

■ External Dimensions (Unit : mm)



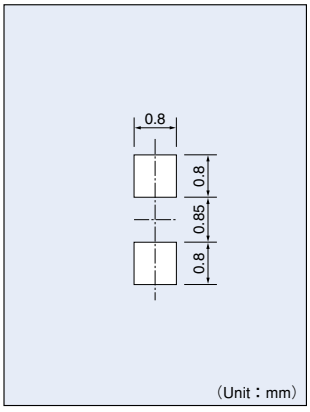
Tolerance:±0.1

■ Directivity



(Typ.)

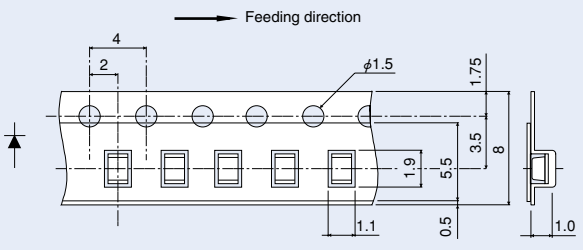
■ Recommemded Pad Layout



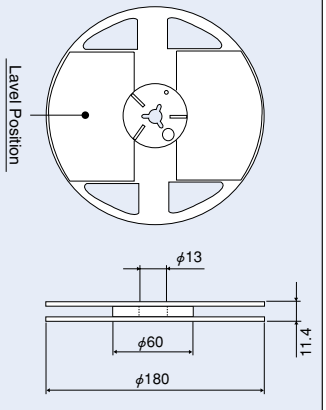
The recommended thickness of the screen mask for soldering is between 100 and 200μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

■ Packaging Spacifications (Unit : mm)

Tape Spacifications : T86 〈3,000pcs／reel〉

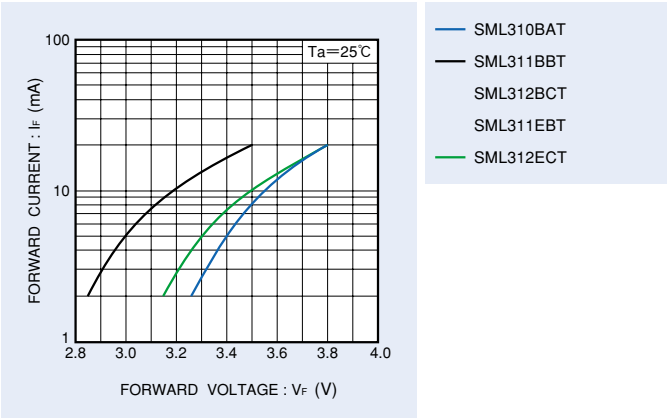


Reel Spacifications



Electrical Characteristic Curves

Forward Current - Forward Voltage



SML310BAT
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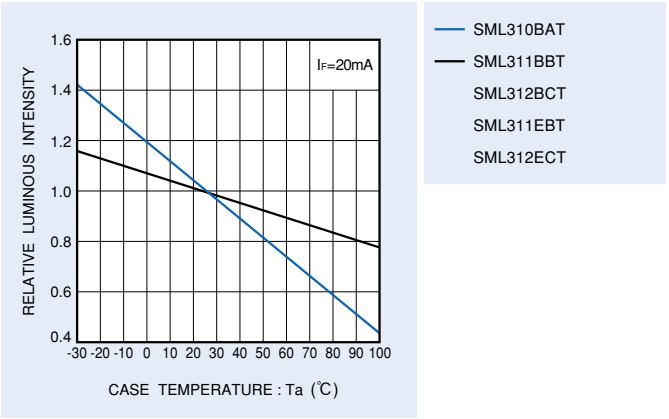
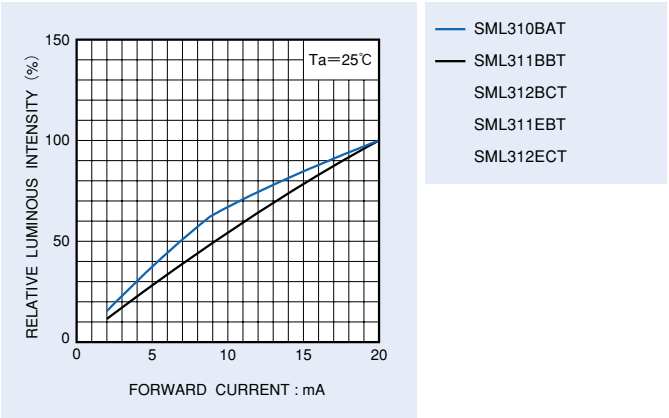
SML311EBT
SML312ECT

Relative Luminous Intensity - Case Temperature



SML310BAT
SML311BBT
SML312BCT
SML311EBT
SML312ECT

Relative Luminous Intensity - Forward Current



SML310BAT
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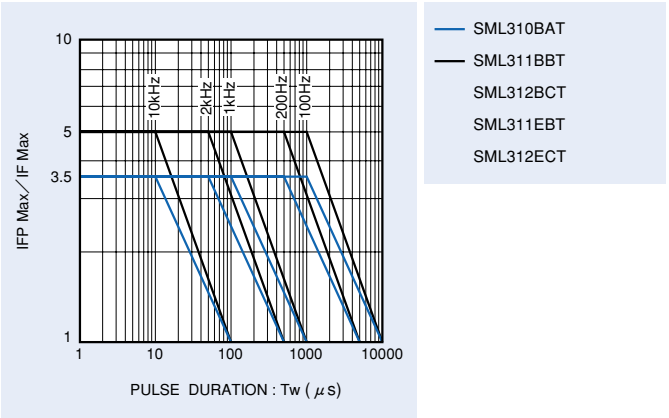
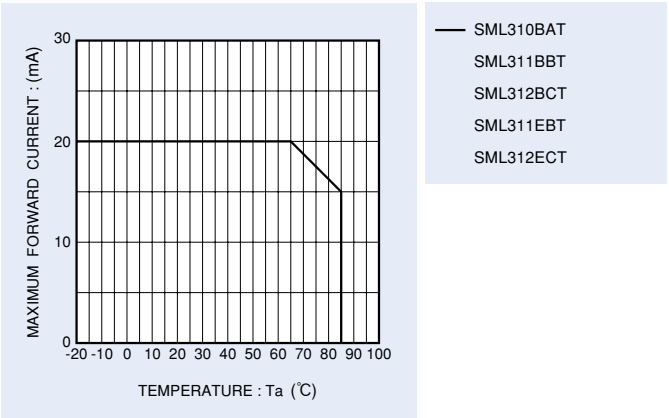
SML311EBT
SML312ECT

Ratio of Maximum Tolerable Peak Current - Pulse Duration



SML310BAT
SML311BBT
SML312BCT
SML311EBT
SML312ECT

Derating



SML310BAT
SML311BBT
SML312BCT
SML311EBT
SML312ECT

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