

# 0603<1.6×0.8 t=0.8mm Standard Type

## SML-310 Series

Emitting Color	Blue	Pure Green	Green(Yellowish Green)	Yellow	Orange	Red	
Material	GaN on SiC	GaP		GaAsP on Gap		GaAlAs on GaAs	
Package Size(mm)							
Part No.	SML310BAT	SML-310PT	SML-310MT	SML-310YT	SML-310DT	SML-310VT	SML-310LT

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

### Absolute Maximum Ratings (Ta=25°C)

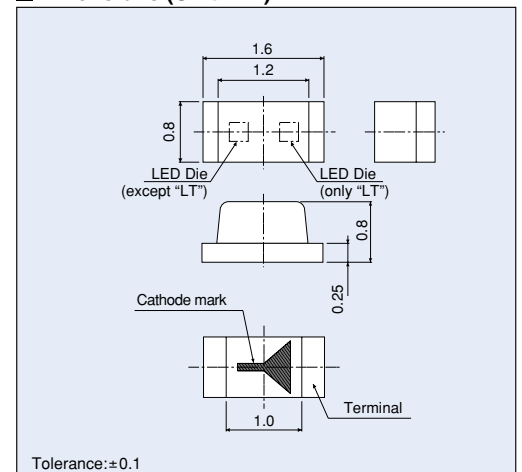
Part No.	Emitting color	Power dissipation Pd (mW)	Forward current IF (mA)	Peak forward current *IFP (mA)	Reverse voltage VR (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
SML310BAT	Blue	94		70	5		-40 to +100
SML-310PT	Pure Green						
SML-310MT	Green (Yellowish Green)		20				
SML-310YT	Yellow	55		60	4	-30 to +85	-40 to +85
SML-310DT	Orange						
SML-310VT	Red						
SML-310LT	Red	60	25	75			

\*:Duty ≤1/5, pulse width ≤1ms.

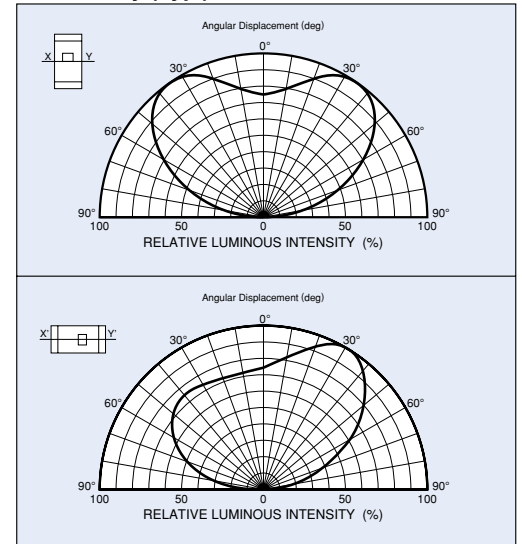
### Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength			Brightness Iv		
		Typ. (V)	IF (mA)	Max. (μA)	VR (V)	Peak λp Typ. (nm)	Half-wave Δλ Typ. (nm)	IF (mA)	Min. (mcd)	Typ. (mcd)	IF (mA)
SML310BAT		3.8			5	428	65		1.4	3.6	
SML-310PT						555				4	
SML-310MT	Transparent Colorless	2.2				570			3.6	16	
SML-310YT		2.1	20	100	4	585	40	20	2.2	6.3	20
SML-310DT		2.0				610					
SML-310VT		2.0				650			1.4	4	
SML-310LT		1.75				660	25		3.6	10	

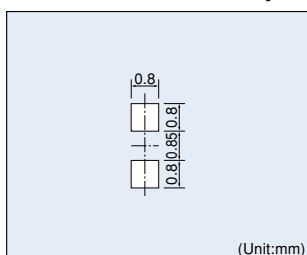
### Dimensions (Unit:mm)



### Directivity (Typ.)

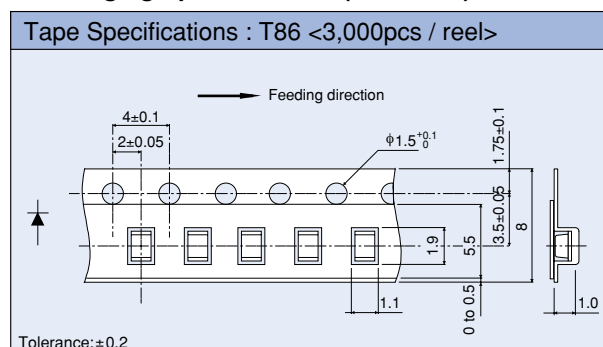


### Recommended Pad Layout

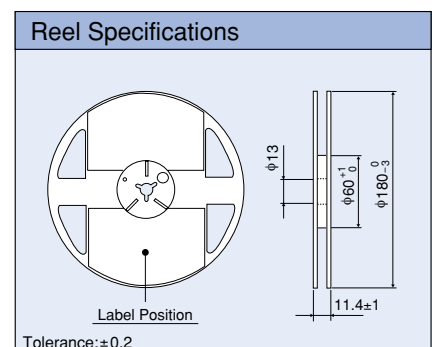


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

### Packaging Specifications (Unit : mm)

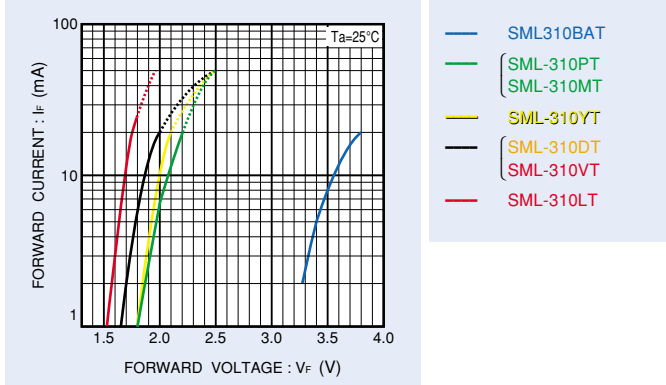


### Reel Specifications

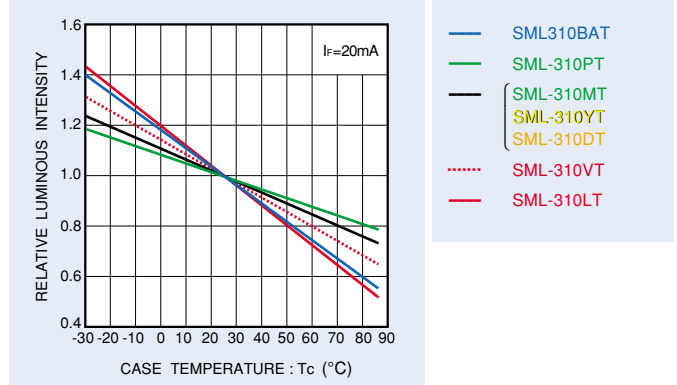


## Electrical Characteristic Curves

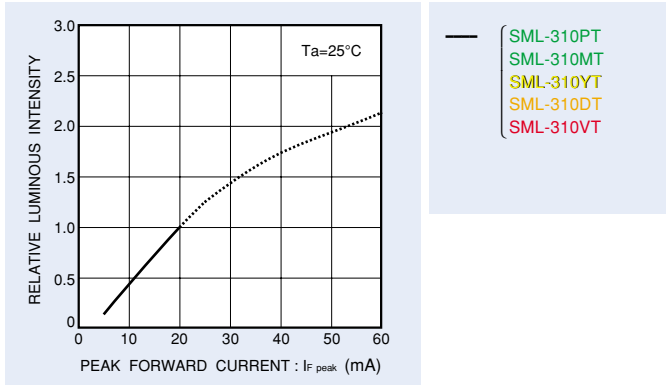
### Forward Current - Forward Voltage



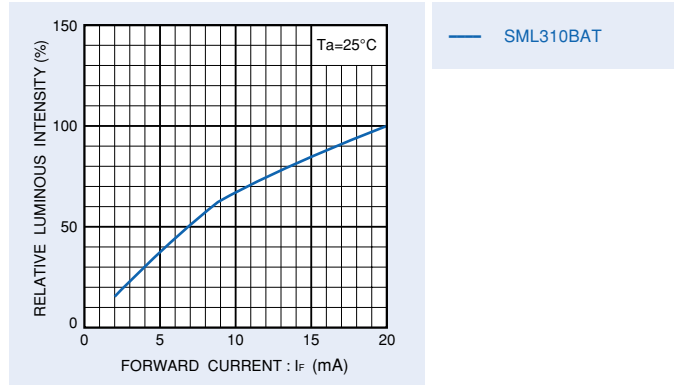
### Relative Luminous Intensity - Case Temperature



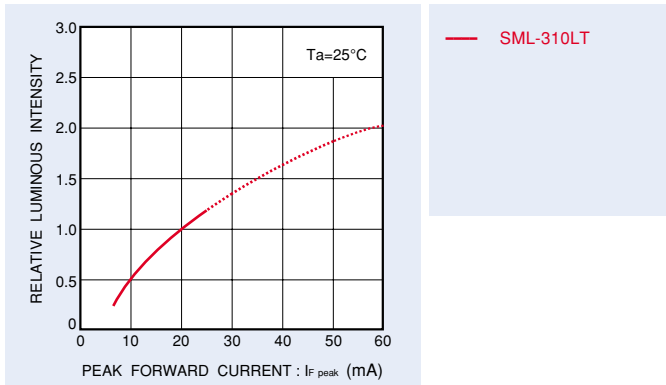
### Relative Luminous Intensity - Forward Current



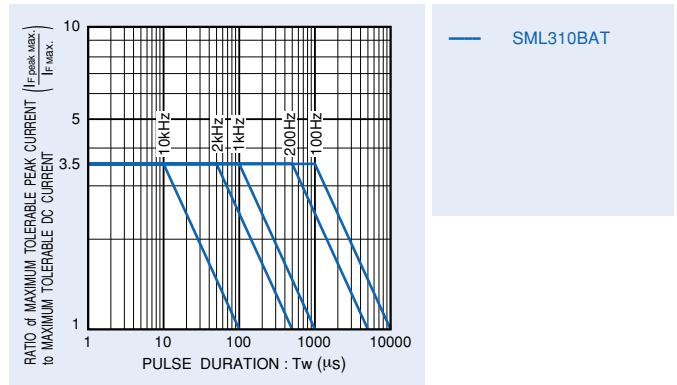
### Relative Luminous Intensity - Forward Current



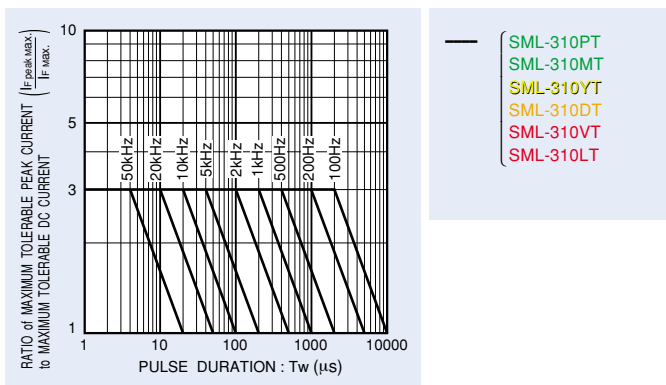
### Relative Luminous Intensity - Forward Current



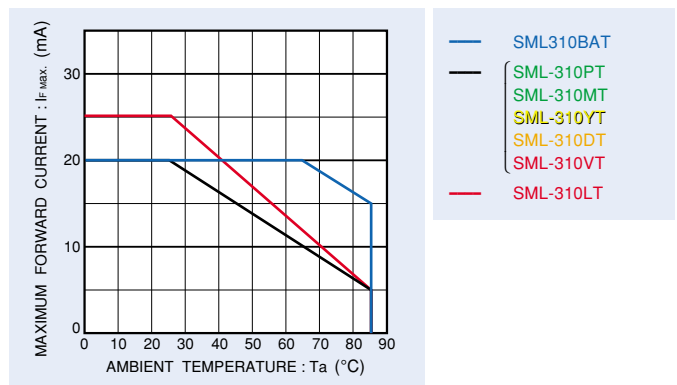
### Ratio of Maximum Tolerable Peak Current - Pulse Duration



### Ratio of Maximum Tolerable Peak Current - Pulse Duration



### Derating



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