

# 0603<1.6×0.8 t=0.8mm Standard Type

## SML-310 Series

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

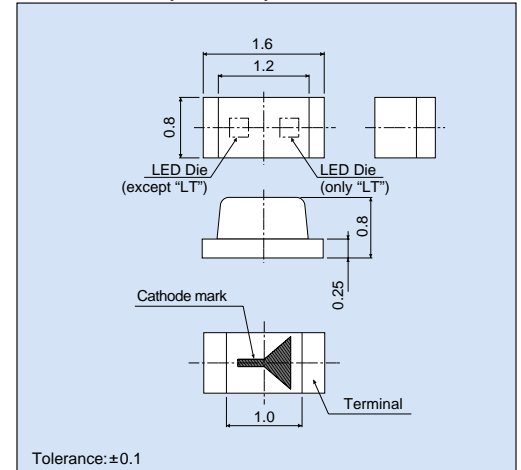
note) "\*" will be taken out for emitting color B/E series.

### 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						

\*:Duty ≤1/5, pulse width ≤1ms.

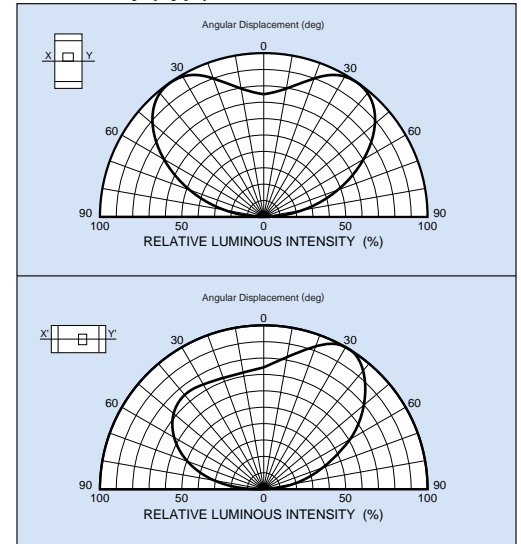
### Dimensions (Unit:mm)



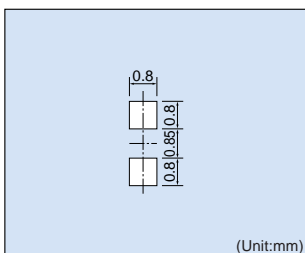
### Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength			Brightness Iv		
		Typ. (V)	IF (mA)	Max. (μA)	VR (V)	Peak λp (nm)	Half-wave Δλ (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		2.2				570			3.6	16	
SML-310YT	Transparent	2.1	20	100	4	585	40	20	2.2	6.3	20
SML-310DT	Colorless					610					
SML-310VT		2.0				650			1.4	4	

### Directivity (Typ.)

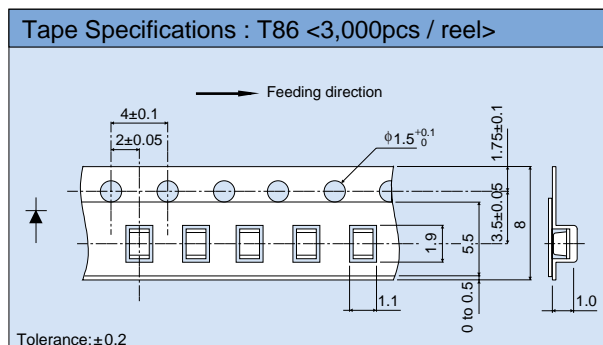


### Recommended Pad Layout

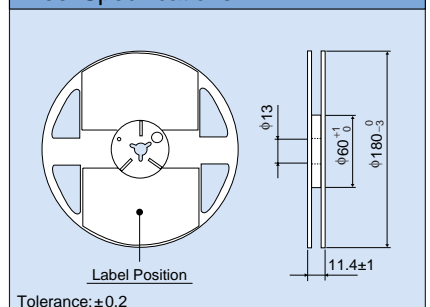


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

### Packaging Specifications (Unit : mm)

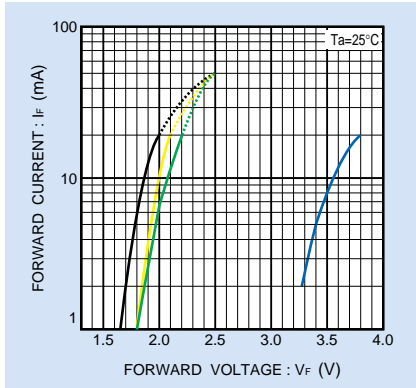


### Reel Specifications



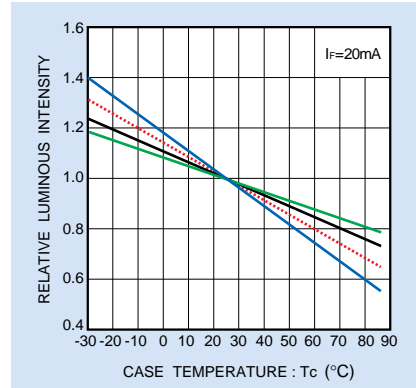
## Electrical Characteristic Curves

### Forward Current - Forward Voltage



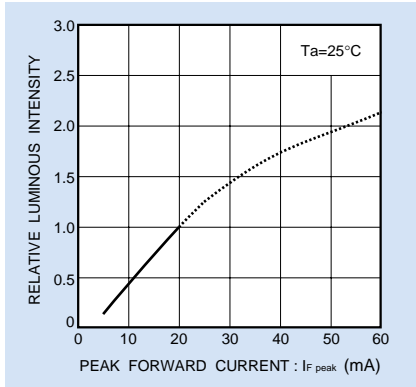
- SML310BAT
- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT

### Relative Luminous Intensity - Case Temperature



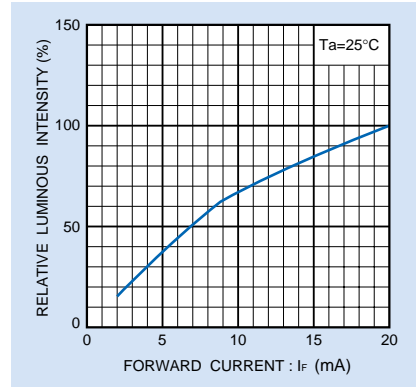
- SML310BAT
- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT

### Relative Luminous Intensity - Forward Current



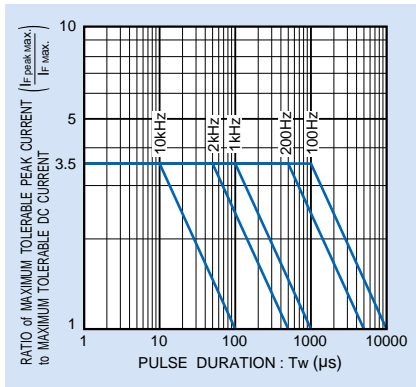
- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT

### Relative Luminous Intensity - Forward Current



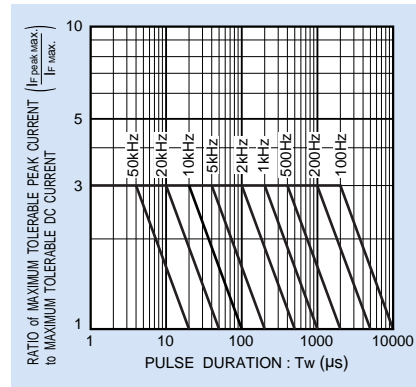
- SML310BAT

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



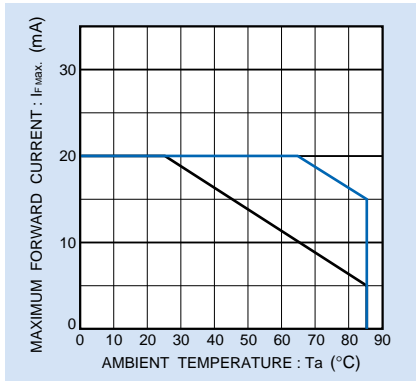
- SML310BAT

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



- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT

### Derating



- SML310BAT
- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT

### Notes

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