

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)

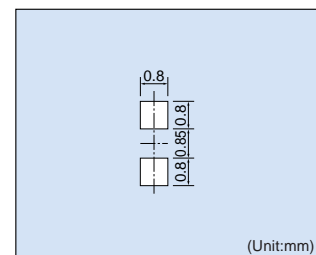
Part No.	Emitting color	Power dissipation Pd (mW)	Forward current If (mA)	Peak forward current *Ifp (mA)	Reverse voltage VR (V)	Operating temperature Topr (°C)	Storage temperature Tstg (°C)
SML310BAT	Blue	94		70	5		-40 to +100
SML-310PT	Pure Green						
SML-310MT	Green (Yellowish Green)		20				
SML-310YT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

*:Duty ≤1/5, pulse width ≤1ms.

Electrical Optical Characteristics (Ta=25°C)

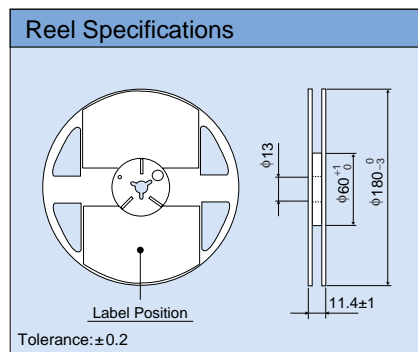
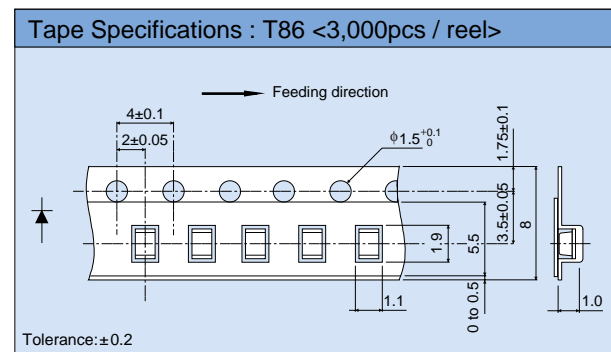
Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength		Brightness Iv		
		Typ. (V)	If (mA)	Max. (μA)	VR (V)	Peak λp (nm)	Half-wave Δλ (nm)	Min. (mcd)	Typ. (mcd)	If (mA)
SML310BAT		3.8			5	428	65		3.6	
SML-310PT						555		1.4	4	
SML-310MT	Transparent	2.2				570		3.6	16	
SML-310YT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

Recommended Pad Layout

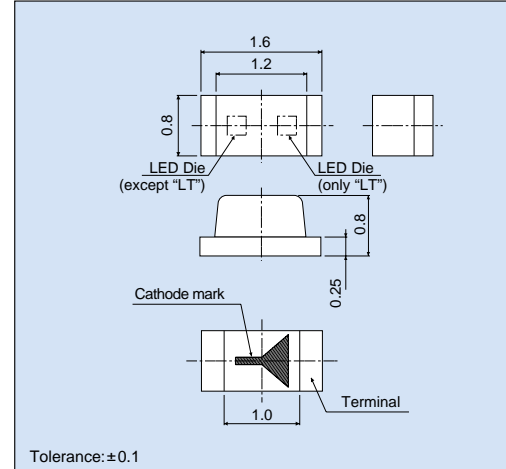


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

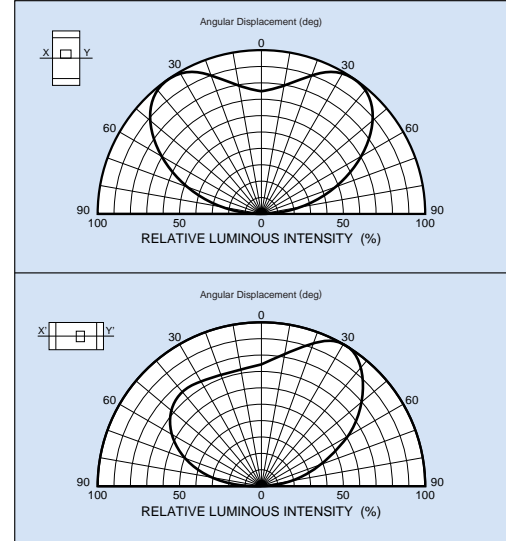
Packaging Specifications (Unit : mm)



Dimensions (Unit:mm)

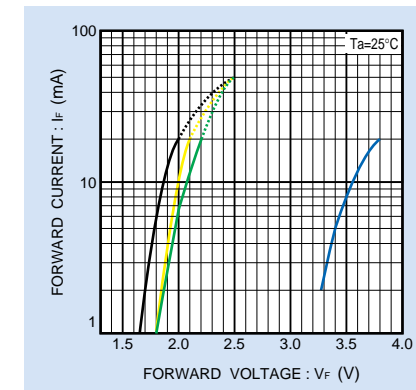


Directivity (Typ.)



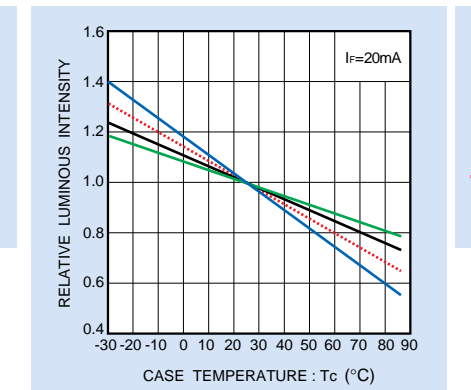
Electrical Characteristic Curves

Forward Current - Forward Voltage



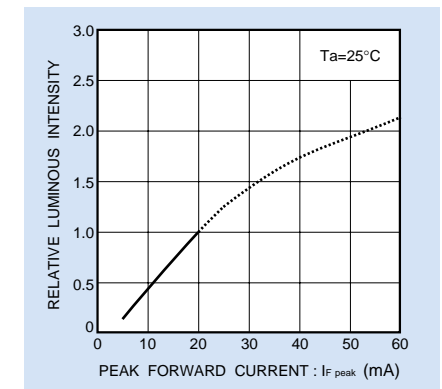
- SML310BAT
- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT

Relative Luminous Intensity - Case Temperature



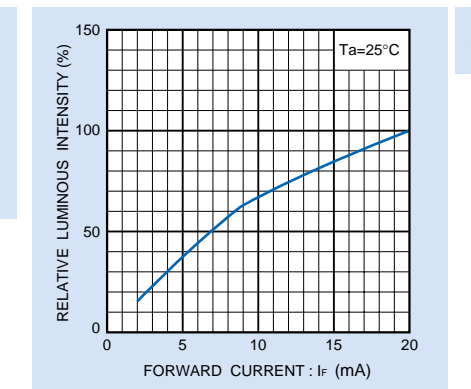
- SML310BAT
- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT

Relative Luminous Intensity - Forward Current



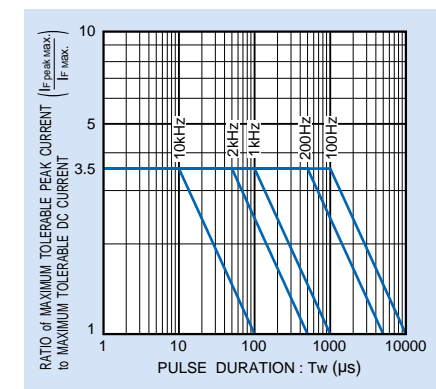
- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT

Relative Luminous Intensity - Forward Current



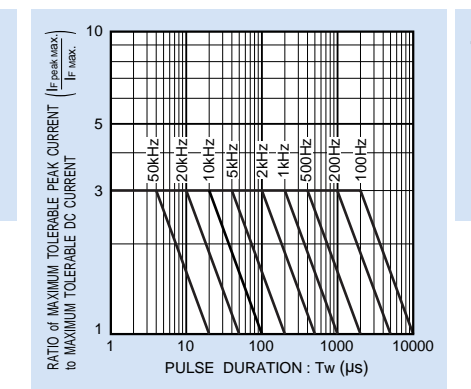
- SML310BAT

Ratio of Maximum Tolerable Peak Current - Pulse Duration



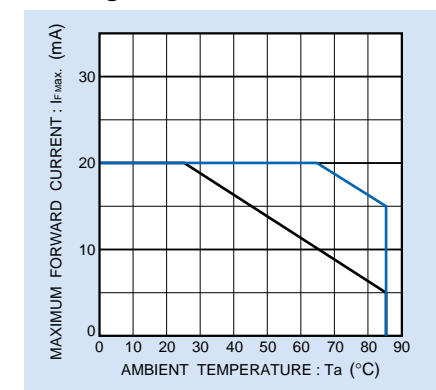
- SML310BAT

Ratio of Maximum Tolerable Peak Current - Pulse Duration



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

Derating



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

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)						
1608(0603) 1.6×0.8(t=0.8)						
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)

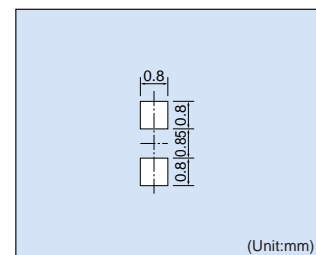
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SML-310DT	Orange						
SML-310VT	Red						

*:Duty ≤1/5, pulse width ≤1ms.

Electrical Optical Characteristics (Ta=25°C)

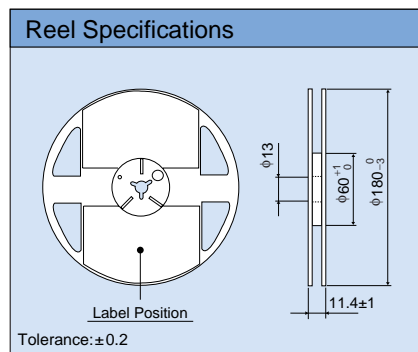
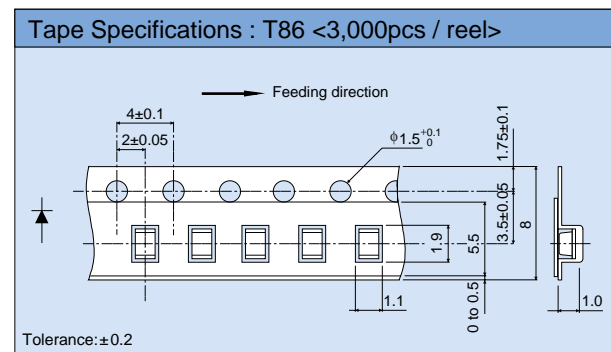
Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength		Brightness Iv			
		Typ. (V)	If (mA)	Max. (μA)	VR (V)	Peak λp (nm)	Half-wave Δλ (nm)	If (mA)	Min. (mcd)	Typ. (mcd)	If (mA)
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SML-310PT						555				4	
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SML-310YT		2.1	20	100	4	585	40	20	2.2	6.3	20
SML-310DT						610					
SML-310VT		2.0				650			1.4	4	

Recommended Pad Layout

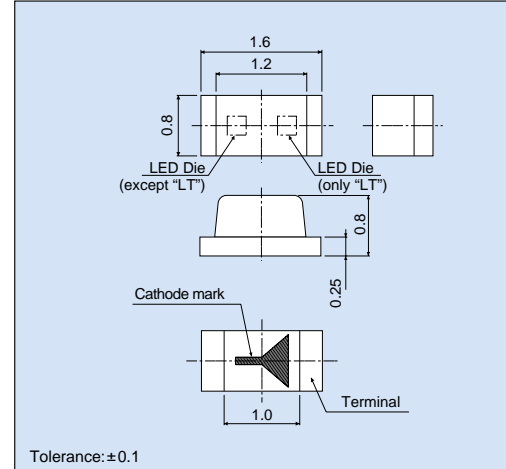


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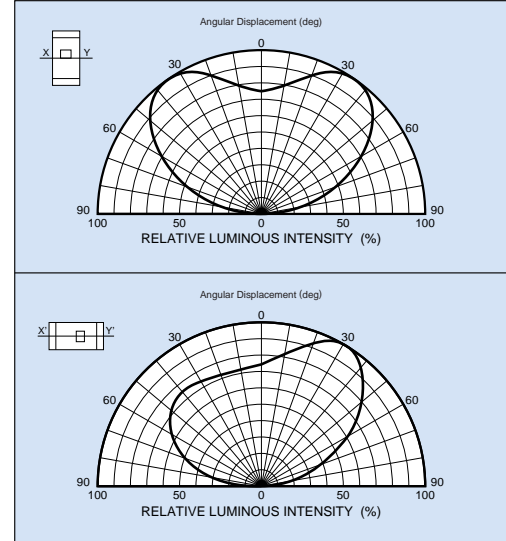
Packaging Specifications (Unit : mm)



Dimensions (Unit:mm)

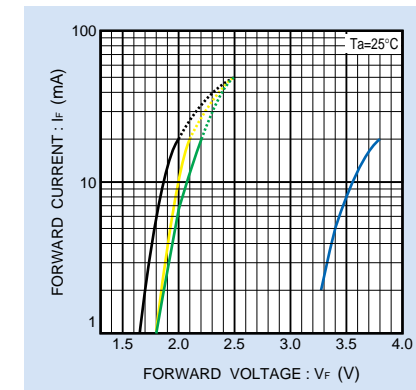


Directivity (Typ.)

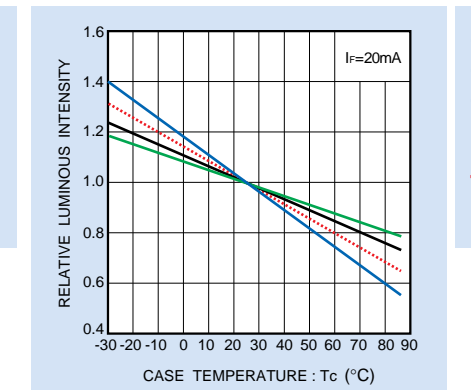


Electrical Characteristic Curves

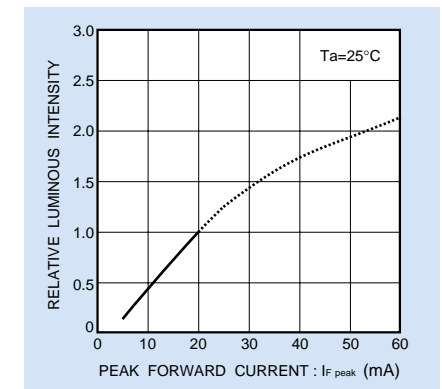
Forward Current - Forward Voltage



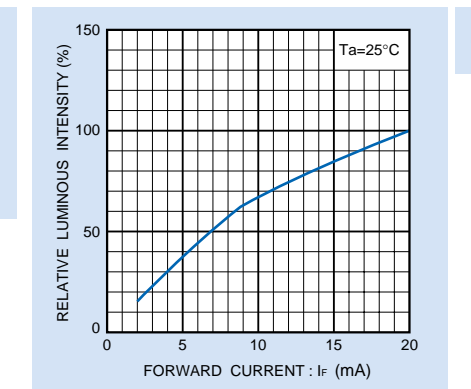
Relative Luminous Intensity - Case Temperature



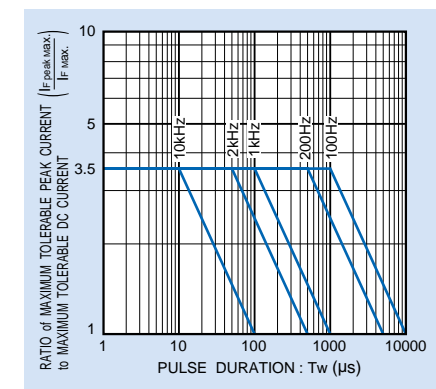
Relative Luminous Intensity - Forward Current



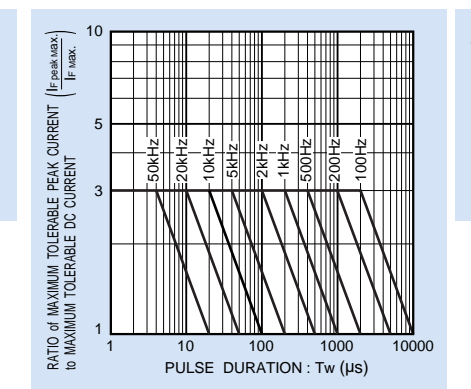
Relative Luminous Intensity - Forward Current



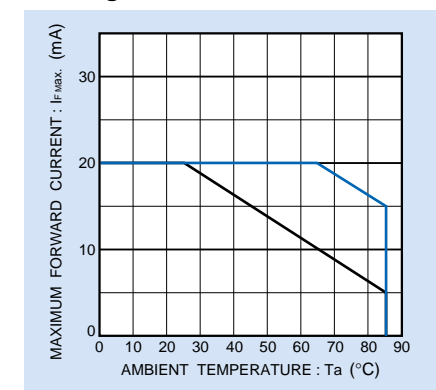
Ratio of Maximum Tolerable Peak Current - Pulse Duration



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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