

# 0603<1.6×0.8 t=0.8mm> Low Current Type(I<sub>F</sub>≤10mA)

## SML-311 Series

Emitting Color	Yellow		Orange	Red
Material	AlGaInP on GaAs			
Package Size(mm)				
Part No.	SML-311YT	SML-311WT	SML-311DT	SML-311UT

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

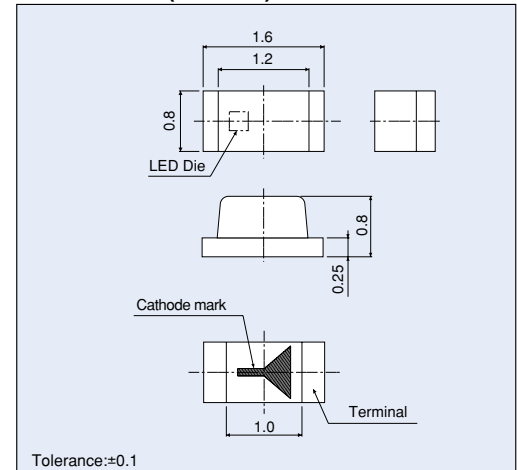
Part No.	Emitting color	Power dissipation P <sub>D</sub> (mW)	Forward current I <sub>F</sub> (mA)	Peak forward current *I <sub>FP</sub> (mA)	Reverse voltage V <sub>R</sub> (V)	Operating temperature T <sub>opr</sub> (°C)	Storage temperature T <sub>stg</sub> (°C)
SML-311YT	Yellow	44	20	60	4	-30 to +85	-40 to +85
SML-311WT							
SML-311DT	Orange						
SML-311UT	Red						

\*:Duty ≤ 1/5, pulse width ≤ 1ms.

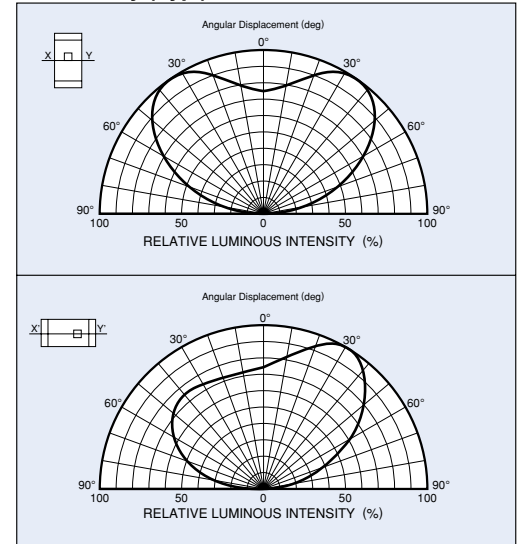
### Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V <sub>F</sub>		Reverse current I <sub>R</sub>		Light wavelength		Brightness I <sub>v</sub>			
		Typ. (V)	I <sub>F</sub> (mA)	Max. (μA)	V <sub>R</sub> (V)	Peak λ <sub>p</sub> Typ. (nm)	Half-wave Δλ Typ. (nm)	I <sub>F</sub> (mA)	Min. (mcd)	Typ. (mcd)	I <sub>F</sub> (mA)
SML-311YT	Transparent Colorless	1.8	2	100	4	590	15	2	0.9	2.5	2
SML-311WT						611	16				
SML-311DT						630	18				
SML-311UT											

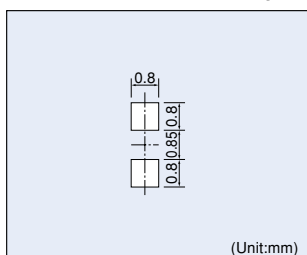
### Dimensions (Unit:mm)



### Directivity (Typ.)

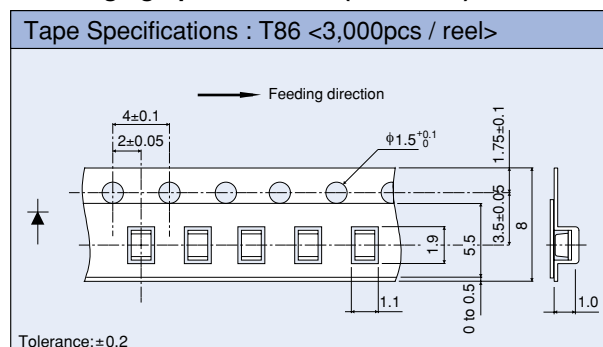


### Recommended Pad Layout

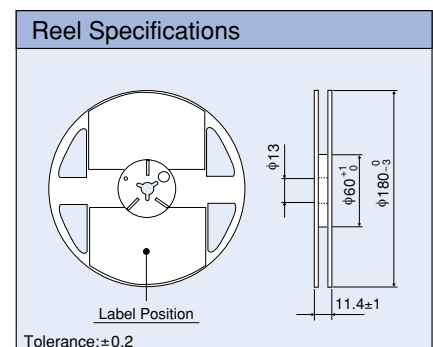


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

### Packaging Specifications (Unit : mm)

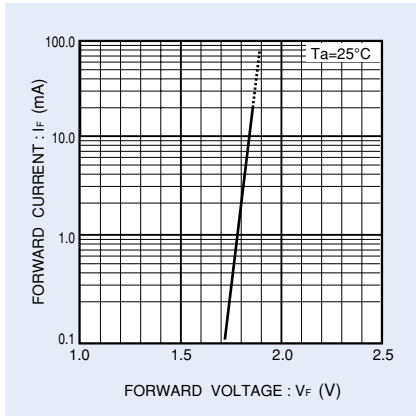


### Reel Specifications



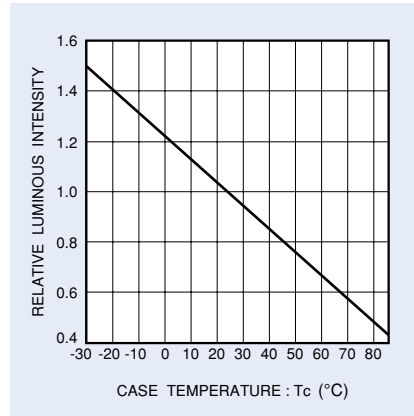
## Electrical Characteristic Curves

### Forward Current - Forward Voltage



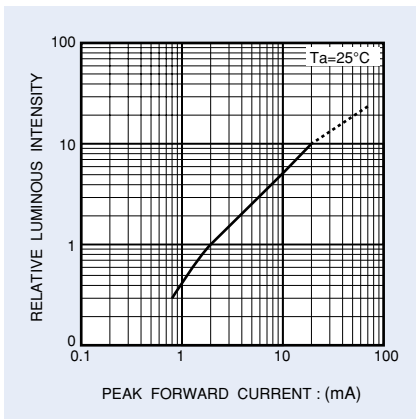
— ( SML-311YT  
SML-311WT  
SML-311DT  
SML-311UT

### Relative Luminous Intensity - Case Temperature



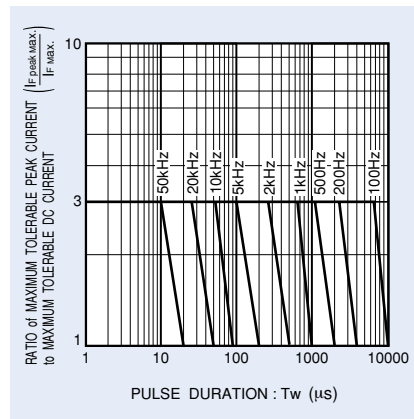
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SML-311WT  
SML-311DT  
SML-311UT

### Relative Luminous Intensity - Forward Current



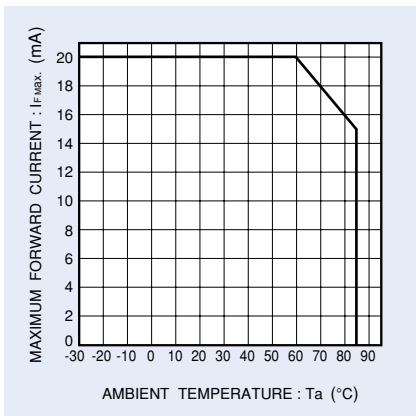
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SML-311UT

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



— ( SML-311YT  
SML-311WT  
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SML-311UT

### Derating



— ( SML-311YT  
SML-311WT  
SML-311DT  
SML-311UT

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