

Dual-Color 0605 <1.5×1.3 t=0.6mm> Standard Type

SML-521 Series

Emitting Color	Part No.	Green(Yellowish Green)	Yellow	Orange	Red
Material		GaP		AlGaInP on GaAs	
Package Size(mm)	SML-521MYW	○	○	—	—
	SML-521MDW	○	—	○	—
	SML-521MUW	○	—	—	○
	New SML-522MUW	○ *1	—	—	○

*1:AlGaInP on GaAs

Absolute Maximum Ratings (Ta=25°C)

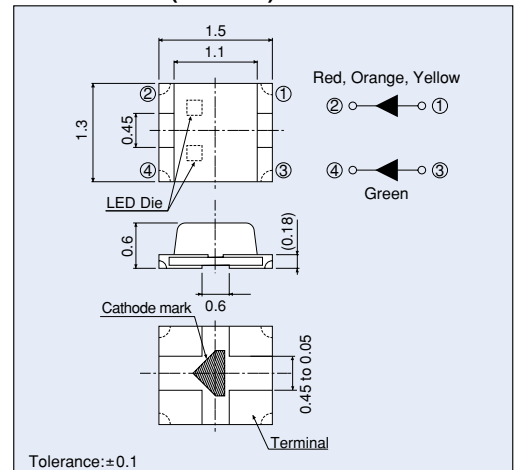
Part No.	Emitting color	Power dissipation P _D (mW)	Forward current I _F (mA)	Peak forward current *I _{FP} (mA)	Reverse voltage V _R (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
SML-521MYW	Green (Yellowish Green)	70	25	60	4	-30 to +85	-40 to +85
	Yellow	50	20				
SML-521MDW	Green (Yellowish Green)	70	25	60	4	-30 to +85	-40 to +85
	Orange	50	20				
SML-521MUW	Green (Yellowish Green)	70	25	60	4	-30 to +85	-40 to +85
	Red	50	20				
SML-522MUW	Green (Yellowish Green)	52	20	60	4	-30 to +85	-40 to +85
	Red	50	20				

*:Duty ≤ 1/5, pulse width ≤ 1ms.

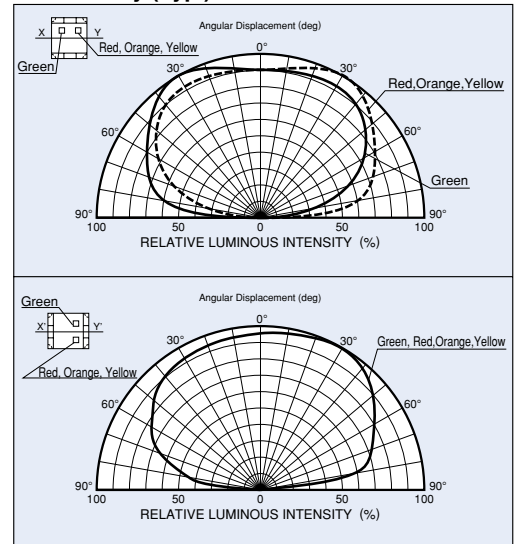
Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V _F		Reverse current I _R		Light wavelength			Brightness I _v		
		Typ. (V)	I _F (mA)	Max. (μA)	V _R (V)	Peak λ _p (nm)	Half-wave Δλ (nm)	I _F (mA)	Min. (mcd)	Typ. (mcd)	I _F (mA)
SML-521MYW		2.2				570	40		5.6	16	
		1.9				590	15		22	63	
SML-521MDW	Milky White	2.2				570	40		5.6	16	
		1.9	20	100	4	611	16	20	22	63	20
SML-521MUW		2.2				570	40		5.6	16	
		1.9				630	15		22	63	
SML-522MUW		2.1				570	18		14	40	
		1.9				630	15		22	63	

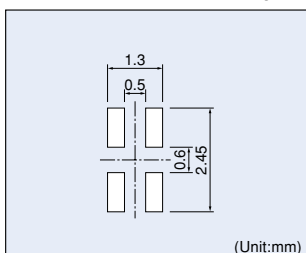
Dimensions (Unit:mm)



Directivity (Typ.)

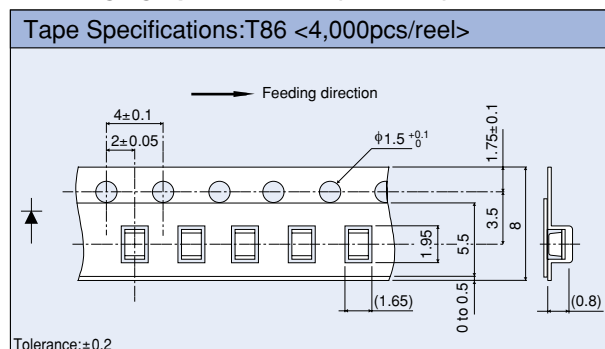


Recommended Pad Layout

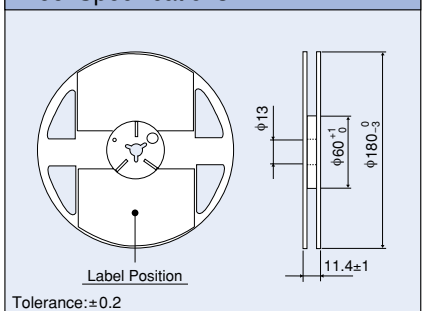


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)

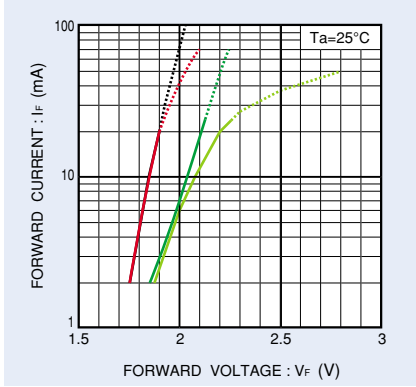


Reel Specifications



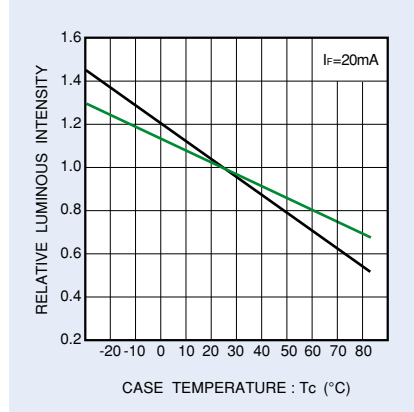
Electrical Characteristic Curves

Forward Current - Forward Voltage



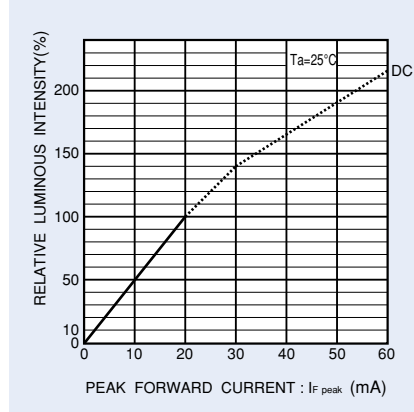
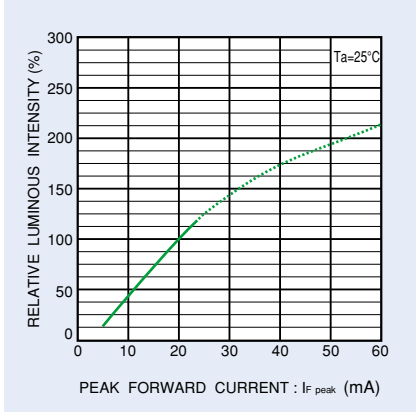
- SML-521MYW <Green>
- SML-521MDW <Green>
- SML-521MUW <Green>
- SML-522MUW <Green>
- SML-521MYW <Yellow>
- SML-521MDW <Orange>
- SML-521MUW <Red>
- SML-522MUW <Red>

Relative Luminous Intensity - Case Temperature



- SML-521MYW <Green>
- SML-521MDW <Green>
- SML-521MUW <Green>
- SML-521MYW <Yellow>
- SML-521MDW <Orange>
- SML-521MUW <Red>
- SML-522MUW <Green>
- SML-522MUW <Red>

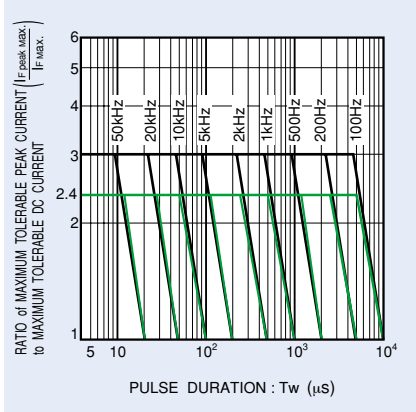
Relative Luminous Intensity - Forward Current



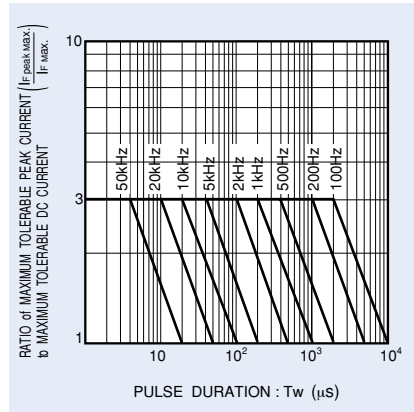
- SML-521MYW <Green>
- SML-521MDW <Green>
- SML-521MUW <Green>

- SML-521MYW <Yellow>
- SML-521MDW <Orange>
- SML-521MUW <Red>
- SML-522MUW <Green>
- SML-522MUW <Red>

Ratio of Maximum Tolerable Peak Current - Pulse Duration

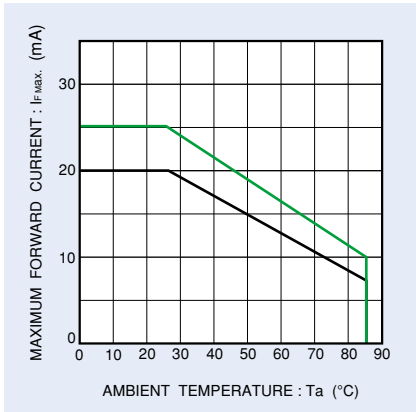


- SML-521MYW <Green>
- SML-521MDW <Green>
- SML-521MUW <Green>
- SML-521MYW <Yellow>
- SML-521MDW <Orange>
- SML-521MUW <Red>



- SML-522MUW <Green>
- SML-522MUW <Red>

Derating



- SML-521MYW <Green>
- SML-521MDW <Green>
- SML-521MUW <Green>
- SML-521MYW <Yellow>
- SML-521MDW <Orange>
- SML-521MUW <Red>
- SML-522MUW <Green>
- SML-522MUW <Red>

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