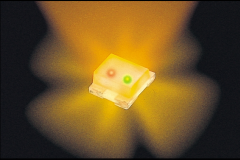


Dual-Color Type Mini-molded chip LEDs

SML-521 Series

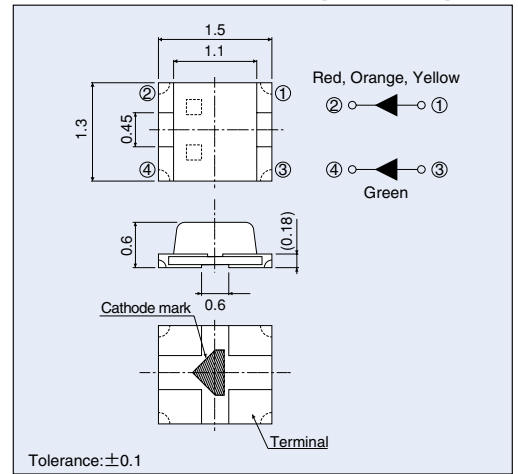
Package Size (mm)	Part No.		Green	Yellow	Orange	Red
			GaP		AlGaInP on GaAs	
			570nm	590nm	611nm	630nm
1616 (0606) 1.5×1.3 t=0.6	SML-521MYW		○	○	—	—
	SML-521MDW		○	—	○	—
	SML-521MUW		○	—	—	○

Absolute Maximum Ratings (Ta=25°C)

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

* I_{FP} measured under duty ≤ 1/5, pulse width ≤ 1ms.

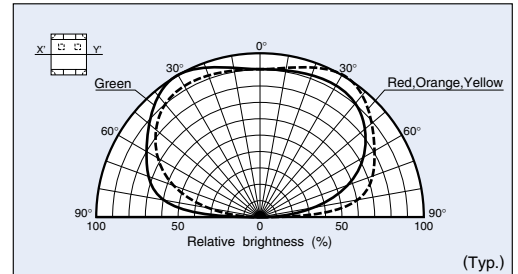
External Dimensions (Unit : mm)



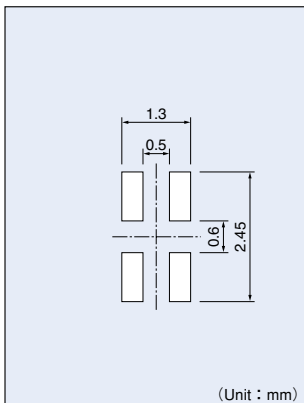
Electrical Optical Characteristics (Ta=25°C)

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)
SML-521MYW		2.2				570	40		5.6	16	
		1.9				590	15		22	63	
SML-521MDW	Milky White	2.2	20	100	4	570	40	20	5.6	16	20
		1.9				611	16		22	63	
SML-521MUW		2.2				570	40		5.6	16	
		1.9				630	15		22	63	

Directivity

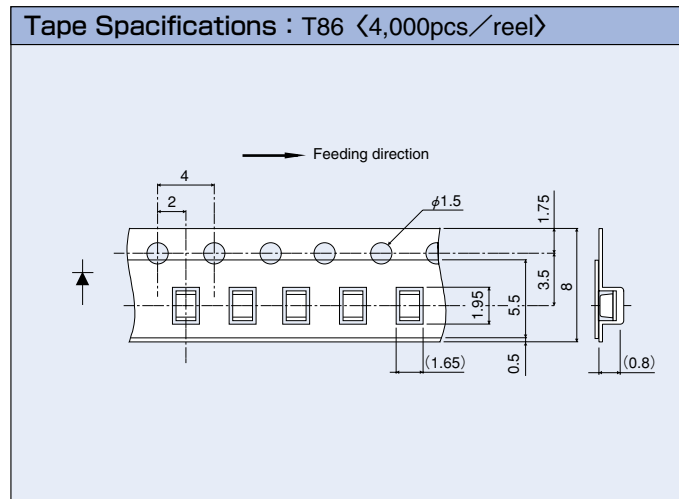


Recommended Pad Layout

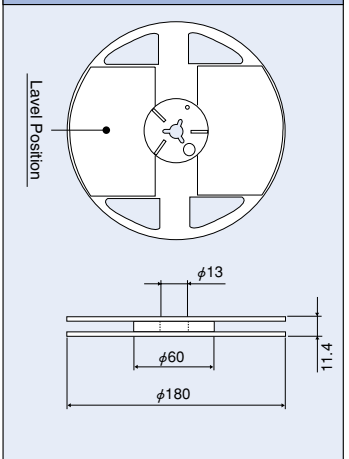


The recommended thickness of the screen mask for soldering is between 100 and 200μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit : mm)

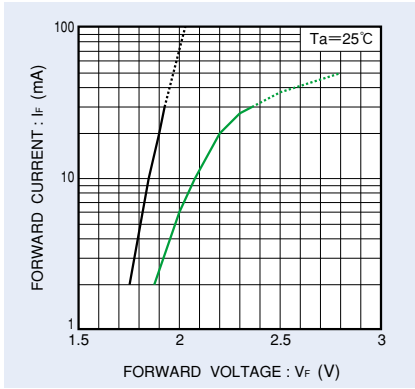


Reel Specifications



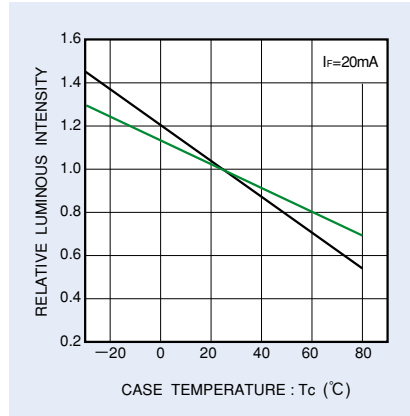
Electrical Characteristic Curves

Forward Current - Forward Voltage



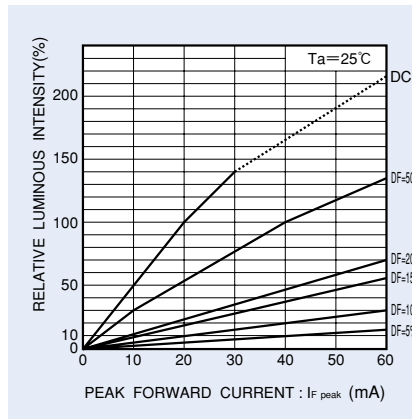
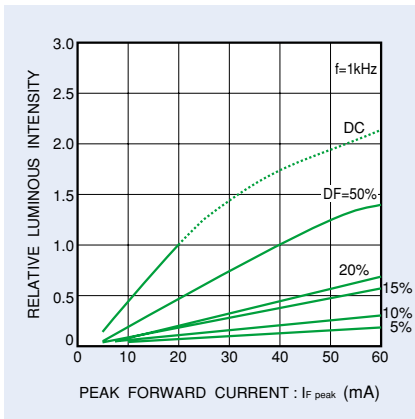
- SML-521MYW<Green>
- SML-521MDW<Green>
- SML-521MUW<Green>
- SML-521MYW<Yellow>
- SML-521MDW<Orange>
- SML-521MUW<Red>

Relative Luminous Intensity - Case Temperature



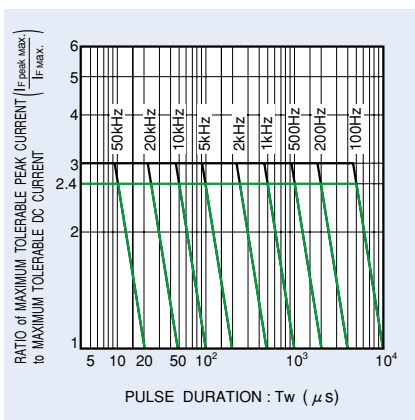
- SML-521MYW<Green>
- SML-521MDW<Green>
- SML-521MUW<Green>
- SML-521MYW<Yellow>
- SML-521MDW<Orange>
- SML-521MUW<Red>

Relative Luminous Intensity - Forward Current



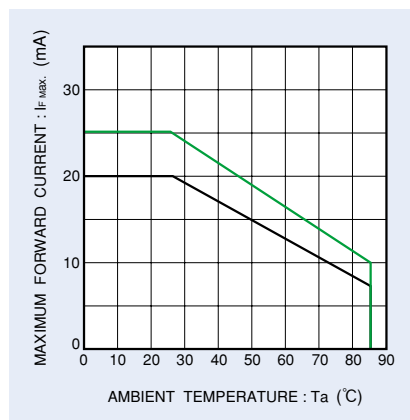
- SML-521MYW<Green>
- SML-521MDW<Green>
- SML-521MUW<Green>
- SML-521MYW<Yellow>
- SML-521MDW<Orange>
- SML-521MUW<Red>

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>

Derating



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

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