

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)

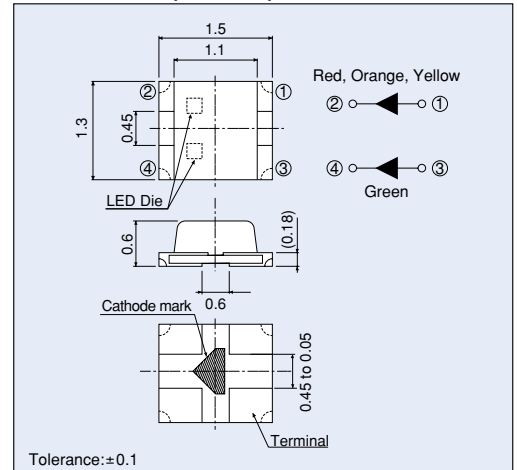
Part No.	Emitting color	Power dissipation P _D (mW)	Forward current I _F (mA)	Peak forward current *I _{FP} (mA)	Reverse voltage V _R (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
SML-521MYW	Green (Yellowish Green)	70	25	60	4	-30 to +85	-40 to +85
	Yellow	50	20				
SML-521MDW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

*:Duty ≤ 1/5, pulse width ≤ 1ms.

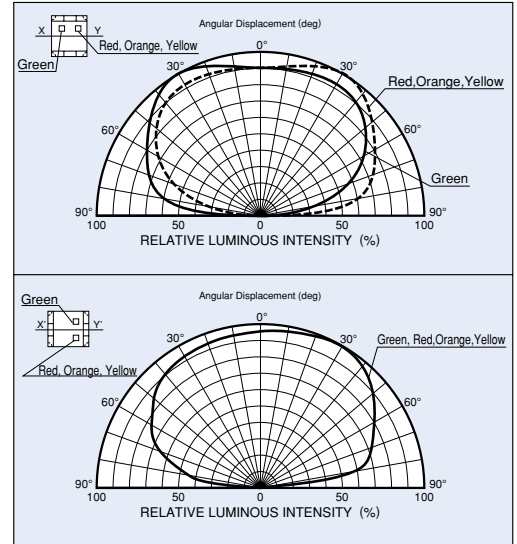
■ Electrical Optical Characteristics (Ta=25°C)

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)
SML-521MYW		2.2				570	40		5.6	16
		1.9				590	15		22	63
SML-521MDW		2.2				570	40		5.6	16
		1.9				611	16		22	63
SML-521MUW	Milky White	2.2	20	100	4	570	40	20	5.6	16
		1.9				630	15		22	63
SML-522MUW		2.1				570	18		14	40
		1.9				630	15		22	63

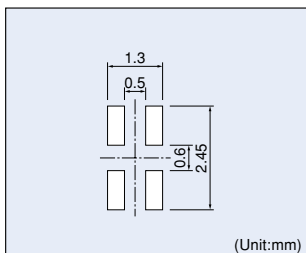
■ Dimensions (Unit:mm)



■ Directivity (Typ.)

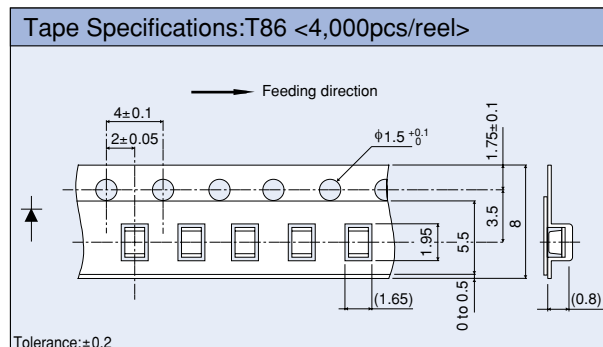


■ Recommended Pad Layout

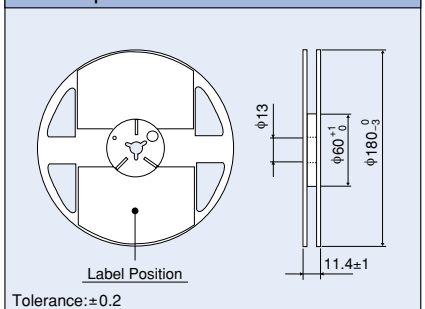


The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

■ Packaging Specifications (Unit:mm)

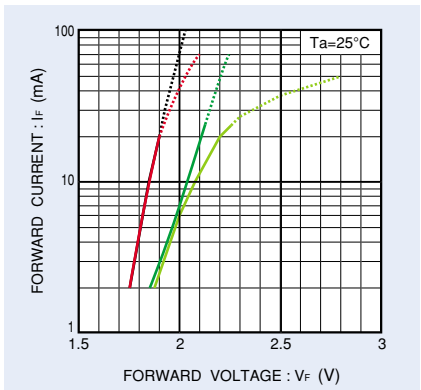


Reel Specifications

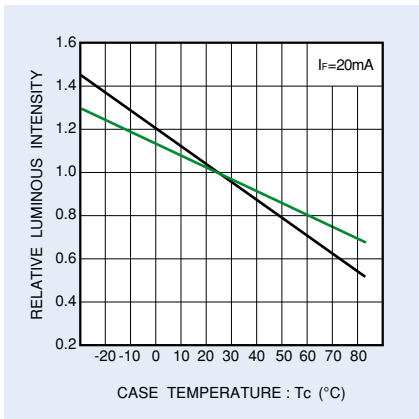


■ Electrical Characteristic Curves

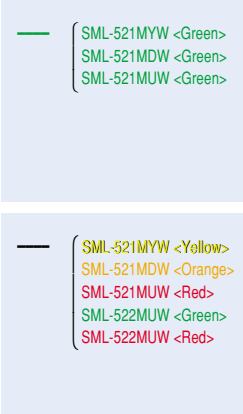
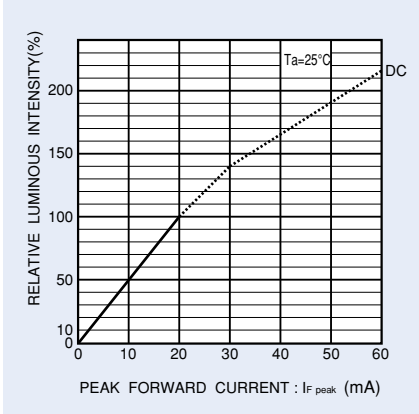
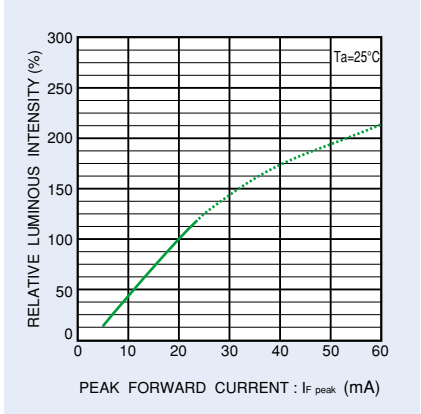
Forward Current - Forward Voltage



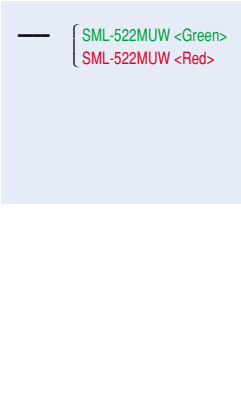
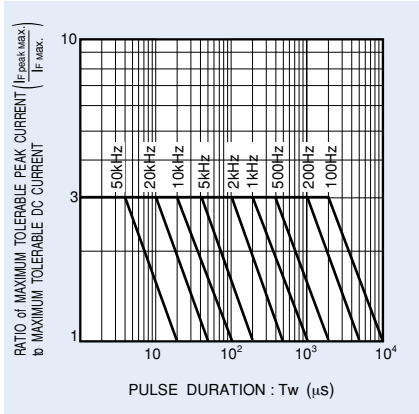
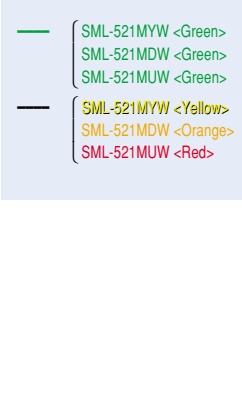
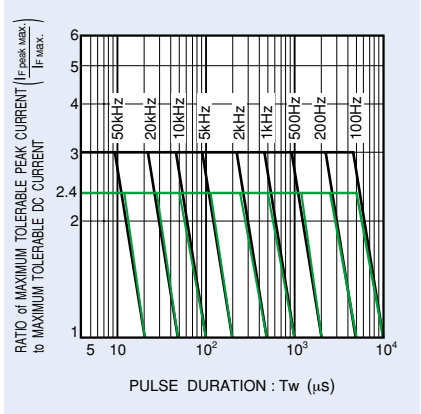
Relative Luminous Intensity - Case Temperature



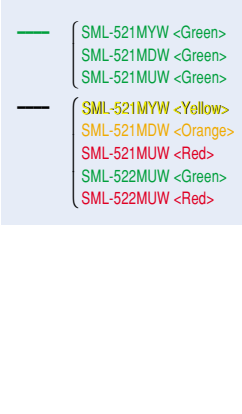
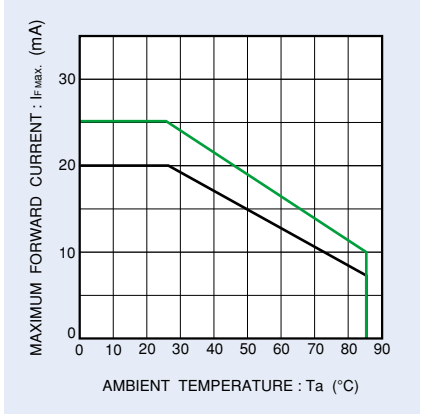
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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