# **Dual-Color Chip LEDs with Reflector** 1210 <3.0×2.5 t=1.3mm> Standard Type





# SML-020 Series

Emitting	g Color	Part No.	Green(Yellowish Green)	Red GaAIAs on GaAs		
Mate	erial	Fait No.	GaP			
Package S	Size(mm)					
3025(1210) 3.0		SML-020MLT	0	0		

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

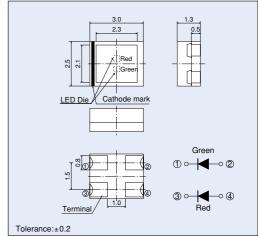
Part No.	Emitting color	Power dissipation P <sub>D</sub> (mW)	Forward current IF (mA)	Peak forward current *IFP (mA)	Reverse voltage V <sub>R</sub> (V)	Operating temperature Topr (°C)	Storage temperature T <sub>stg</sub> (°C)	
SML-020MLT	Green (Yellowish Green)	60	25	60	4	-30 to +85	-40 to +85	
SWE-020WE1	Red	00	30	75	7	-30 10 +03		

<sup>\*:</sup>Duty ≤1/5, pulse width≤1ms.

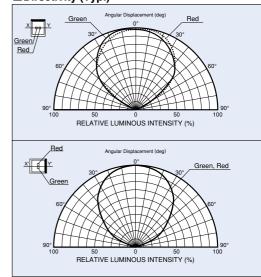
# ■Electrical Optical Characteristics (Ta=25°C)

	Part No.	Resin Color	Forward voltage		Reverse current In		Light wavelength  Peak Half-wave  λρ Δλ		Brightness Iv			
			Typ.	lF (mA)	Max. (μA)	VR (V)	Typ. (nm)	Typ. (nm)	lF (mA)	Min. (mcd)	Typ. (mcd)	lF (mA)
	SML-020MLT	Transparent	2.2	20	100	4	570	40	20	9.0	20	20
SIV	SIVIL-UZUWIL I	Colorless	1.75				660	25			16	

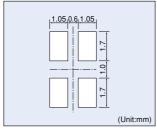
#### ■ Dimensions (Unit:mm)



# ■Directivity (Typ.)

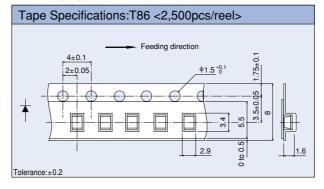


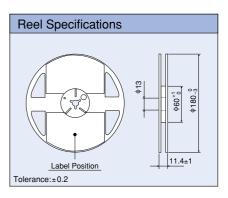
#### ■ Recommended Pad Layout



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

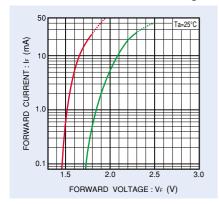
# ■ Packaging Specifications (Unit:mm)





#### **■**Electrical Characteristic Curves

#### **Forward Current - Forward Voltage**



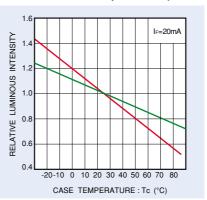
#### **Relative Luminous Intensity - Case Temperature**

SML-020MLT <Green>

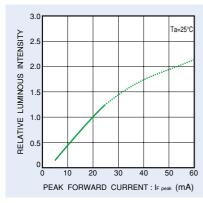
SML-020MLT <Red>

SML-020MLT <Green>

SML-020ML <Red>

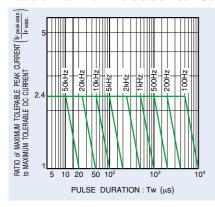


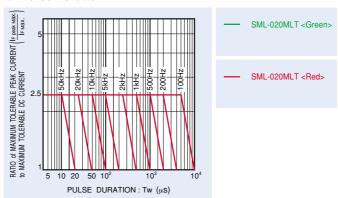
### **Relative Luminous Intensity - Forward Current**



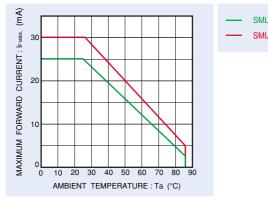


# **Ratio of Maximum Tolerable Peak Current - Pulse Duration**





#### **Derating**



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