# Low Current Type (IF≦10mA) Mini-molded chip LEDs

# SML-211 Series

Package Size (mm)	Yellow	Orange	Red		
		AlGaInP on GaAs			
	590nm	611nm	630nm		
2012 (0805) 2.0×1.25 t=0.8					
	SML-211YT	SML-211DT	SML-211UT		

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

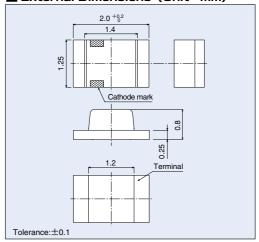
Part No.	Emitting color	Power dissipation Po (mW)	Forward current IF (mA)	Peak forward current * IFP (mA)	Reverse voltage V <sub>R</sub> (V)	Operating temperature Topr	Stotage temperature T <sub>stg</sub> (°C)
SML-211YT	Yellow						
SML-211DT	Orange	44	20	60	4	-30 to +85	-40 to +85
SML-211UT	Red						

<sup>\*</sup> IFP measured under duty  $\leq$ 1/5,pulse width  $\leq$ 1ms.

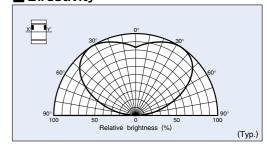
### ■ Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V <sub>F</sub>		Reverse current In		Light wavelength  Peak Half-wave  λρ Δλ			Brightness Iv		
		Typ. (V)	lF (mA)	Max. (μA)	VR (V)	Typ. (nm)	Typ. (nm)	lF (mA)	Min. (mcd)	Typ. (mcd)	lF (mA)
SML-211YT	Transparent Clear					590	15		1.4	4	
SML-211DT		1.8	2	100	4	611	16	2	0.9	2.5	2
SML-211UT						630	18		0.9	2.5	

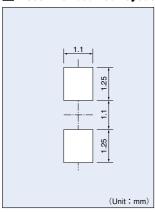
## **■** External Dimensions (Unit: mm)



## Directivity

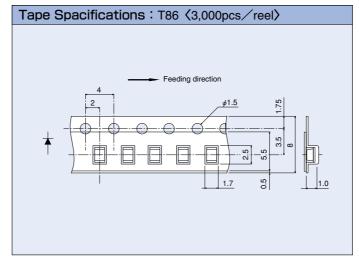


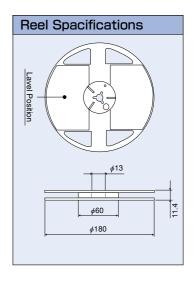
## ■ Recommemded Pad Layout



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

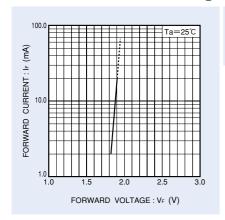
## ■ Packaging Spacifications (Unit:mm)





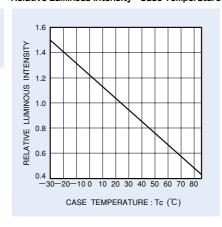
### **■** Electrical Characteristic Curves

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



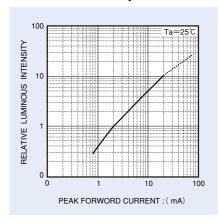
SML-211YT
SML-211DT
SML-211UT

## Relative Luminous Intensity - Case Temperature



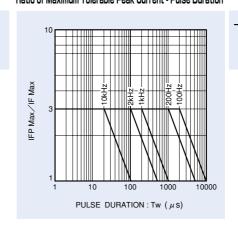
SML-211YT
SML-211DT
SML-211UT

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



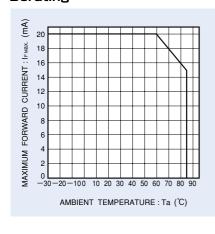
SML-211YT
SML-211DT
SML-211UT

# Ratio of Maximum Tolerable Peak Current - Pulse Duration



SML-211YT
SML-211DT
SML-211UT

### Derating



— SML-211YT SML-211DT SML-211UT

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