# Standard Type Mini-molded chip LEDs

## SML-310 Series

Package Size (mm)	Pure Green	Green	Yellow	Orange	Red		
	Ga	aP		GaAsP on Gap	GaAlAs on GaAs		
(11111)	555nm	570nm	585nm	610nm	650nm	660nm	
1608 (0603) 1.6x0.8 t=0.8	(0603) 1.6x0.8			10			
	SML-310PT	SML-310MT	SML-310YT	SML-310DT	SML-310VT	SML-310LT	

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

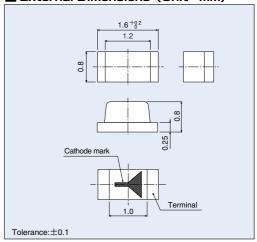
Part No.	Emitting color	Power dissipation Po (mW)	Forward current IF (mA)	Peak forward current * IFP (mA)	Reverse voltage V <sub>R</sub> (V)	Operating temperature Topr	Stotage temperature T <sub>stg</sub> (°C)
SML-310PT	Pure Green						
SML-310MT	Green						
SML-310YT	Yellow	55	20	60	4	-30 to +85	-40 to +85
SML-310DT	Orange				4	-30 10 +65	-40 10 +65
SML-310VT	Red						
SML-310LT	Red	60	25	75			

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

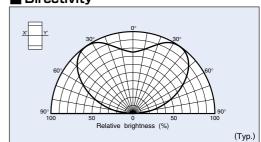
## ■ Electrical Optical Characteristics (Ta=25°C)

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-310PT		2.2				555			1.4	4	
SML-310MT		2.2				570			3.6	16	
SML-310YT	Transparent	2.1	-00	100	4	585	40	00	2.2	6.0	00
SML-310DT	Clear	0.0	20	100	4	610		20	2.2	6.3	20
SML-310VT		2.0				650			1.4	4	
SML-310LT		1.75				660	25		3.6	16	

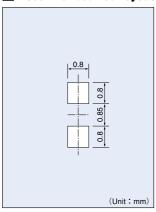
## ■ External Dimensions (Unit:mm)





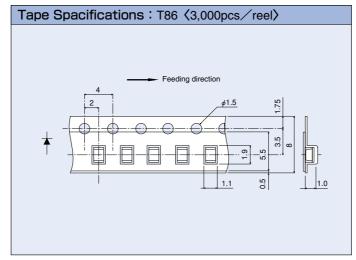


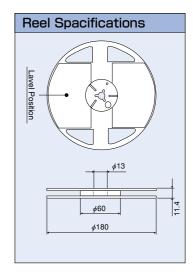
# ■ Recommemded Pad Layout



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)



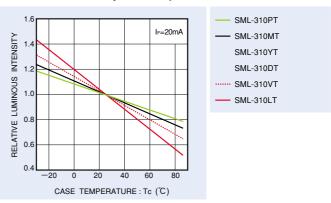


## **■** Electrical Characteristic Curves

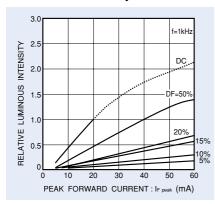
#### Forward Current - Forward Voltage

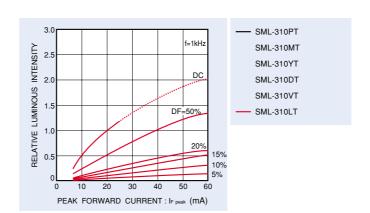


#### Relative Luminous Intensity - Case Temperature

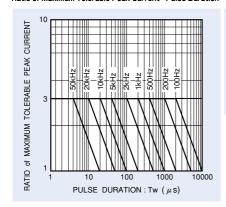


## Relative Luminous Intensity - Forward Current



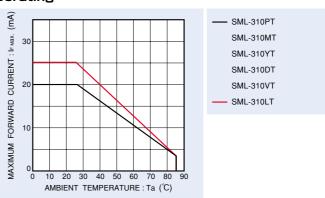


#### Ratio of Maximum Tolerable Peak Current - Pulse Duration



SML-310PT
SML-310MT
SML-310YT
SML-310DT
SML-310VT
SML-310LT

# Derating



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