Standard Type Mini-molded chip LEDs

SML-310 Series

Package Size	Pure Green	Green	Yellow	Orange	Red		
	G	aP		GaAsP on Gap	GaAlAs on GaAs		
(mm)	555nm 570nm 585nm 610nm 650nm	660nm					
1608 (0603) 1.6x0.8 t=0.8	(0603) 1.6x0.8			9			
	SML-310PT	SML-310MT	SML-310YT	SML-310DT	SML-310VT	SML-310LT	

■ Absolute Maximum Ratings (Ta=25°C)

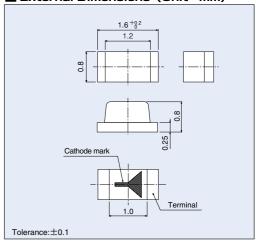
Part No.	Emitting color	Power dissipation Po (mW)	Forward current IF (mA)	Peak forward current * IFP (mA)	Reverse voltage V _R (V)	Operating temperature Topr	Stotage temperature T _{stg} (°C)
SML-310PT	Pure Green						
SML-310MT	Green						
SML-310YT	Yellow	55	20	60	4	-30 to +85	-40 to +85
SML-310DT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

^{*}IFP measured under duty $\leq 1/5$, pulse width ≤ 1 ms.

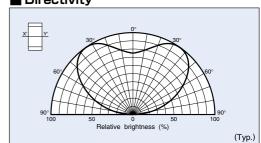
■ Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V _F		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		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	

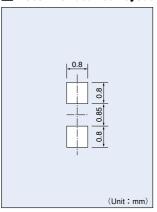
■ External Dimensions (Unit:mm)



■ Directivity

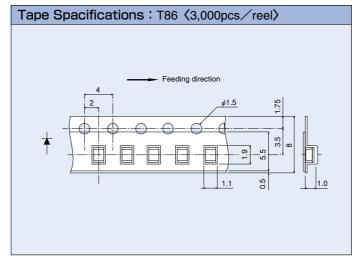


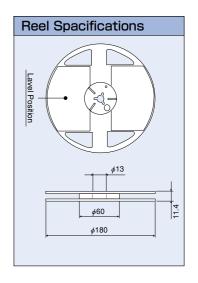
■ Recommemded Pad Layout



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)



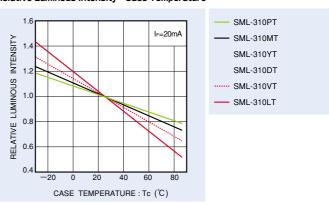


■ Electrical Characteristic Curves

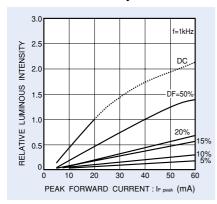
Forward Current - Forward Voltage

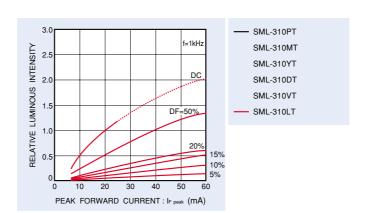


Relative Luminous Intensity - Case Temperature

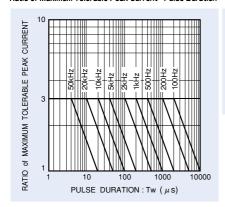


Relative Luminous Intensity - Forward Current



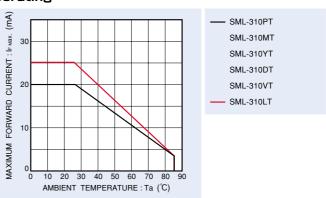


Ratio of Maximum Tolerable Peak Current - Pulse Duration



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

Derating



Notes

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