

# Standard Type Mini-molded chip LEDs

## SML-310 Series

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

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

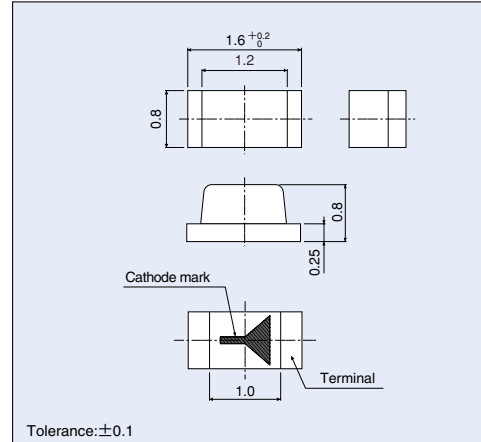
Part No.	Emitting color	Power dissipation Pd (mW)	Forward current IF (mA)	Peak forward current * I <sub>FP</sub> (mA)	Reverse voltage VR (V)	Operating temperature T <sub>opr</sub> (°C)	Storage temperature T <sub>stg</sub> (°C)
SML-310PT	Pure Green						
SML-310MT	Green						
SML-310YT	Yellow	55	20	60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

\* I<sub>FP</sub> measured under duty ≤ 1/5, pulse width ≤ 1ms.

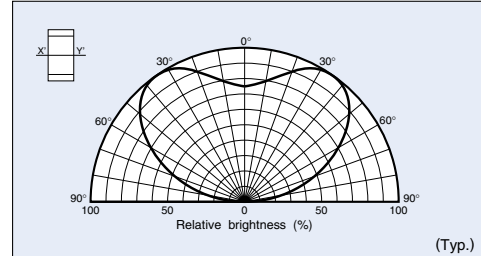
### Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength		Brightness Iv		
		Typ. (V)	IF (mA)	Max. (μA)	VR (V)	Peak λp (nm)	Half-wave Δλ (nm)	Min. (mcd)	Typ. (mcd)	IF (mA)
SML-310PT	Transparent Clear	2.2	20	100	4	555		1.4	4	
SML-310MT						570		3.6	16	
SML-310YT		2.1				585	40	2.2	6.3	20
SML-310DT						610				
SML-310VT		2.0				650		1.4	4	
SML-310LT		1.75				660	25	3.6	16	

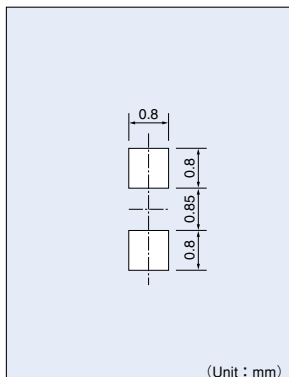
### External Dimensions (Unit : mm)



### Directivity



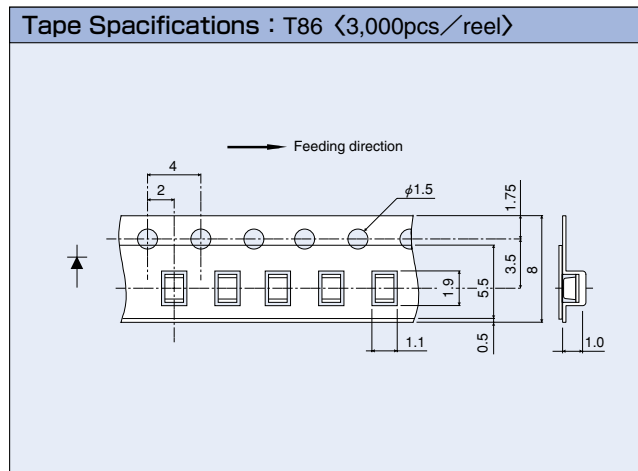
### Recommended Pad Layout



(Unit : mm)

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

### Packaging Specifications (Unit : mm)

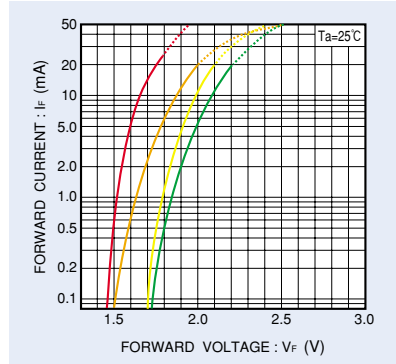


### Reel Specifications



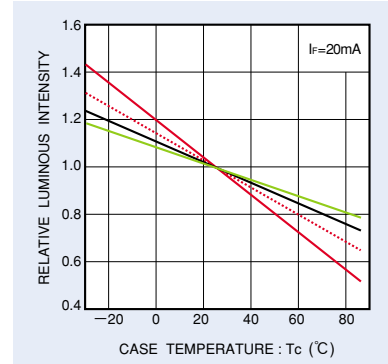
## Electrical Characteristic Curves

### Forward Current - Forward Voltage



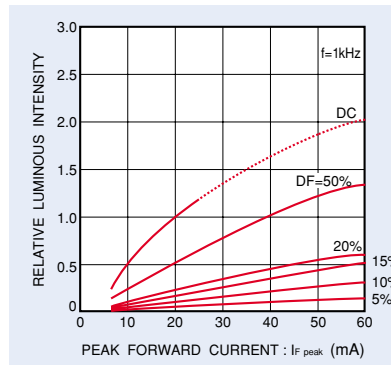
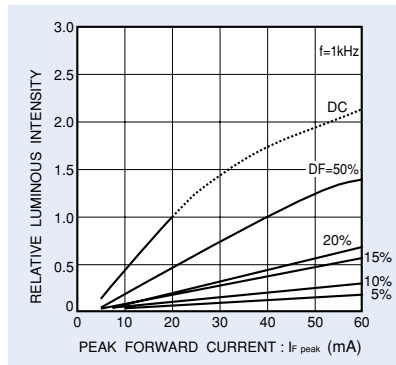
- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT
- SML-310LT

### Relative Luminous Intensity - Case Temperature



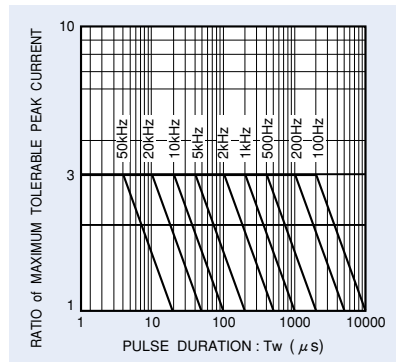
- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT
- SML-310LT

### Relative Luminous Intensity - Forward Current



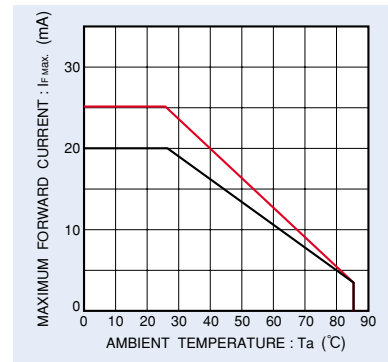
- SML-310PT
- SML-310MT
- SML-310YT
- SML-310DT
- SML-310VT
- SML-310LT

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



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

### Derating



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

### Notes

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