

# High Brightness Type Side view chip LEDs

## SML-A12 Series

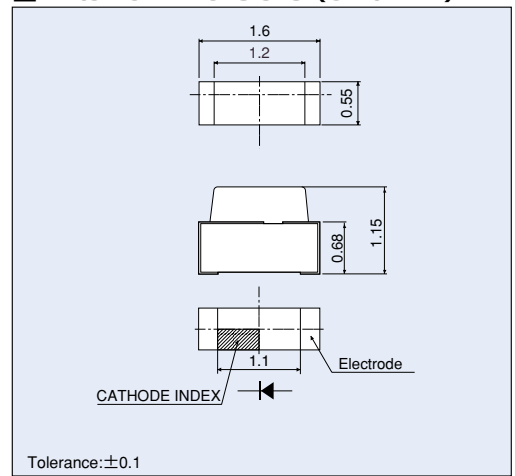
Package Size (mm)	Green	Yellow	Orange	Red
	AlGaInP on GaAs			
	570nm	590nm	611nm	630nm
1611 (0605) 1.6×1.15 t=0.55				
	SML-A12MT	SML-A12WT	SML-A12DT	SML-A12UT

### 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-A12MT	Green	65	25	100	5	-30 to +85	-40 to +85
SML-A12WT	Yellow	75	30			-40 to +85	-40 to +100
SML-A12DT	Orange			-40 to +85	-40 to +100		
SML-A12UT	Red						

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

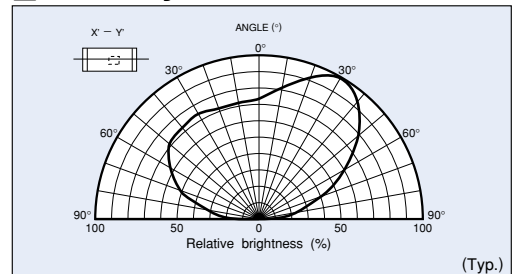
### External Dimensions (Unit : mm)



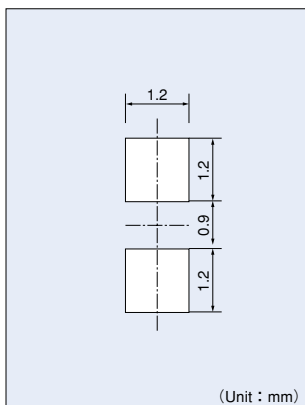
### Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength Peak Half-wave			Brightness Iv		
		Typ. (V)	IF (mA)	Max. (μA)	VR (V)	Typ. (nm)	Typ. (nm)	IF (mA)	Min. (mcd)	Typ. (mcd)	IF (mA)
SML-A12MT	Transparent Clear	2.1	20	100	5	570	18	20	14	40	20
SML-A12WT		2.0		10		590	15		63		
SML-A12DT		611	16	36		100					
SML-A12UT		630	18								

### Directivity



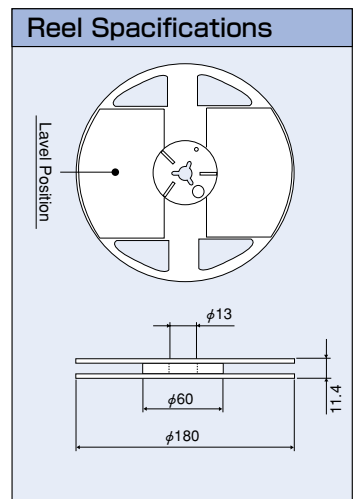
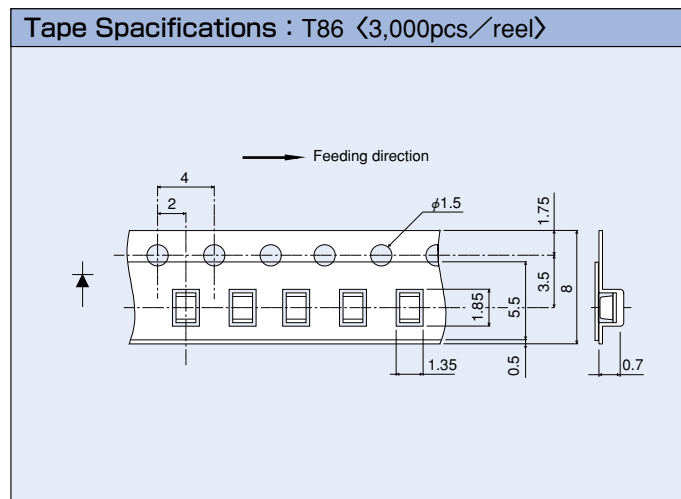
### Recommended Pad Layout



(Unit : mm)

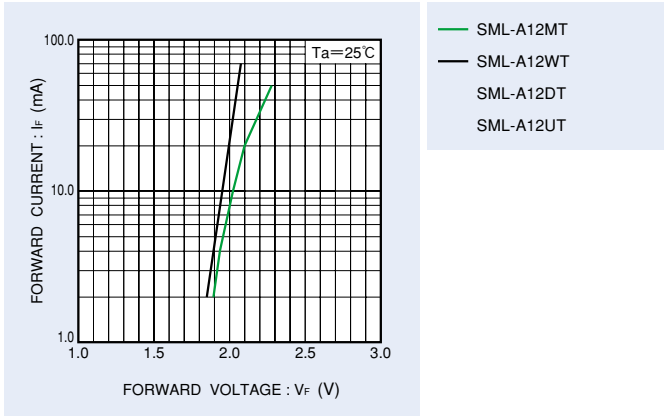
The recommended thickness of the screen mask for soldering is more than 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

### Packaging Specifications (Unit : mm)

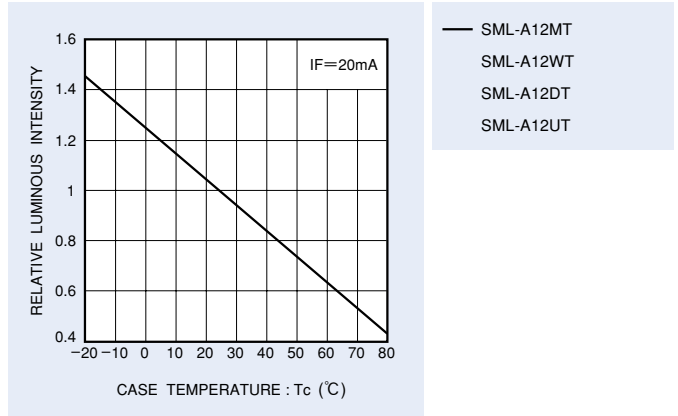


## Electrical Characteristic Curves

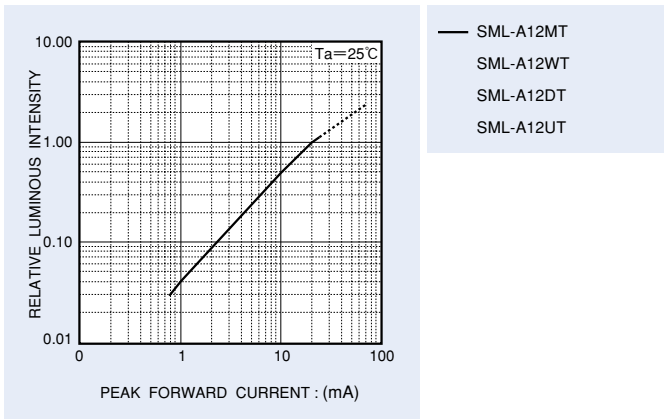
### Forward Current - Forward Voltage



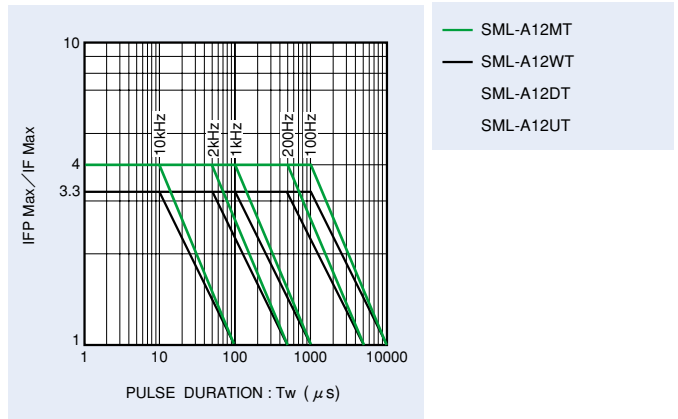
### Relative Luminous Intensity - Case Temperature



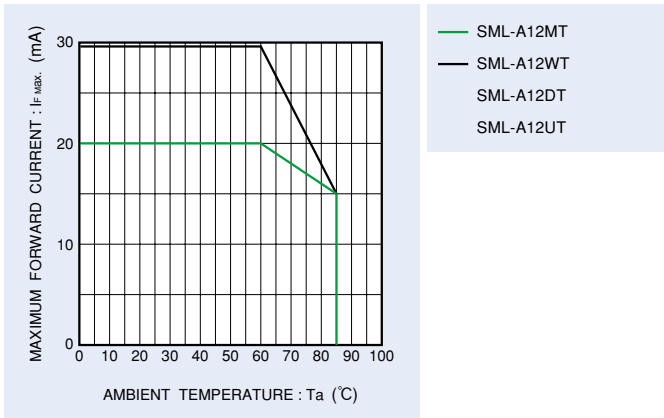
### Relative Luminous Intensity - Forward Current



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



## Derating



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