

# 0402<1.0×0.6 t=0.2mm> Standard Type

## SML-P12 Series PICOLED™

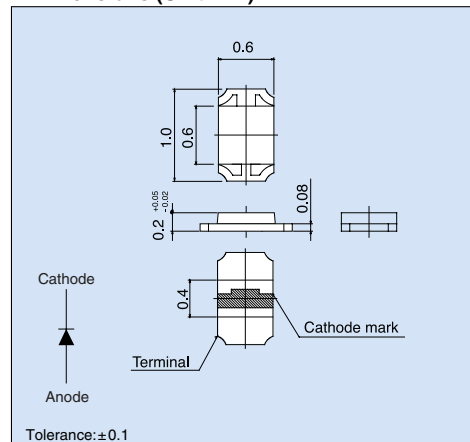
Emitting Color	Pure Green	Green(Yellowish Green)	Yellow	Orange	Red	
Material	AlGaInP on GaAs					
Package Size(mm)						
	1006(0402) 1.0×0.6(t=0.2)					
Part No.	SML-P12PT	SML-P12MT	SML-P12YT	SML-P12DT	SML-P12UT	SML-P12VT

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

Part No.	Emitting color	Power dissipation P <sub>D</sub> (mW)	Forward current I <sub>F</sub> (mA)	Peak forward current *I <sub>FP</sub> (mA)	Reverse voltage V <sub>R</sub> (V)	Operating temperature T <sub>opr</sub> (°C)	Storage temperature T <sub>stg</sub> (°C)
SML-P12PT	Pure Green	54					
SML-P12MT	Green (Yellowish Green)	54					
SML-P12YT	Yellow	52	20	100	5	-40 to +85	-40 to +100
SML-P12DT	Orange	52					
SML-P12UT	Red	50					
SML-P12VT	Red	50					

※:Duty ≤ 1/10, 1kHz.

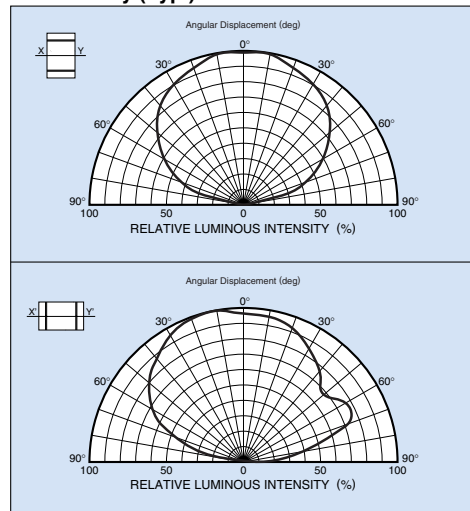
### Dimensions (Unit:mm)



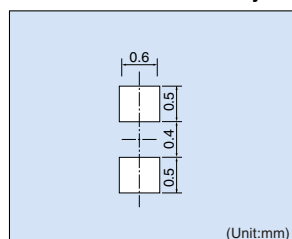
### Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V <sub>F</sub>		Reverse current I <sub>R</sub>		Light wavelength Dominant λ <sub>D</sub>		Brightness I <sub>v</sub>		
		Typ. (V)	I <sub>F</sub> (mA)	Max. (μA)	V <sub>R</sub> (V)	Typ. (nm)	I <sub>F</sub> (mA)	Min. (mcd)	Typ. (mcd)	I <sub>F</sub> (mA)
SML-P12PT	Transparent Colorless	2.2				560		4.0	13	
SML-P12MT		2.2				572		10	35	
SML-P12YT		2.1				590	20	40	130	20
SML-P12DT		2.1	20	100	4	605		40	100	
SML-P12UT		2.0				620		25	85	
SML-P12VT		2.0				630		25	60	

### Directivity (Typ.)

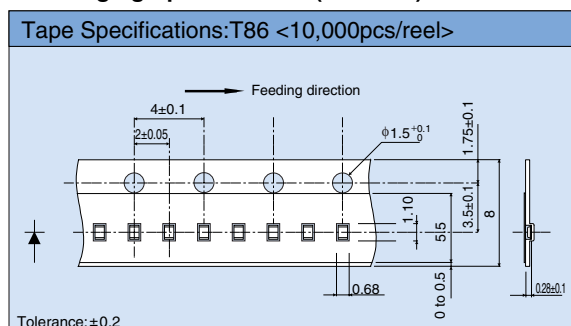


### Recommended Pad Layout

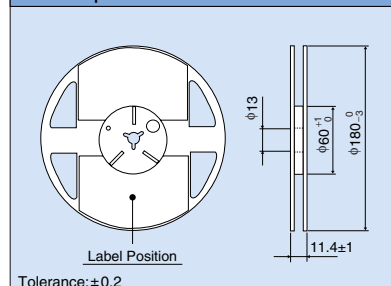


The recommended thickness of the screen mask for soldering is between 80 and 130μm. The hole size of the screen mask should be the same as the recommended land pattern or smaller.

### Packaging Specifications (Unit:mm)

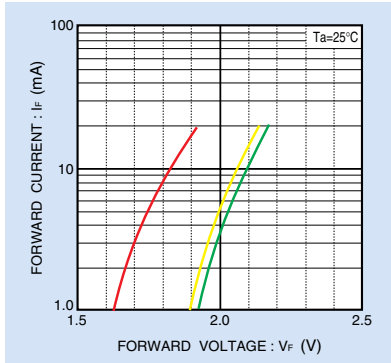


### Reel Specifications



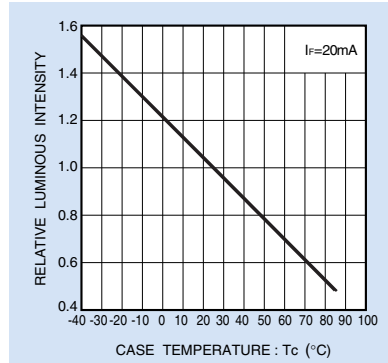
## Electrical Characteristic Curves

### Forward Current - Forward Voltage



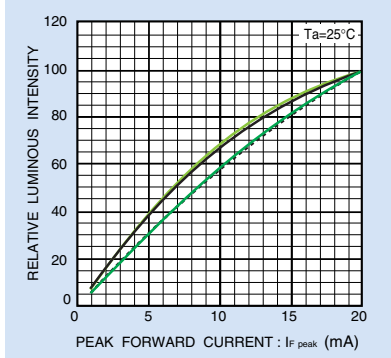
- SML-P12PT
- SML-P12MT
- SML-P12YT
- SML-P12DT
- SML-P12VT
- SML-P12UT

### Relative Luminous Intensity - Case Temperature



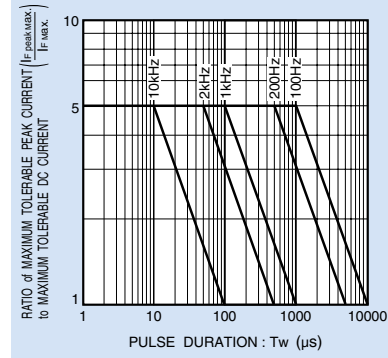
- SML-P12PT
- SML-P12MT
- SML-P12YT
- SML-P12DT
- SML-P12VT
- SML-P12UT

### Relative Luminous Intensity - Forward Current



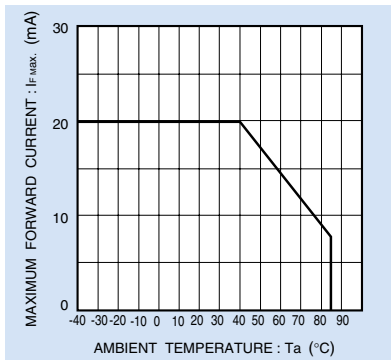
- SML-P12PT
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- SML-P12YT
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### Ratio of Maximum Tolerable Peak Current - Pulse Duration



- SML-P12PT
- SML-P12MT
- SML-P12YT
- SML-P12DT
- SML-P12VT
- SML-P12UT

### Derating



- SML-P12PT
- SML-P12MT
- SML-P12YT
- SML-P12DT
- SML-P12VT
- SML-P12UT

### Notes

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