

0402<1.0×0.6 t=0.2mm> Standard Type

SML-P12 Series PICOLED™

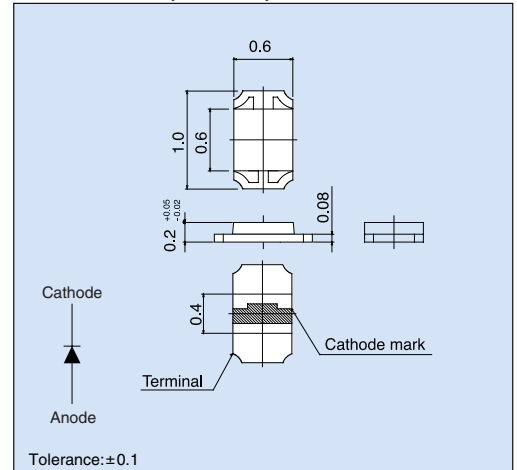
Emitting Color	Pure Green	Green(Yellowish Green)	Yellow	Orange	Red	
Material	AlGaInP on GaAs					
Package Size(mm)						
1006(0402) 1.0×0.6(t=0.2)						
Part No.	SML-P12PT	SML-P12MT	SML-P12YT	SML-P12DT	SML-P12UT	SML-P12VT

Absolute Maximum Ratings (Ta=25°C)

Part No.	Emitting color	Power dissipation Pd (mW)	Forward current IF (mA)	Peak forward current *IFP (mA)	Reverse voltage VR (V)	Operating temperature Topr (C)	Storage temperature Tstg (C)
SML-P12PT	Pure Green	54					
SML-P12MT	Green (Yellowish Green)	54					
SML-P12YT	Yellow	52					
SML-P12DT	Orange	52	20	100	5	-40 to +85	-40 to +100
SML-P12UT	Red	50					
SML-P12VT	Red	50					

*:Duty ≤1/10, 1kHz.

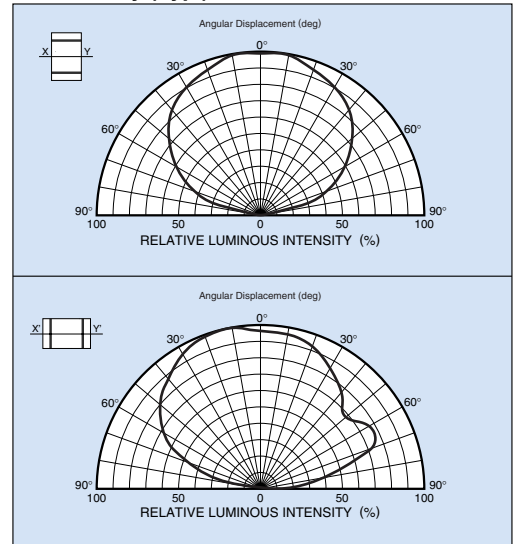
Dimensions (Unit:mm)



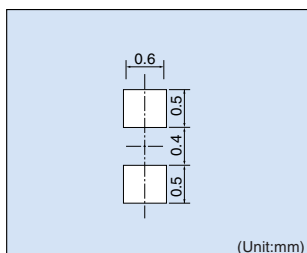
Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength Dominant λD		Brightness Iv		
		Typ. (V)	IF (mA)	Max. (μA)	VR (V)	Typ. (nm)	IF (mA)	Min. (mcd)	Typ. (mcd)	IF (mA)
SML-P12PT	Transparent	2.2	20	100	4	560	20	4.0	13	20
SML-P12MT		572				10		35		
SML-P12YT		590				40		130		
SML-P12DT		605				40		100		
SML-P12UT		620				25		85		
SML-P12VT		630				25		60		

Directivity (Typ.)

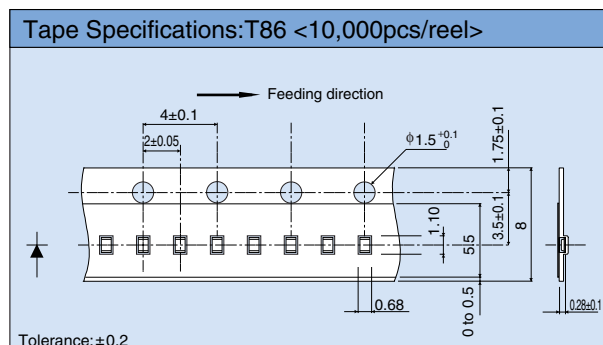


Recommended Pad Layout



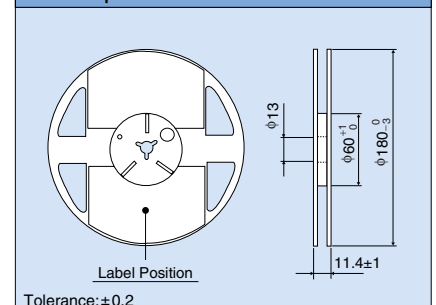
The recommended thickness of the screen mask for soldering is between 80 and 130μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)



Tolerance: ±0.2

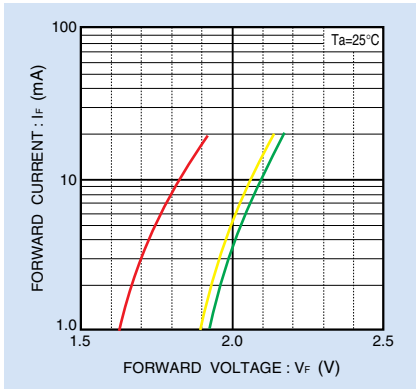
Reel Specifications



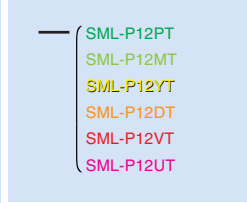
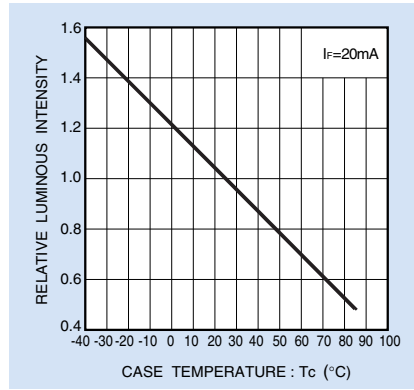
Tolerance: ±0.2

Electrical Characteristic Curves

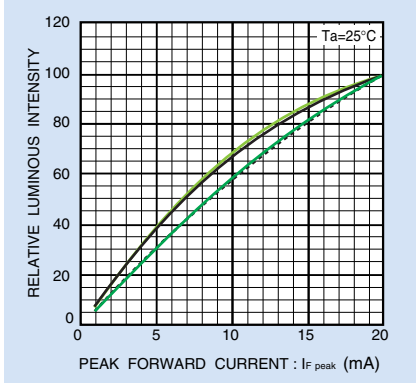
Forward Current - Forward Voltage



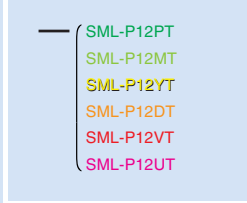
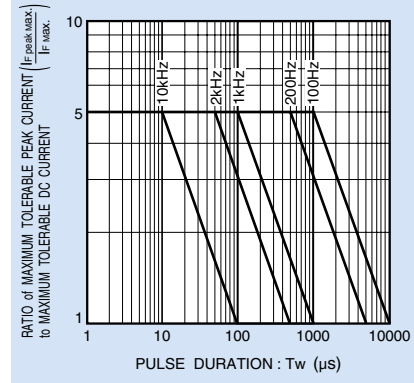
Relative Luminous Intensity - Case Temperature



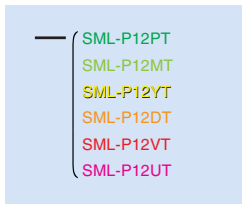
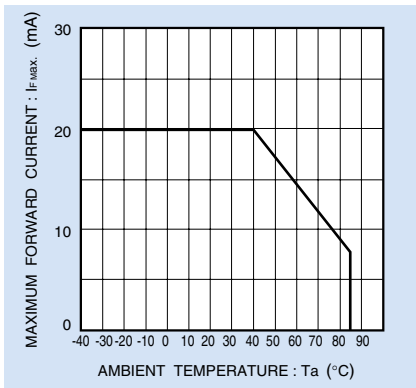
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



Notes

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