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)	\$	•	-	1	4		
Part No.	SML-P12PT	SML-P12MT	SML-P12YT	SML-P12DT	SML-P12UT	SML-P12VT	

■ Absolute Maximum Ratings (Ta=25°C)

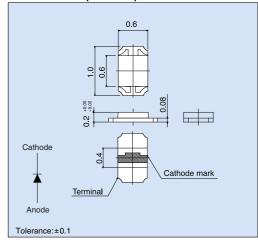
Part No.	Emitting color	Power dissipation Pp (mW)	Forward current IF (mA)	Peak forward current *IFP (mA)	Reverse voltage VR (V)	Operating temperature Topr (C)	Storage temperature Tstg (C)
SML-P12PT	Pure Green	54					
SML-P12MT	Green (Yellowish Green)	54					
SML-P12YT	Yellow	52	20	100	5	-40 to +85	-40 to +100
SML-P12DT	Orange	52	20	100	5	-40 (0 +85	-40 10 +100
SML-P12UT	Red	50					
SML-P12VT	Red	50					

^{*:}Duty ≦1/10, 1kHz.

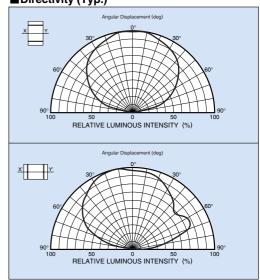
■Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V _F		Reverse current In		Light wavelength Dominant λD		Brightness Iv		
		Typ. (V)	lF (mA)	Max. (μA)	VR (V)	Typ. (nm)	lF (mA)	Min. (mcd)	Typ. (mcd)	lF (mA)
SML-P12PT		2.2				560		4.0	13	
SML-P12MT		2.2				572		10	35	
SML-P12YT	Transparent Colorless	2.1	20	100	4	590	20	40	130	20
SML-P12DT		2.1				605		40	100	
SML-P12UT		2.0				620		25	85	
SML-P12VT		2.0				630		25	60	

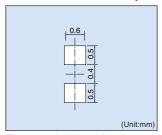
■Dimensions (Unit:mm)



■ Directivity (Typ.)

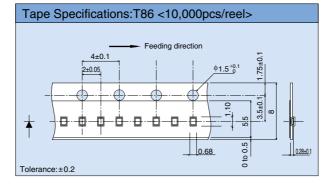


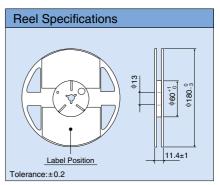
■ Recommended Pad Layout



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

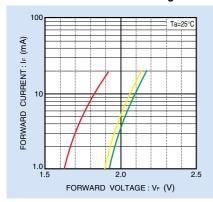
■ Packaging Specifications (Unit:mm)

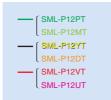




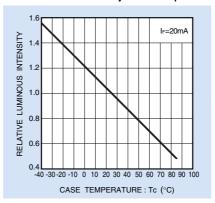
■Electrical Characteristic Curves

Forward Current - Forward Voltage



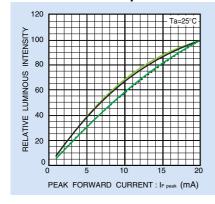


Relative Luminous Intensity - Case Temperature



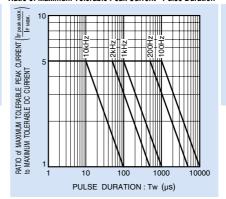


Relative Luminous Intensity - Forward Current



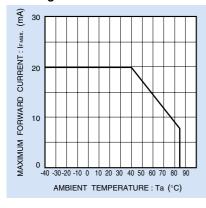


Ratio of Maximum Tolerable Peak Current - Pulse Duration



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

Derating



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

Notes

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