

Side View Chip LEDs 0605<1.6 × 1.15 t=0.55mm> Standard Type



SML-A12*8 Series

Side View

EXCELED™

Emitting Color	Pure Green	Green(Yellowish Green)	Yellow	Orange	Red	
Material	AlGaInP on GaAs					
Package Size(mm)						
Part No.	SML-A12P8T	SML-A12M8T	SML-A12Y8T	SML-A12D8T	SML-A12U8T	SML-A12V8T

Absolute Maximum Ratings (Ta=25°C)

Part No.	Emitting color	Power dissipation Pd (mW)	Forward current IF (mA)	Peak forward current I _{FP} * (mA)	Reverse voltage VR (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
SML-A12P8T	Pure Green	54	20	100	5	-40 to +85	-40 to +100
SML-A12M8T	Green (Yellowish Green)						
SML-A12Y8T	Yellow	54	20	100	5	-40 to +85	-40 to +100
SML-A12D8T	Orange						
SML-A12U8T	Red	54	20	100	5	-40 to +85	-40 to +100
SML-A12V8T							

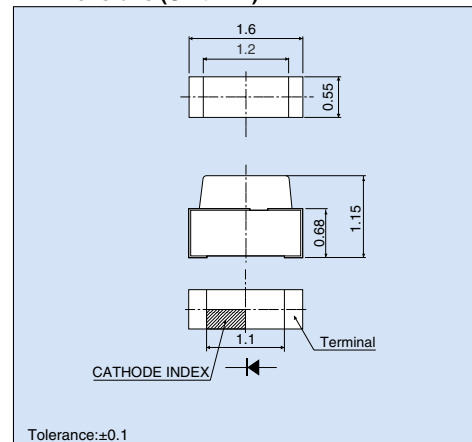
*:Duty ≤ 1/10, 1kHz.

Electrical Optical Characteristics (Ta=25°C)

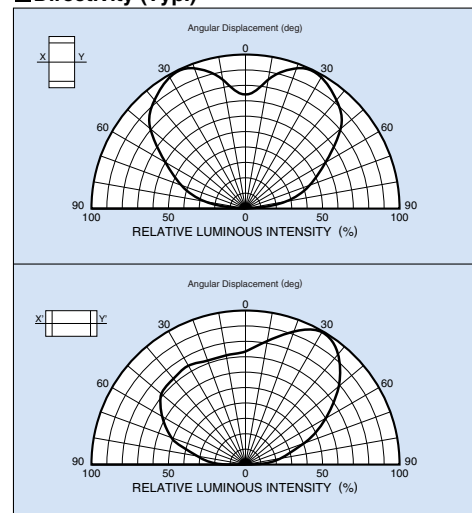
Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength		Brightness Iv		
		Typ. (V)	IF* (mA)	Max. (μA)	VR (V)	Dominant λD Typ. (nm)	IF* (mA)	Min. (mcd)	Typ. (mcd)	IF* (mA)
SML-A12P8T	Transparent Colorless	2.2	20	10	5	560	20	2.5	6.3	20
SML-A12M8T						572		10	25	
SML-A12Y8T						590		25	63	
SML-A12D8T						605		40	100	
SML-A12U8T						620		25	63	
SML-A12V8T						630		16	40	

*Pulse width : 30ms

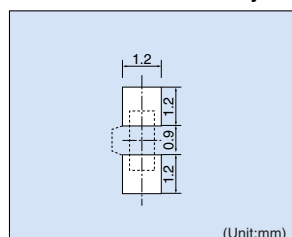
Dimensions (Unit:mm)



Directivity (Typ.)

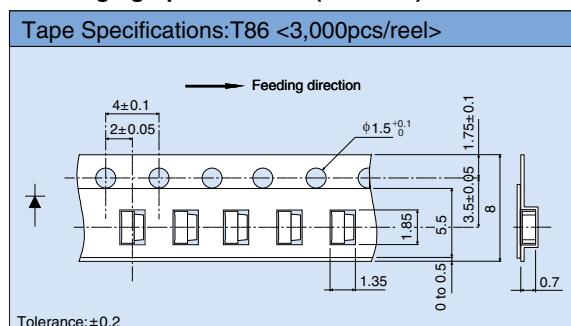


Recommended Pad Layout

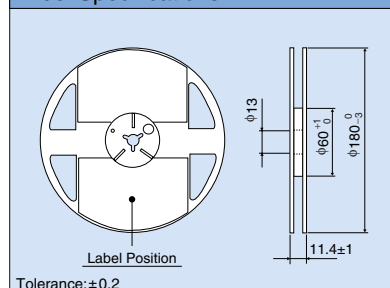


The recommended thickness of the screen mask for soldering is more than 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)

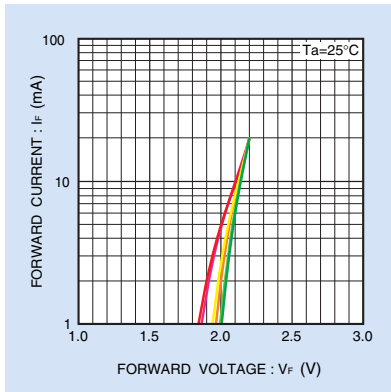


Reel Specifications



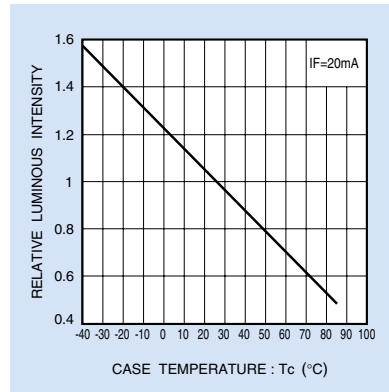
Electrical Characteristic Curves

Forward Current - Forward Voltage



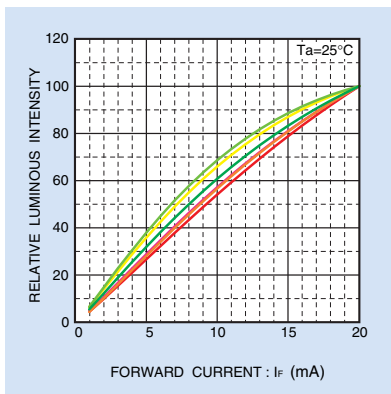
- SML-A12P8T
- SML-A12M8T
- SML-A12Y8T
- SML-A12D8T
- SML-A12U8T
- SML-A12V8T

Relative Luminous Intensity - Case Temperature



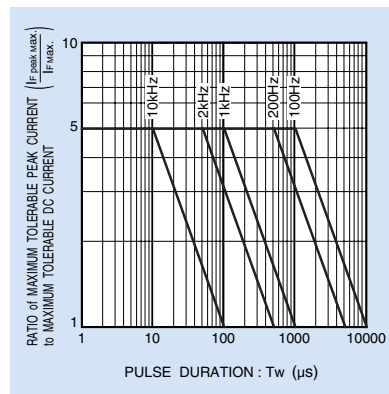
- SML-A12P8T
- SML-A12M8T
- SML-A12Y8T
- SML-A12D8T
- SML-A12U8T
- SML-A12V8T

Relative Luminous Intensity - Forward Current



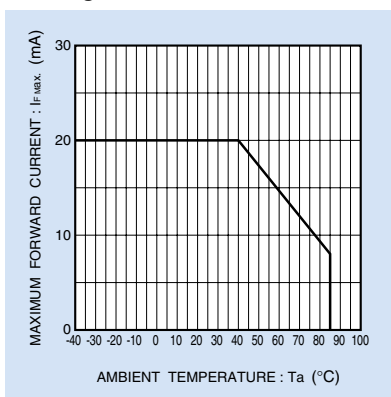
- SML-A12P8T
- SML-A12M8T
- SML-A12Y8T
- SML-A12D8T
- SML-A12U8T
- SML-A12V8T

Ratio of Maximum Tolerable Peak Current - Pulse Duration



- SML-A12P8T
- SML-A12M8T
- SML-A12Y8T
- SML-A12D8T
- SML-A12U8T
- SML-A12V8T

Derating



- SML-A12P8T
- SML-A12M8T
- SML-A12Y8T
- SML-A12D8T
- SML-A12U8T
- SML-A12V8T

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