

0603<1.6×0.8 t=0.36mm> Standard Type



SML-E12*8 Series EXCELED™

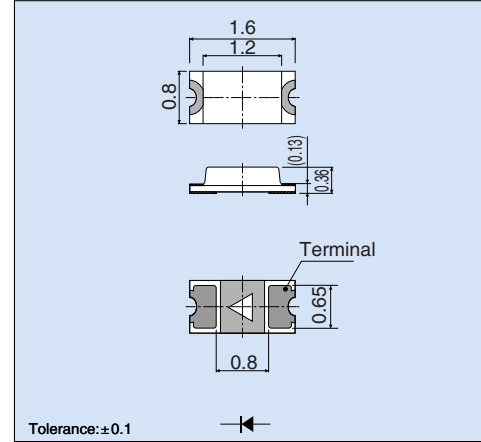
Emitting Color	Pure Green	Green(Yellowish Green)	Yellow	Orange	Red	
Material	AlGaInP on GaAs					
Package Size(mm)						
Part No.	SML-E12P8W	SML-E12M8W	SML-E12Y8W	SML-E12D8W	SML-E12U8W	SML-E12V8W

Absolute Maximum Ratings (Ta=25°C)

Part No.	Emitting color	Power dissipation P _D (mW)	Forward current I _F (mA)	Peak forward current *I _{FP} (mA)	Reverse voltage V _R (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
SML-E12P8W	Pure Green	54	20	100	5	-40 to +85	-40 to +100
SML-E12M8W	Green (Yellowish Green)						
SML-E12Y8W	Yellow	54	20	100	5	-40 to +85	-40 to +100
SML-E12D8W	Orange						
SML-E12U8W	Red	54	20	100	5	-40 to +85	-40 to +100
SML-E12V8W	Red						

*:Duty ≤ 1/10, 1kHz.

Dimensions (Unit:mm)

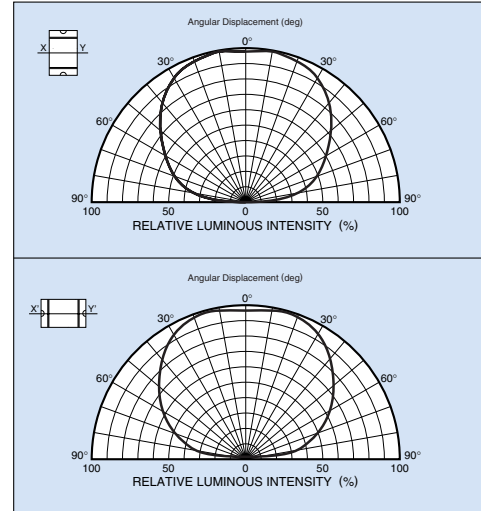


Electrical Optical Characteristics (Ta=25°C)

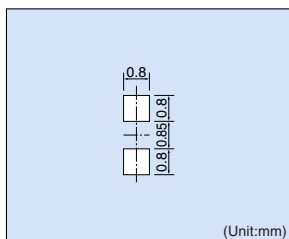
Part No.	Resin Color	Forward voltage V _F		Reverse current I _R		Light wavelength Dominant λ _D		Brightness I _v		
		Typ. (V)	I _F * (mA)	Max. (μA)	V _R (V)	Typ. (nm)	I _F * (mA)	Min. (mcd)	Typ. (mcd)	I _F * (mA)
SML-E12P8W	Diffused Milky White	2.2	20	10	4	560	20	2.5	6.3	20
SML-E12M8W						572		10	25	
SML-E12Y8W						590		25	63	
SML-E12D8W						605		40	100	
SML-E12U8W						620		25	63	
SML-E12V8W						630		16	40	

*Pulse width : 30ms.

Directivity (Typ.)

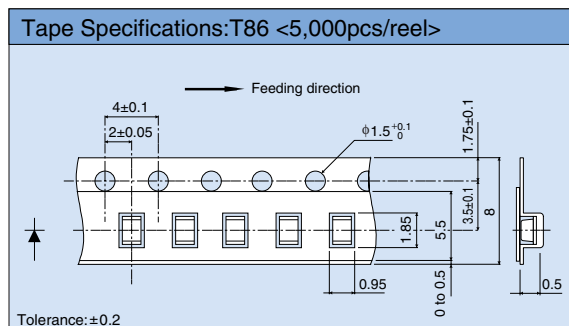


Recommended Pad Layout



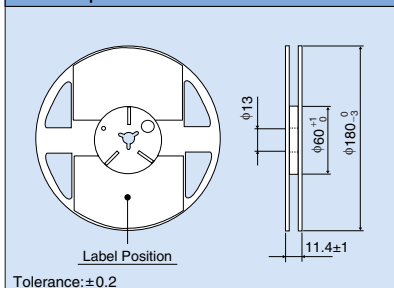
(Unit:mm)
The recommended thickness of the screen mask for soldering is between 100 and 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit:mm)



Tolerance: ±0.2

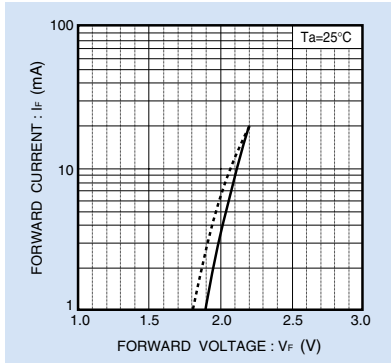
Reel Specifications



Tolerance: ±0.2

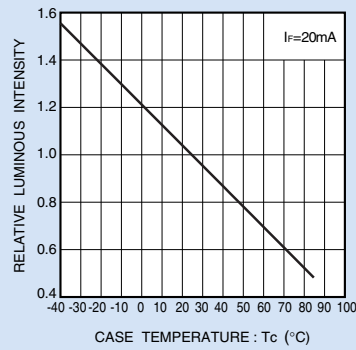
Electrical Characteristic Curves

Forward Current - Forward Voltage



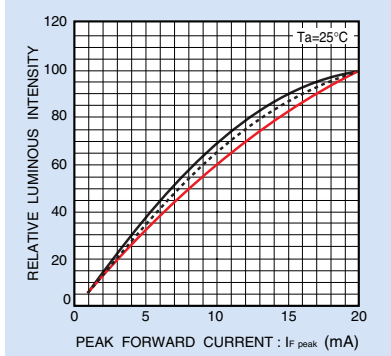
- SML-E12P8T
- SML-E12M8T
- SML-E12Y8T
- SML-E12D8T
- SML-E12V8T
- SML-E12U8T

Relative Luminous Intensity - Case Temperature



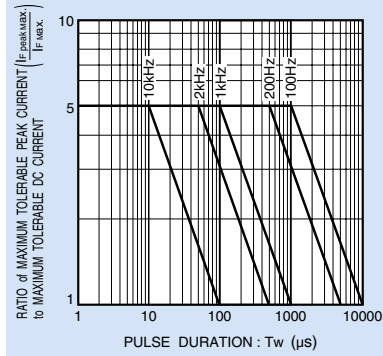
- SML-E12P8T
- SML-E12M8T
- SML-E12Y8T
- SML-E12D8T
- SML-E12V8T
- SML-E12U8T

Relative Luminous Intensity - Forward Current



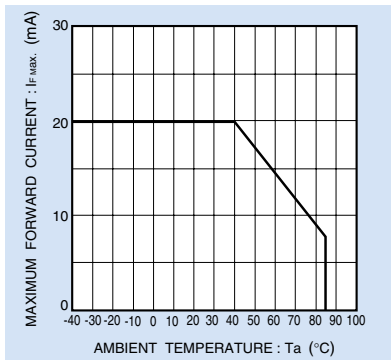
- SML-E12M8T
- SML-E12Y8T
- SML-E12P8T
- SML-E12D8T
- SML-E12U8T
- SML-E12V8T

Ratio of Maximum Tolerable Peak Current - Pulse Duration



- SML-E12P8T
- SML-E12M8T
- SML-E12Y8T
- SML-E12D8T
- SML-E12V8T
- SML-E12U8T

Derating



- SML-E12P8T
- SML-E12M8T
- SML-E12Y8T
- SML-E12D8T
- SML-E12V8T
- SML-E12U8T

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