

High Brightness Type Side view chip LEDs

SML-A12 Series

Package Size (mm)	Green	Yellow	Orange	Red
	AlGaInP on GaAs			
	570nm	590nm	611nm	630nm
1611 (0605) 1.6×1.15 t=0.55				
	SML-A12MT	SML-A12WT	SML-A12DT	SML-A12UT

Absolute Maximum Ratings (Ta=25°C)

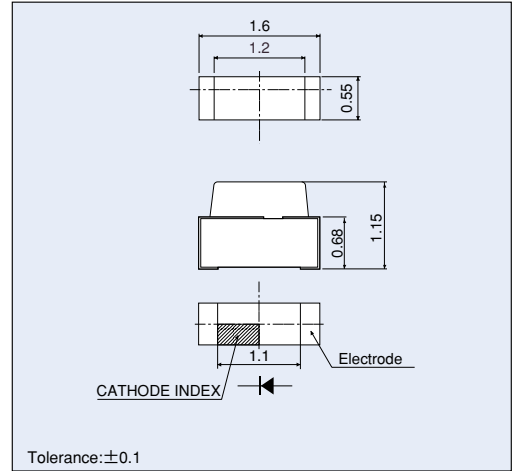
Part No.	Emitting color	Power dissipation Pd (mW)	Forward current IF (mA)	Peak forward current * I _{FP} (mA)	Reverse voltage VR (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)
SML-A12MT	Green	65	25	100	5	-30 to +85	-40 to +85
SML-A12WT	Yellow	75	30			-40 to +85	-40 to +100
SML-A12DT	Orange						
SML-A12UT	Red						

* I_{FP} measured under duty ≤ 1/5, pulse width ≤ 1ms.

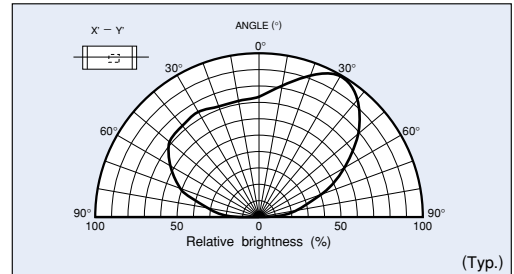
Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage VF		Reverse current IR		Light wavelength Peak Half-wave			Brightness Iv		
		Typ. (V)	IF (mA)	Max. (μA)	VR (V)	Typ. (nm)	Typ. (nm)	IF (mA)	Min. (mcd)	Typ. (mcd)	IF (mA)
SML-A12MT	Transparent Clear	2.1	20	100	5	570	18	20	14	40	20
SML-A12WT		2.0		10		590	15		63		
SML-A12DT		611	16	36		100					
SML-A12UT		630	18								

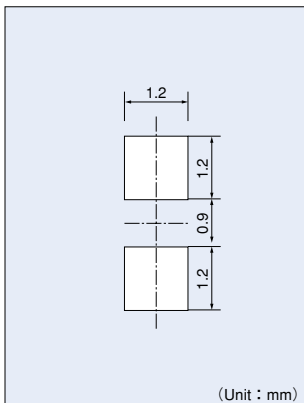
External Dimensions (Unit : mm)



Directivity

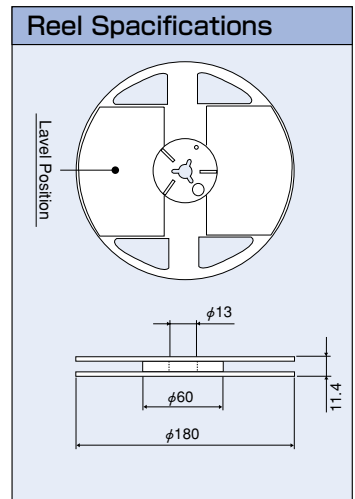
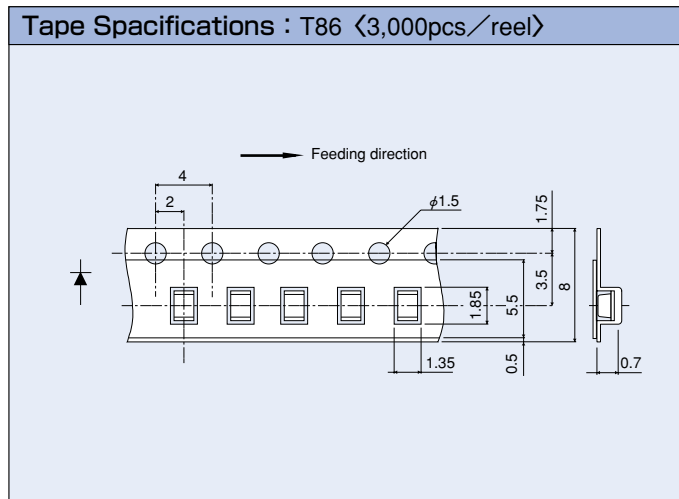


Recommended Pad Layout



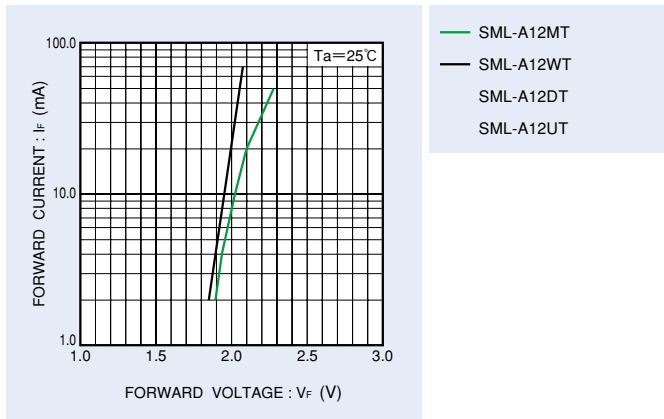
The recommended thickness of the screen mask for soldering is more than 150μm. The hole size of the screen mask should be same as the recommended land pattern or smaller.

Packaging Specifications (Unit : mm)

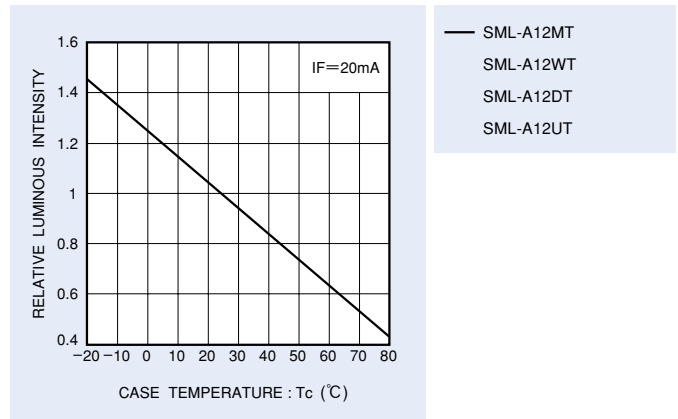


Electrical Characteristic Curves

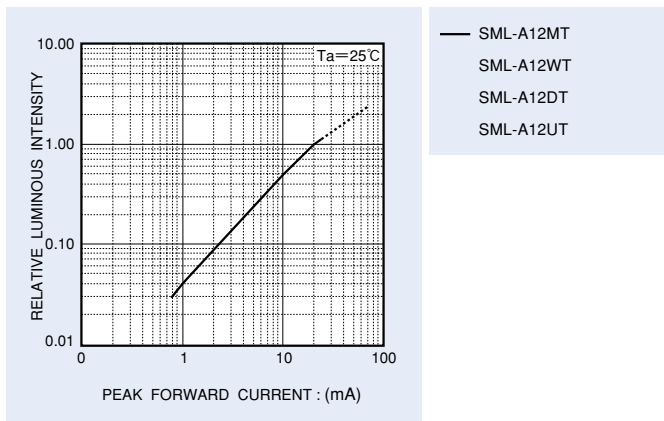
Forward Current - Forward Voltage



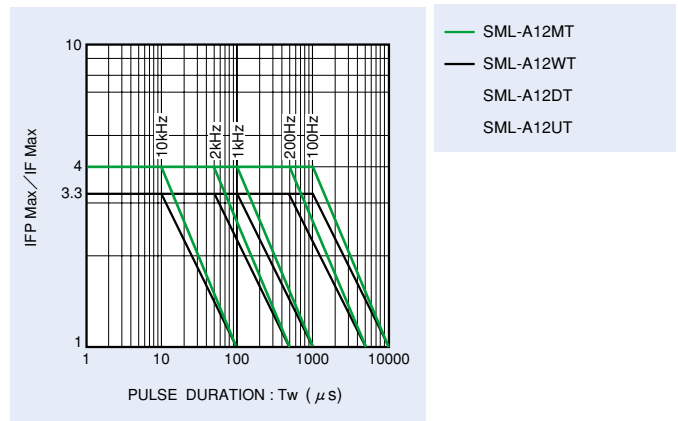
Relative Luminous Intensity - Case Temperature



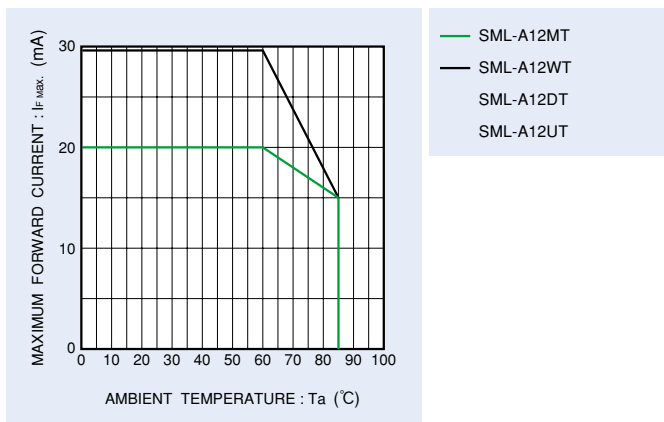
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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