High Brightness Type Side view chip LEDs

SML-A12 Series

Package Size (mm)	Green	Yellow	Orange	Red	
		AlGaInP			
	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)

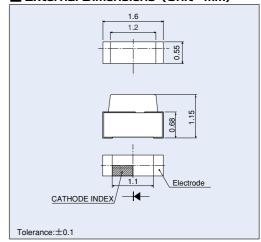
Part No.	Emitting color	Power dissipation Po (mW)	Forward current IF (mA)	Peak forward current * IFP (mA)	Reverse voltage V _R (V)	Operating temperature Topr	Stotage temperature T _{stg} (°C)
SML-A12MT	Green	65	25			-30 to +85	-40 to +85
SML-A12WT	Yellow			100	5		
SML-A12DT	Orange	75	30	100	5	-40 to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

^{*} IFP measured under duty ≤1/5,pulse width ≤1ms.

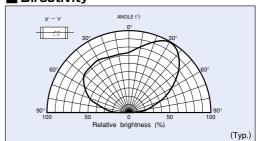
■ Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage V _F		Reverse current In		Light wavelength Peak Half-wave			Brightness Iv		
		Typ. (V)	lF (mA)	Max. (μA)	VR (V)	Typ. (nm)	Typ. (nm)	lF (mA)	Min. (mcd)	Typ. (mcd)	lF (mA)
SML-A12MT		2.1		100		570	18		14	40	
SML-A12WT	Transparent		20		5	590	15	20		63	20
SML-A12DT	Clear	2.0	20	10	3	611	16	20	36	100	20
SML-A12UT						630	18			100	

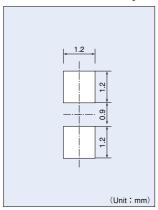
■ External Dimensions (Unit: mm)



Directivity

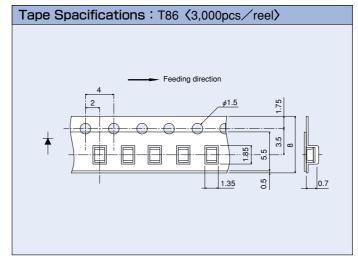


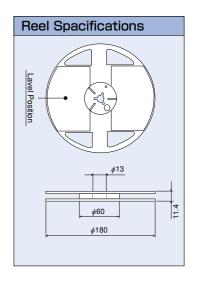
■ Recommemded Pad Layout



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

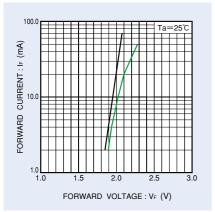
■ Packaging Spacifications (Unit:mm)





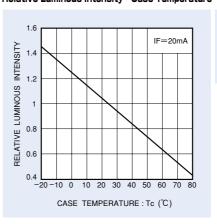
■ Electrical Characteristic Curves

Forward Current - Forward Voltage



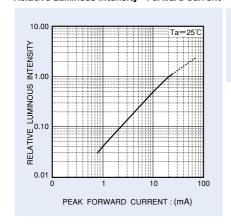
— SML-A12MT — SML-A12WT SML-A12DT SML-A12UT

Relative Luminous Intensity - Case Temperature



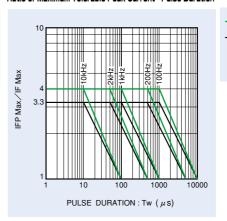
SML-A12MT
SML-A12WT
SML-A12DT
SML-A12UT

Relative Luminous Intensity - Forward Current



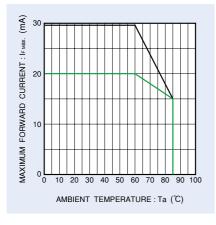
SML-A12MT
SML-A12WT
SML-A12DT
SML-A12UT

Ratio of Maximum Tolerable Peak Current - Pulse Duration



SML-A12MT
SML-A12WT
SML-A12DT
SML-A12UT

Derating



SML-A12MTSML-A12WTSML-A12DTSML-A12UT

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