

## High Brightness Type Side view chip LEDs

## SML-A12 Series

Package Size (mm)	Green	Yellow	Orange	Red
	AlGaNp 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)

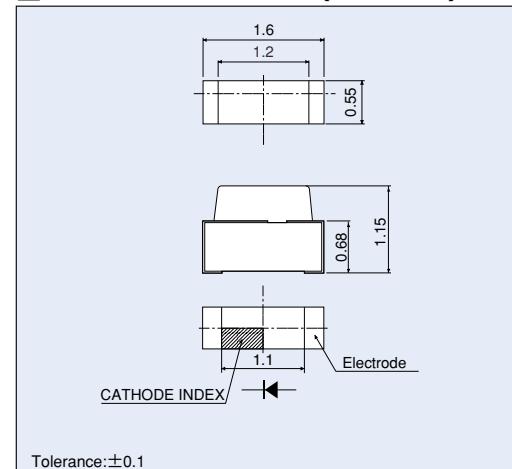
Part No.	Emitting color	Power dissipation $P_D$ (mW)	Forward current $I_F$ (mA)	Peak forward current * $I_{FP}$ (mA)	Reverse voltage $V_R$ (V)	Operating temperature $T_{opr}$ (°C)	Stotage temperature $T_{stg}$ (°C)
SML-A12MT	Green	65	25			-30 to +85	-40 to +85
SML-A12WT	Yellow						
SML-A12DT	Orange	75	30	100	5	-40 to +85	-40 to +100
SML-A12UT	Red						

\* IFP measured under duty  $\leq 1/5$ , pulse width  $\leq 1\text{ms}$

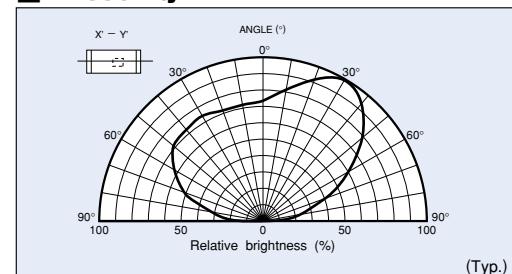
## ■ Electrical Optical Characteristics (Ta=25°C)

Part No.	Resin Color	Forward voltage $V_F$		Reverse current $I_R$		Light wavelength			Brightness $I_V$		
		Peak		Half-wave							
		Typ. (V)	$I_F$ (mA)	Max. ( $\mu$ A)	$V_R$ (V)	Typ. (nm)	Typ. (nm)	$I_F$ (mA)	Min. (mcd)	Typ. (mcd)	$I_F$ (mA)
SML-A12MT	Transparent Clear	2.1	20	100	5	570	18	20	14	40	
SML-A12WT		590		15		36	63		20		
SML-A12DT		611		16			100				
SML-A12UT		630		18							

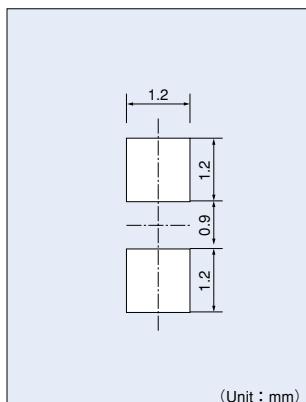
## ■ External Dimensions (Unit : mm)



## ■ Directivity



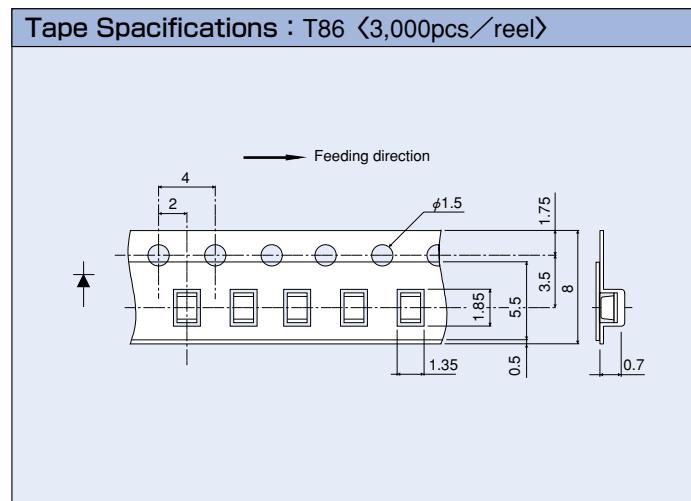
### ■ Recommended Pad Layout



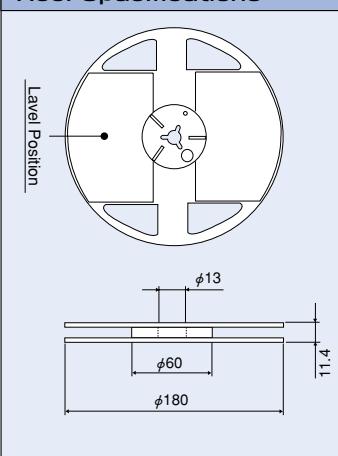
The recommended thickness of the screen mask for soldering is more than 150  $\mu\text{m}$ . The hole size of the screen mask should be same as the recommended land pattern or smaller.

## ■ Packaging Specifications (Unit : mm)

### Tape Specifications : T86 <3,000pcs/reel>

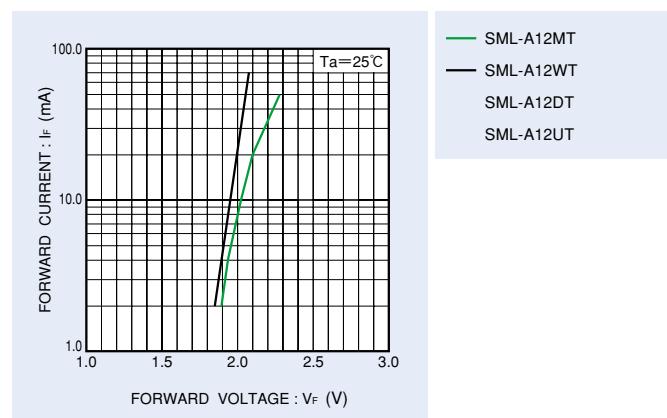


## Reel Specifications

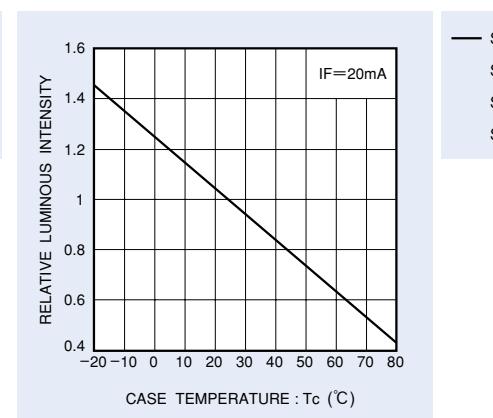


## ■ Electrical Characteristic Curves

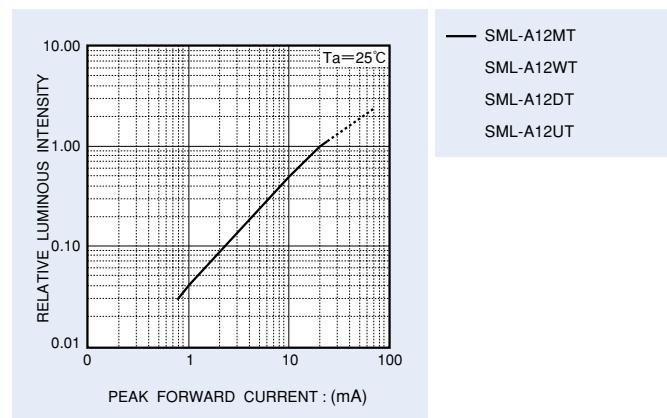
### Forward Current - Forward Voltage



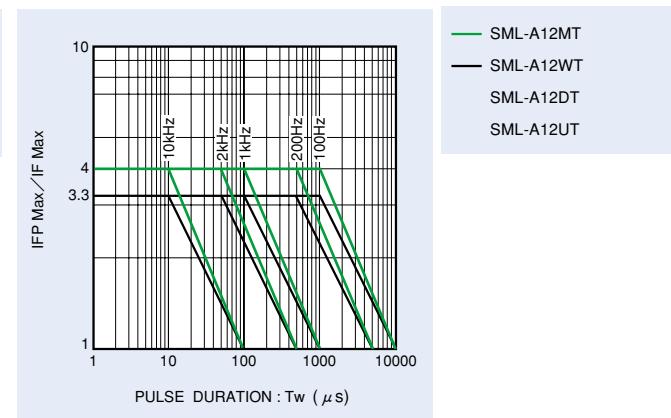
### Relative Luminous Intensity - Case Temperature



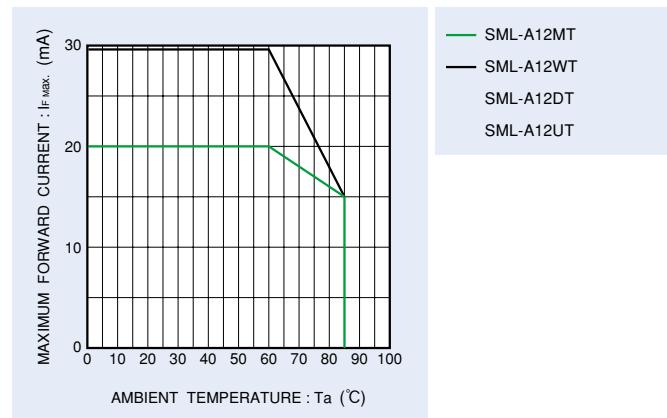
### Relative Luminous Intensity - Forward Current



### Ratio of Maximum Tolerable Peak Current - Pulse Duration



### Derating



## Appendix

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