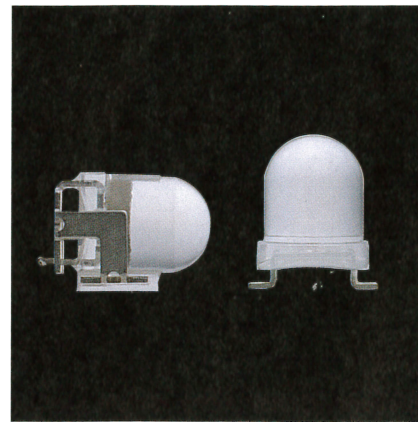


# Lens type LED



## SML-L1 / SML-J1 series

### SML-L1

Actual Size  
 4936(1914)  
 4.9×3.6mm(t=3.3mm)

### SML-J1

Actual Size  
 4034(1613)  
 4.0×3.4mm(t=4.5mm)

### Features

- High power, high brightness, surface mount type LEDs with Lens.
- The SML-L1 series represents the first side view lens LEDs in the industry.
- A top view model (SML-J1) is featuring a package height of the only 4.5mm - the smallest on the planet.
- A directivity of 8° is possible by optimizing the lens and frame structures. The light axis is also minimized to ±3°.

Color Type ■ U ■ D ■ Y R

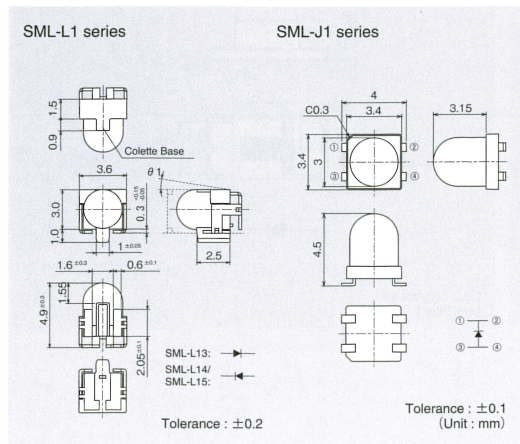
### Specifications

Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)									
			Power Dissipation Pd(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)	Forward Voltage VF Typ.(V)	Reverse Current IR Max.(μA)	VR(V)	Dominant Wavelength λ D Min. nm Typ. nm Max. nm			Luminous Intensity Iv Min. cd Typ. cd Max. cd		
SML-L13DT		Orange	175	70		10		2.0				598	605	612	10	15	
SML-L14DT			135	50				2.2				601	608	615	25	35	
SML-L15DT			175	70	200*1	5	-40 to +85	-40 to +100	2.0	100	5	619	624	629	20	9	18
SML-J14UT	AlGaInP	Red	175	70		5		2.0				598	605	612	20	28	
SML-J14DT			135	50				2.2				601	608	615	30	40	
SML-J15DT			175	70		10			2.0				587	590	593	7	15

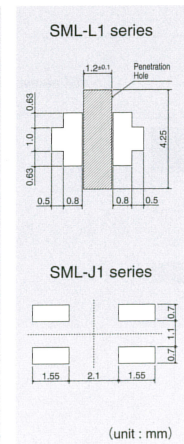
Part No.	Chip Structure	Emitting Color	Absolute Maximum Ratings (Ta=25°C)					Electrical and Optical Characteristics (Ta=25°C)											
			Power Dissipation Pd(mW)	Forward Current IF(mA)	Peak Forward Current IFP(mA)	Reverse Voltage VR(V)	Operating Temperature Topr(°C)	Storage Temperature Tstg(°C)	Forward Voltage VF Typ.(V)	Reverse Current IR Max.(μA)	VR(V)	Dominant Wavelength λ D Min. nm Typ. nm Max. nm			Radiation Intensity Ie Min. mW/sr Typ. mW/sr Max. mW/sr				
SML-J14RT	AlGaAs	Infrared LED	286	130	500*1	5	-40 to +85	-40 to +100	1.6	50	100	5	870			50	100	150	50

\*1:Duty1/10, 1kHz \*2:Reference  
 ※ Mounting conditions must be carefully considered

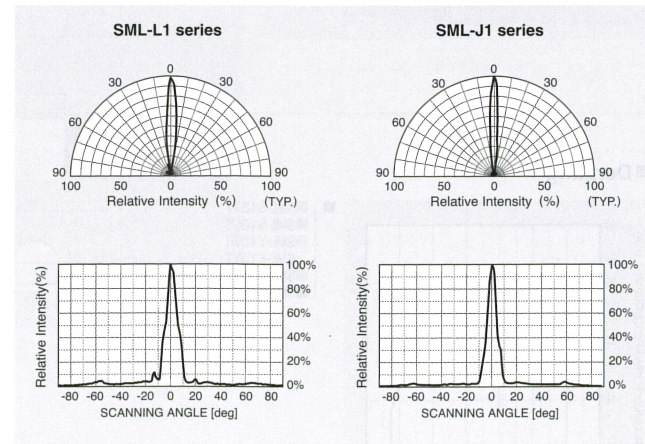
### Dimensions



### Recommended Solder Pattern

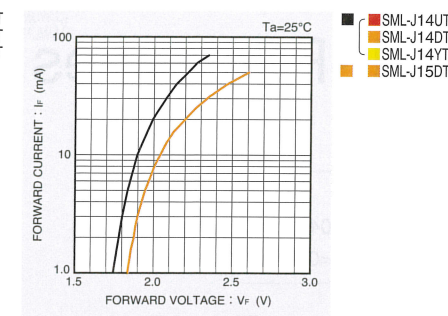
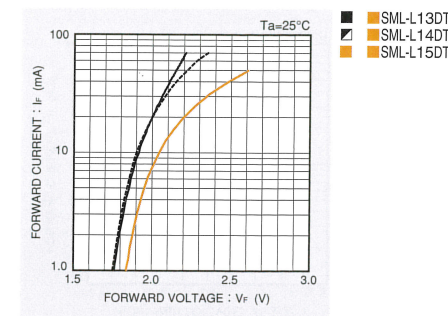


### Viewing Angle

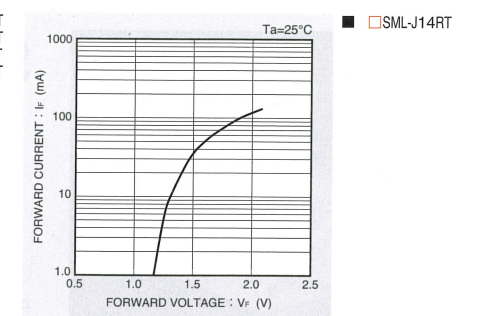


### Electrical Characteristics Curves

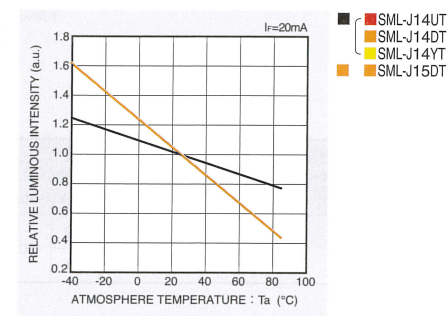
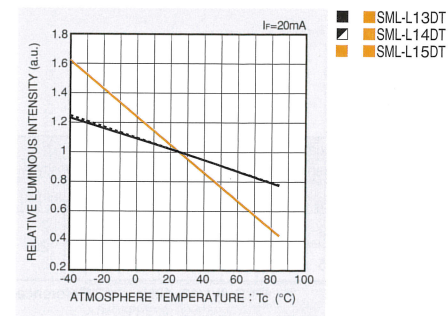
#### Forward Current-Forward Voltage



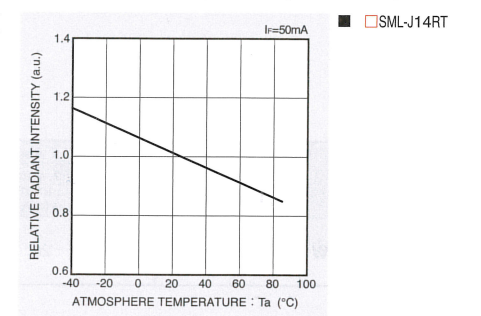
#### Forward Current-Forward Voltage



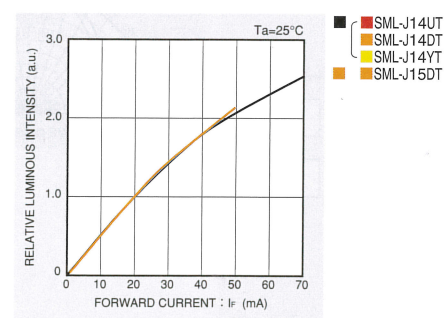
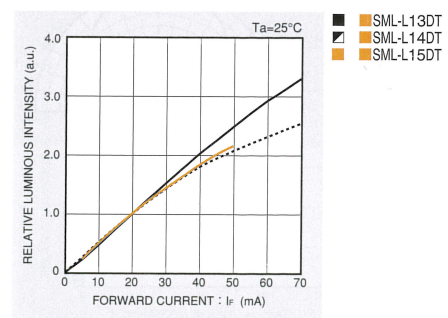
#### Luminous Intensity-Atmosphere Temperature



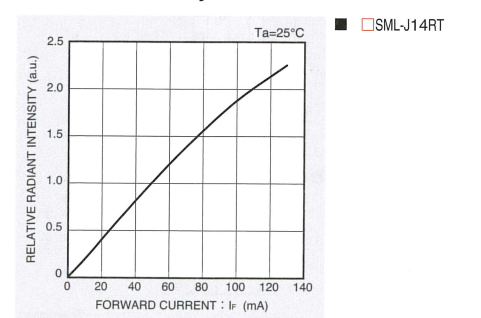
#### Radiant Intensity-Atmosphere Temperature



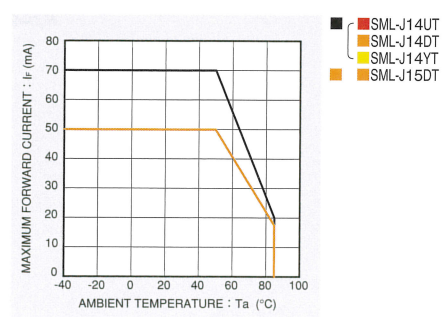
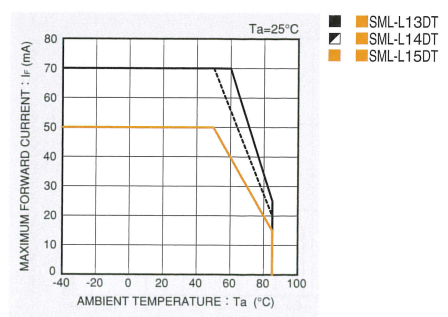
#### Luminous Intensity-Forward Current



#### Radiant Intensity-Forward Current



#### Derating



#### Derating

