

## ■ Description

The **19-21** SMD Taping is much smaller than lead frame type components, thus enable smaller board size, higher packing density, reduced storage space and finally smaller equipment to be obtained. and the package quantity 4000pcs/reel.

## ■ Features

- Package in 8mm tape on 7" diameter reel.
- Compatible with infrared and vapor phase reflow solder process.
- Compatible with automatic placement equipment .
- Mono-color type.
- The product itself will remain within ROHS Compliant version.

## ■ Applications

- Backlighting.
- Indicator.
- LCD.
- General use.

## ■ Absolute Maximum Ratings (at Ta=25°C)

Parameter	Symbol	Maximum Rating	Unit
Power Dissipation	P <sub>D</sub>	120	mW
Forward Current	I <sub>F</sub>	25	mA
Peak Forward Current (Pulse width ≤ 100 μS duty ≤ 1/10)	I <sub>FP</sub>	100	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operation Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +90	°C
Soldering Temperature	Tsol	Reflow Soldering:230°C for 10s	°C

## ■ Basic Characteristics

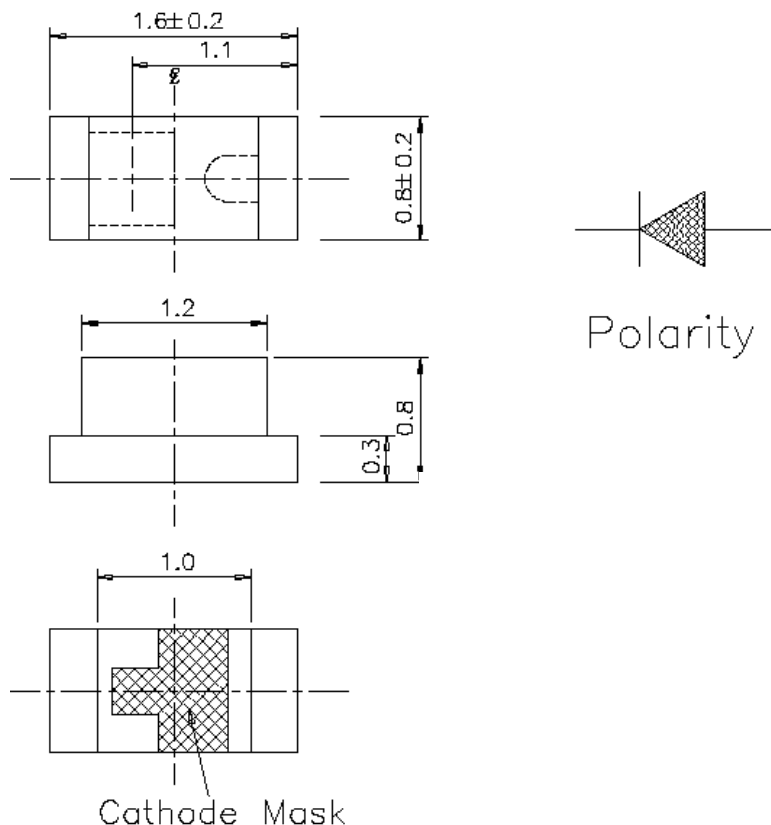
## 0.8mm Height Flat Top LED

## LK19-21SUGC/TR8

 $T_a=25^{\circ}\text{C}$ 

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20\text{mA}$	--	3.2	4.0	V
Reverse Current	$I_R$	$V_R=5\text{V}$	--	--	50	$\mu\text{A}$
Dominant Wavelength	$\lambda_D$	$I_F=20\text{mA}$	--	517	520--	nm
Peak Wavelength	$\lambda_P$	$I_F=20\text{mA}$	--	525	--	nm
Spectral Bandwidth	$\Delta\lambda$	$I_F=20\text{mA}$	--	30	--	nm
Luminous Intensity	$I_V$	$I_F=20\text{mA}$		400	--	mcd
50% View Angle	$2\theta_{1/2}$	$I_F=20\text{mA}$	--	120	--	deg

### ■ Package Dimensions



Notes: without special declared, the tolerance is +/-0.2mm

■ Typical Electrical / Optical / Characteristics Curves

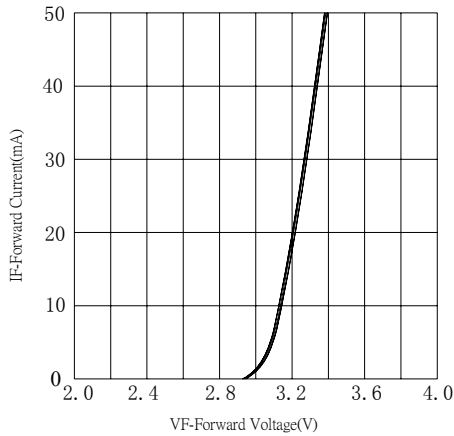


Fig.1 Forward Current vs. Forward Voltage

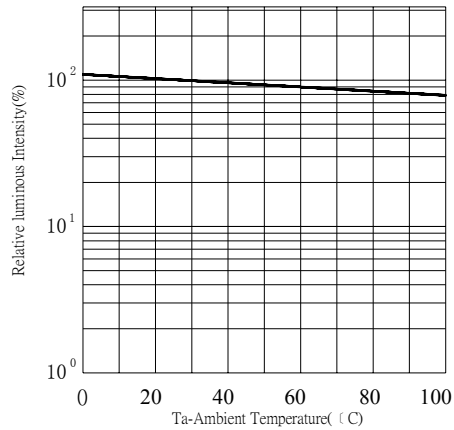


Fig.2 Relative luminous Intensity vs. Ambient Temperature

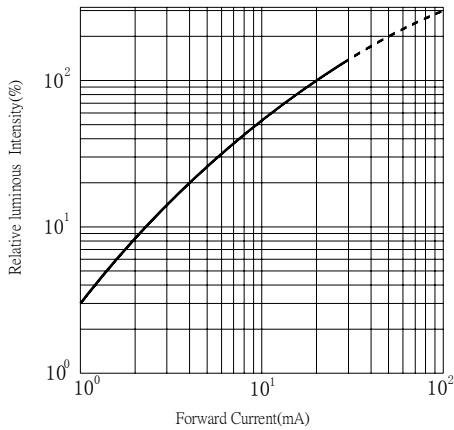


Fig.3 Relative luminous Intensity vs. Forward Current

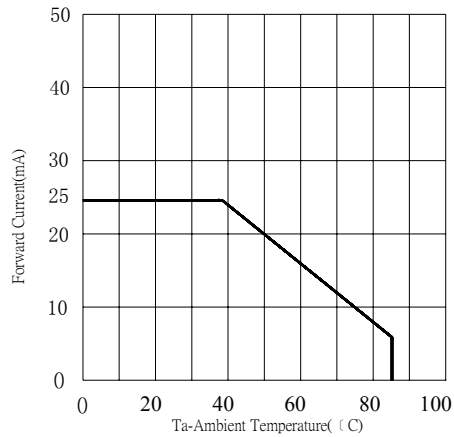


Fig.4 Forward Current vs. Ambient Temperature

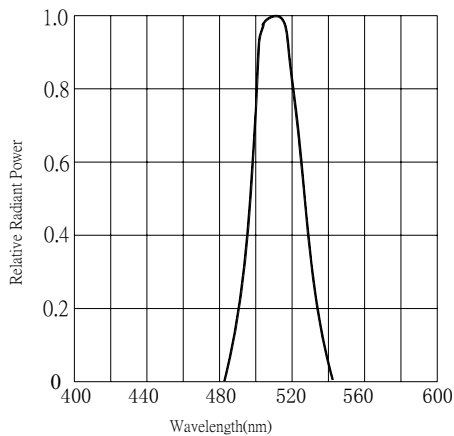


Fig.5 Relative Radiant Power vs. Wavelength

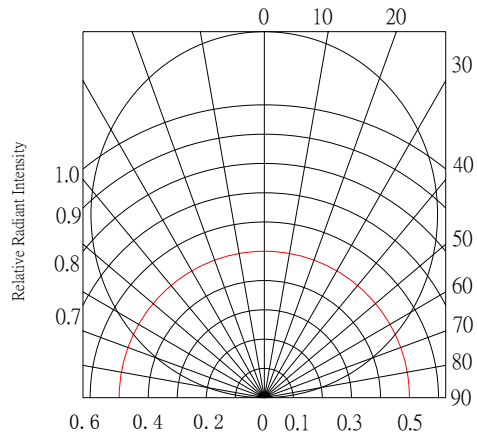


Fig.6 Relative Radiant Intensity vs. Angular Displacement

- Reflow Soldering Curves

