



Technical Data Sheet

1206 Package Chip LED

15-21UYC/S530-XX/TR8

Features

- Package in 8mm tape on 7" diameter reel.
- Compatible with automatic placement equipment.-
- Compatible with infrared and vapor phase reflow solder process.
- Mono-color type.

Descriptions

- The 15-21 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.
- Besides, lightweight makes them ideal for miniature applications. etc.

Applications

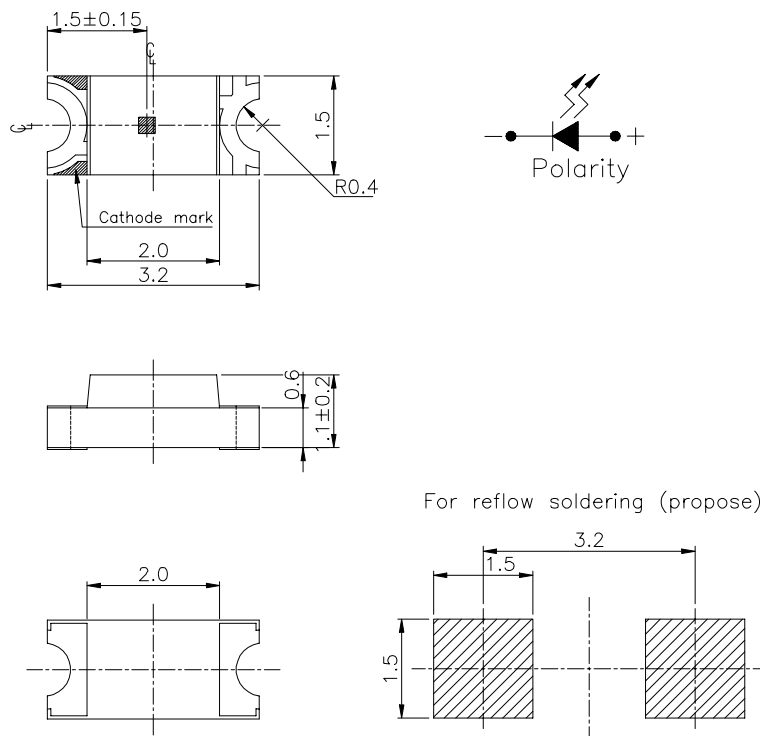
- Automotive: backlighting in dashboard and switch.
- Telecommunication: indicator and backlighting in telephone and fax.
- Flat backlight for LCD, switch and symbol.
- General use.



Device Selection Guide

Chip		Lens Color
Material	Emitted Color	
AlGaInP	Super Yellow	Water Clear

Package Outline Dimensions



Notes: Tolerances Unless Dimension $\pm 0.1\text{mm}$, Angle $\pm 0.5^\circ$,Unit = mm

Absolute Maximum Ratings (Ta=25°C)

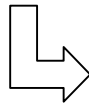
Parameter	Symbol	Rating	Unit
Reverse Voltage	V _R	5	V
Forward Current	I _F	25	mA
Operating Temperature	T _{opr}	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40~ +90	°C
Soldering Temperature	T _{sol}	260 (for 5 second)	°C
Electrostatic Discharge	ESD	2000	V
Power Dissipation	P _d	60	mW
Peak Forward Current (Duty 1/10 @1KHz)	I _F	160	mA

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Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	*Chip Rank	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I _v	A2	15	39	-----	mcd	I _F =20 mA
		A3	36	57	-----		
		A4	51	77	-----		
		A5	62	98	-----		
		A6	77	113	-----		
Viewing Angle	2 θ 1/2		-----	140	-----	deg	I _F =20mA
Peak Wavelength	λ _p		-----	591	-----	nm	I _F =20mA
Dominant Wavelength	λ _d		-----	589	-----	nm	I _F =20mA
Spectrum Radiation Bandwidth	△ λ		-----	15	-----	nm	I _F =20mA
Forward Voltage	V _F		-----	2.0	2.4	V	I _F =20mA
Reverse Current	I _R		-----	-----	10	μ A	V _R =5V

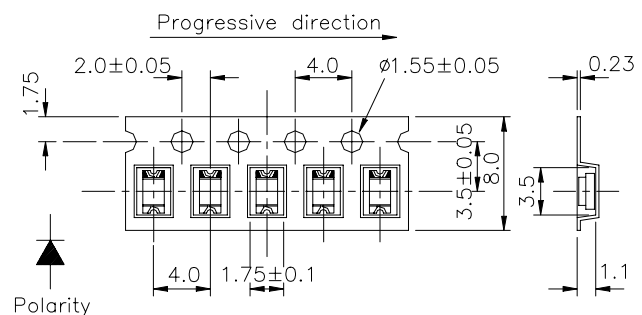
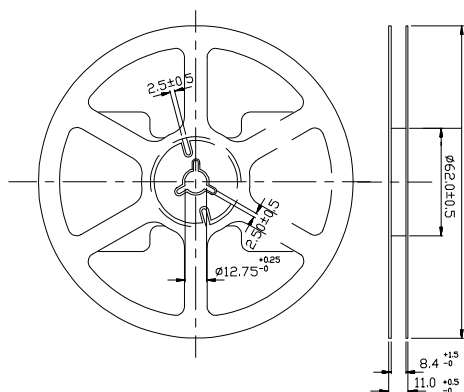
***15-21UYC/S530-XX/TR8**



Chip Rank

Reel & Carrier Tape Dimensions

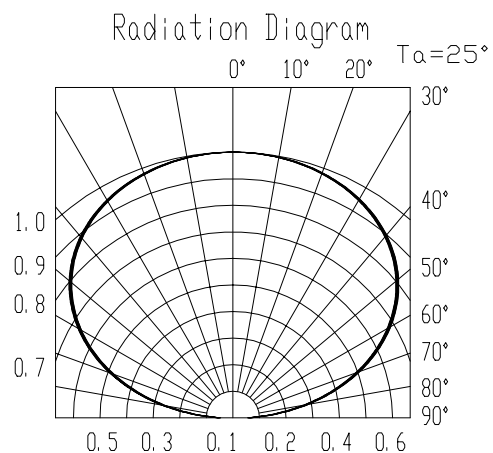
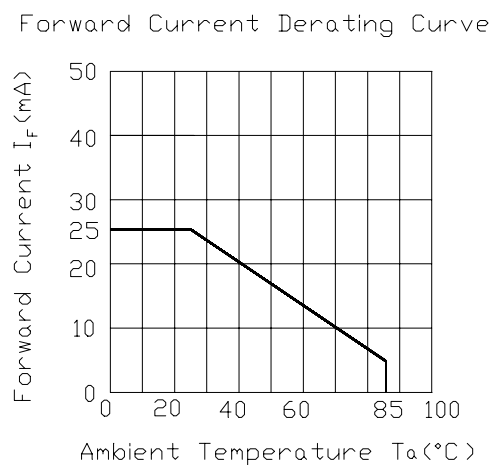
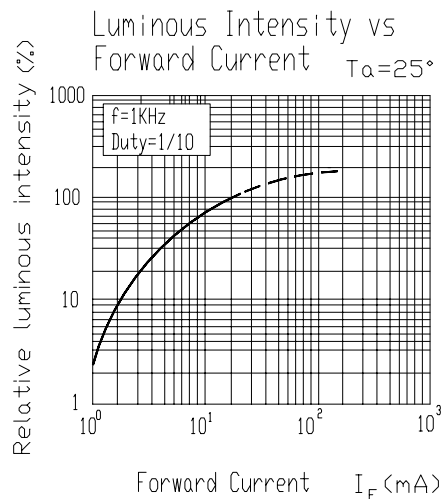
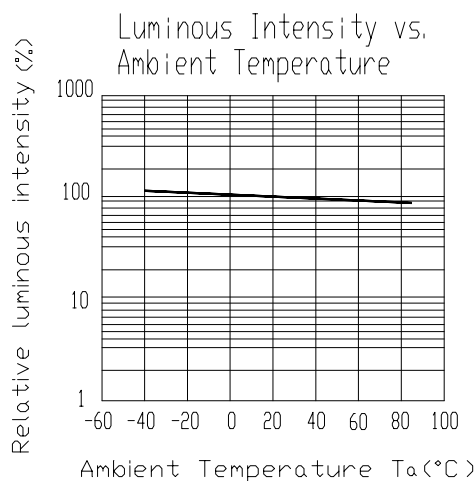
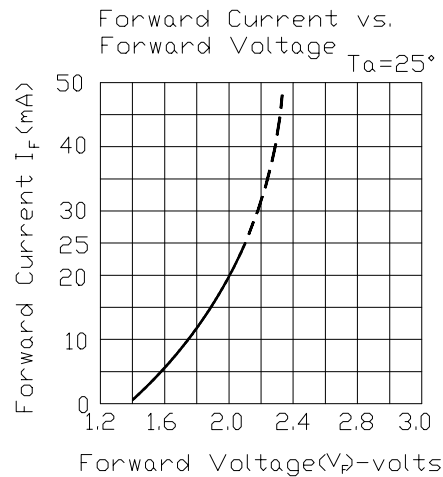
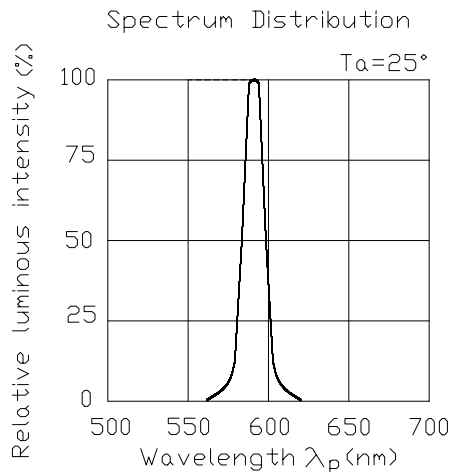
Loaded quantity per reel 2000 PCS/reel



Notes: Tolerances Unless Dimension $\pm 0.1\text{mm}$, Angle $\pm 0.5^\circ$, Unit = mm

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Typical Electro-Optical Characteristics Curves

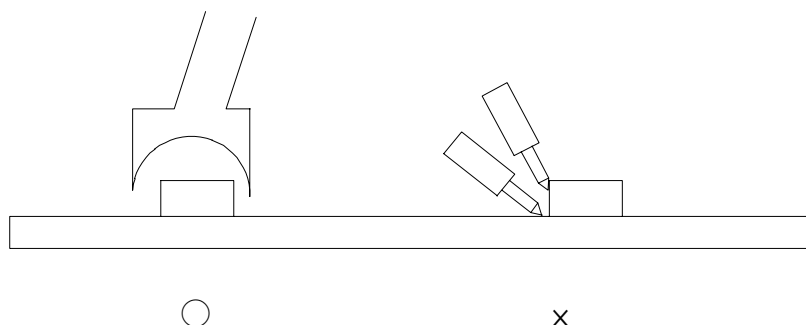


15-21UYC/S530-XX/TR8**Reliability Test Items And Conditions**

No.	Items	Test Condition	Test Hours/Cycles	Sample Size	Ac/Rc
1	Solder Heat	Temp. : 260°C ± 5°C	5 Sec.	76 PCS.	0/1
2	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 Cycles	76 PCS.	0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	50 Cycles	76 PCS.	0/1
4	High Temperature Storage	Temp. : 100°C	1000 Hrs.	76 PCS.	0/1
5	Low Temperature Storage	Temp. : -55°C	1000 Hrs.	76 PCS.	0/1
6	DC Operating Life	I _F = 20 mA	1000 Hrs.	76 PCS.	0/1
7	High Temperature / High Humidity	85°C /RH85%	1000 Hrs.	76 PCS.	0/1

Rework

1. Customer must finish rework within 5 sec under 245°C.
2. The head of iron can not touch copper foil.
3. Twin-head type is preferred.

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