

產品承認書

SPECIFICATION FOR APPROVAL

客戶代碼(Customer Code): 9531

客戶名稱(Customer): 東裕電子（香港）有限公司

規格(Specification): SMD B

料號(Part Number): 3019217406

品名(Part Name): 19-21UYC/S530-A2/TR8

規格書文件號(Datasheet No): DSE-0008884

客戶規格書核准版次(Approval Version): Rev 2

送承認數量(Quantity): 30PCS

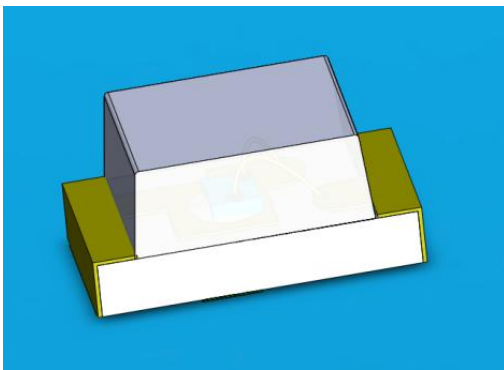
承認書核准日期(Admit Data): 20161205

Everlight			Customer		
DGND.	CHKD	APPD.	DGND.	CHKD	APPD.
RD	RD 主管	品保			
Date:	Date:	Date:	Date:	Date:	Date:

請貴公司於完成此份產品規格書及樣品的承認後，簽回此封面給本公司作為依據，以符合 ISO9001 的規定。

Please sign back this cover page after your approval on the specification and samples for our completion of ISO 9001 procedures.

SMD ■ B 19-21UYC/S530-A2/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.
- Pb-free.
- The product itself will remain within RoHS compliant version.
- Compliance with EU REACH
- Compliance Halogen Free .(Br <900 ppm ,Cl <900 ppm , Br+Cl < 1500 ppm).

Description

- The 19-21 SMD LED 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

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

Device Selection Guide

Chip Materials	Emitted Color	Resin Color
AlGaInP	Brilliant Yellow	Water Clear

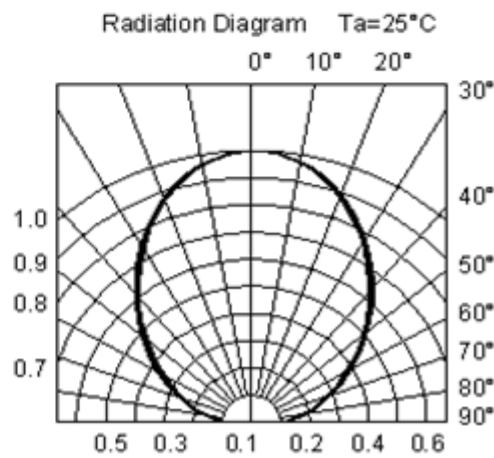
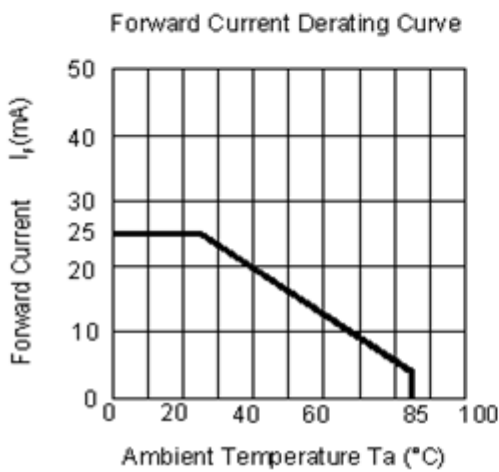
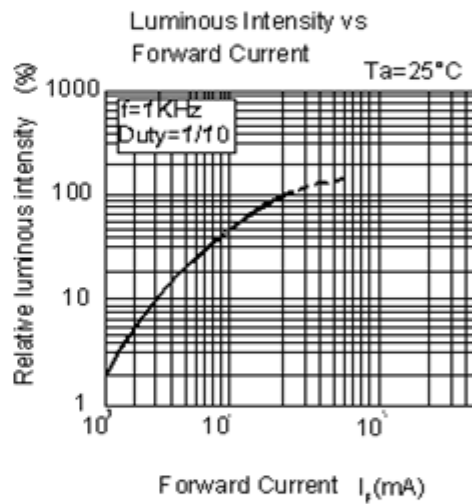
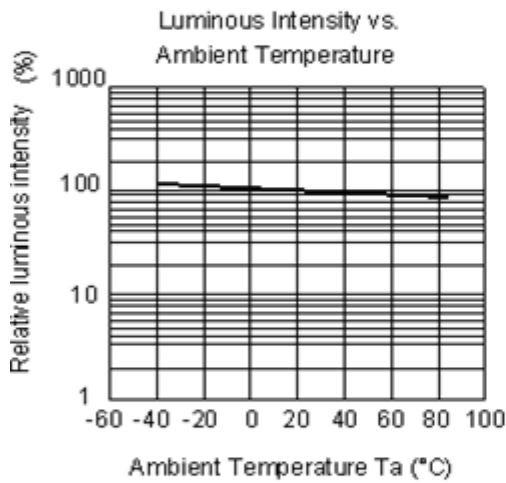
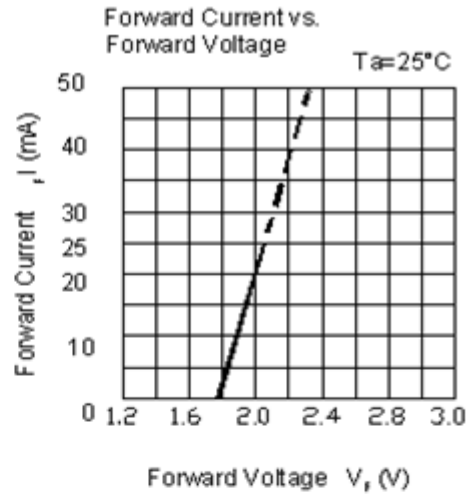
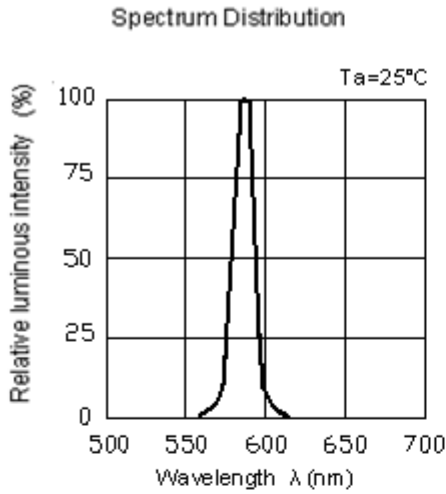
Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	25	mA
Peak Forward Current (Duty 1/10 @1KHz)	I_{FP}	60	mA
Power Dissipation	P_d	60	mW
Operating Temperature	T_{opr}	-40 ~ +85	°C
Storage Temperature	T_{stg}	-40 ~ +90	°C
Electrostatic Discharge	ESD_{HBM}	2000	V
Soldering Temperature	T_{sol}	Reflow Soldering : 260 °C for 30 sec. Hand Soldering : 350 °C for 3 sec.	

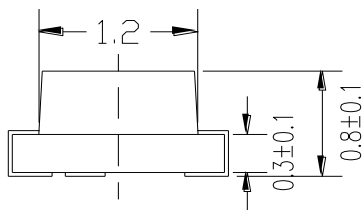
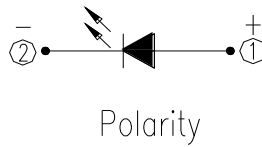
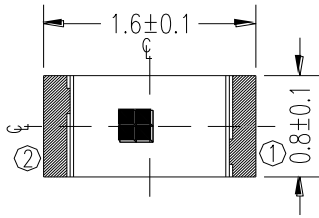
Electro-Optical Characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	I_v	16	40	-----	mcd	$I_F=20mA$
Viewing Angle	$2\theta_{1/2}$	-----	100	-----	deg	
Peak Wavelength	λ_p	-----	591	-----	nm	
Dominant Wavelength	λ_d	-----	589	-----	nm	
Spectrum Radiation Bandwidth	$\Delta\lambda$	-----	15	-----	nm	
Forward Voltage	V_F	1.70	2.00	2.40	V	$V_R=5V$
Reverse Current	I_R	-----	-----	10	μA	

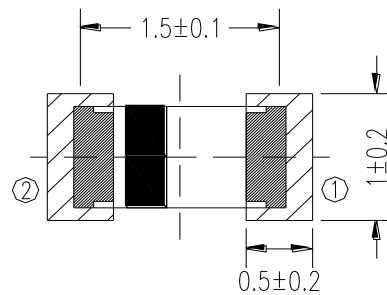
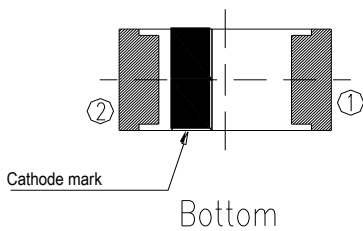
Typical Electro-Optical Characteristics Curves



Package Outline Dimensions



Recommend Sodering Pad

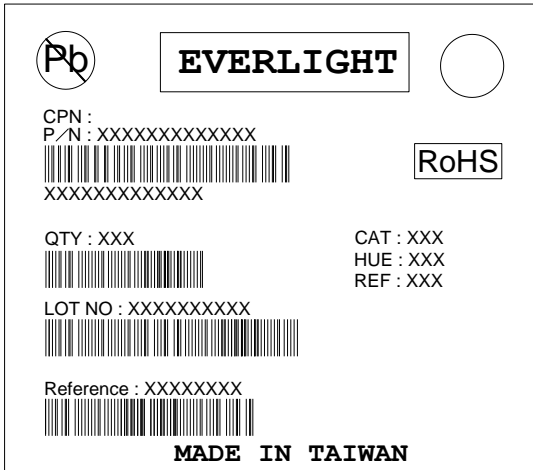


Suggested pad dimension is just for reference only.
Please modify the pad dimension based on individual need.

Note: Tolerances unless mentioned ± 0.1 mm. Unit = mm
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Please modify the pad dimension based on individual need.

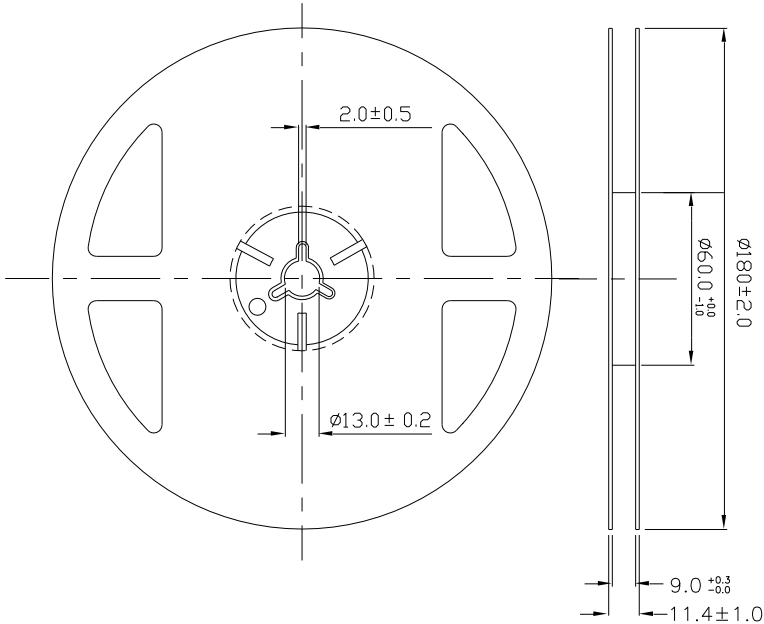
Moisture Resistant Packing Materials

Label Explanation



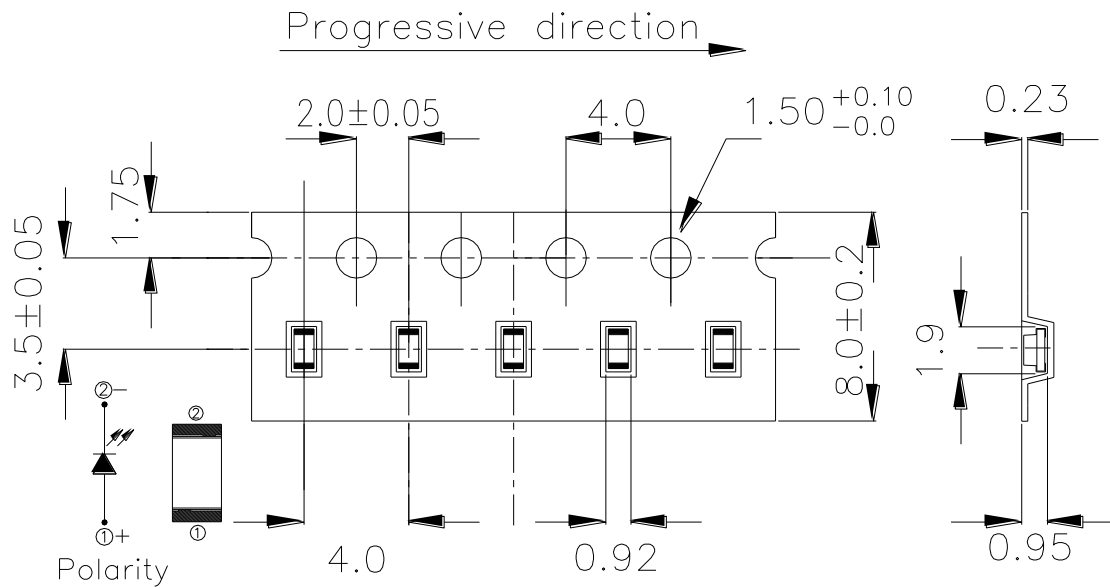
- CPN: Customer's Product Number
- P/N: Product Number
- QTY: Packing Quantity
- CAT: Luminous Intensity Rank
- HUE: Chromaticity Coordinates & Dom. Wavelength Rank
- REF: Forward Voltage Rank
- LOT No: Lot Number

Reel Dimensions



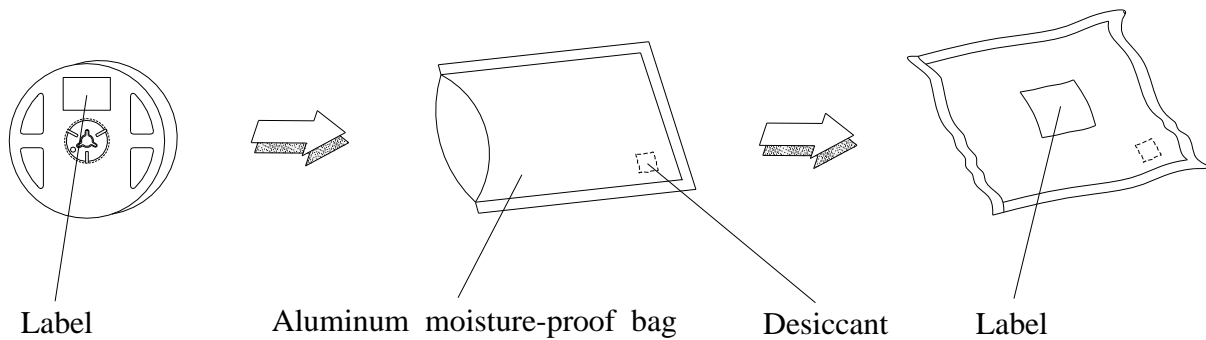
Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$,Unit = mm

Carrier Tape Dimensions: Loaded quantity 3000 PCS per reel



Note: The tolerances unless mentioned is $\pm 0.1\text{mm}$, Unit = mm

Moisture Resistant Packaging



Precautions For Use

1. Over-current-proof

Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen).

2. Storage

2.1 Do not open moisture proof bag before the products are ready to use.

2.2 Before opening the package: The LEDs should be kept at 30°C or less and 90%RH or less.

2.3 After opening the package: The LED's floor life is 1 year under 30°C or less and 60% RH or less.

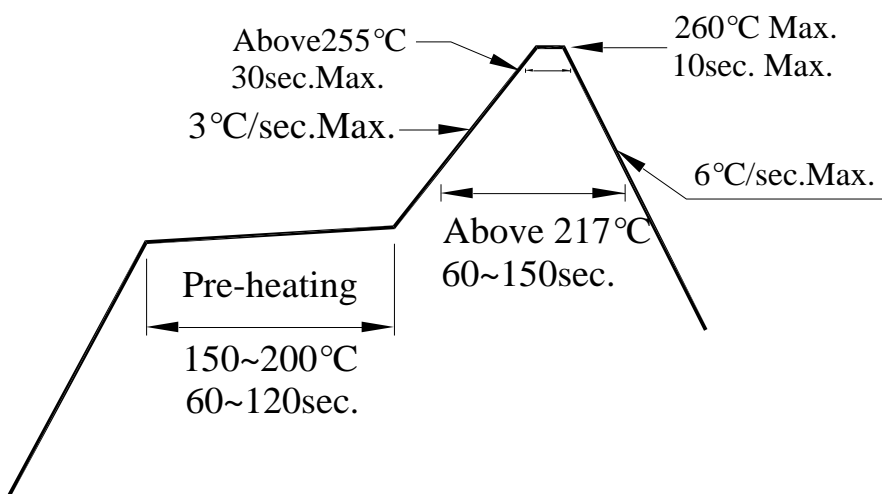
If unused LEDs remain, it should be stored in moisture proof packages.

2.4 If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.

Baking treatment : 60±5°C for 24 hours.

3. Soldering Condition

3.1 Pb-free solder temperature profile



3.2 Reflow soldering should not be done more than two times.

3.3 When soldering, do not put stress on the LEDs during heating.

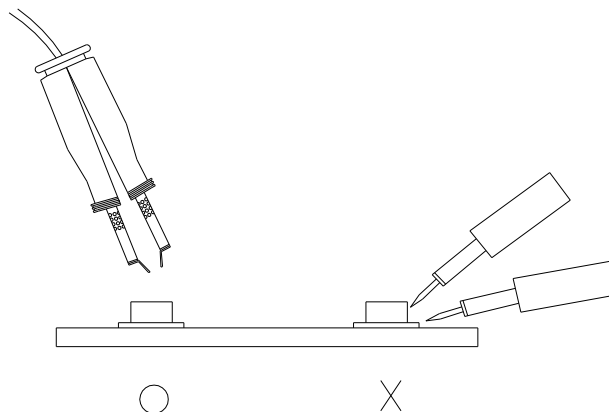
3.4 After soldering, do not warp the circuit board

4. Soldering Iron

Each terminal is to go to the tip of soldering iron temperature less than 350°C for 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.

5. Repairing

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.



Application Restrictions

High reliability applications such as military/aerospace, automotive safety/security systems, and medical equipment may require different product. If you have any concerns, please contact Everlight before using this product in your application. This specification guarantees the quality and performance of the product as an individual component. Do not use this product beyond the specification described in this document.