EVERLIGHT ELECTRONICS CO.,LTD.

DEVICE NUMBER : DLE-952-180 REV : 1.0

ECN : PAGE : 1/7

1.8mm Round Subminiature "Gull Wing" Lead LEDs

MODEL NO : 95-21UYD/S400-A5/S69/TR7

Features :

- Package in 12mm tape on 7" diameter reels.
- Compatible with automatic placement equipment.
- Compatible with infrared and vapor phase reflow solder process.
- IC compatible.
- EIA std package.
- Mono-color type.

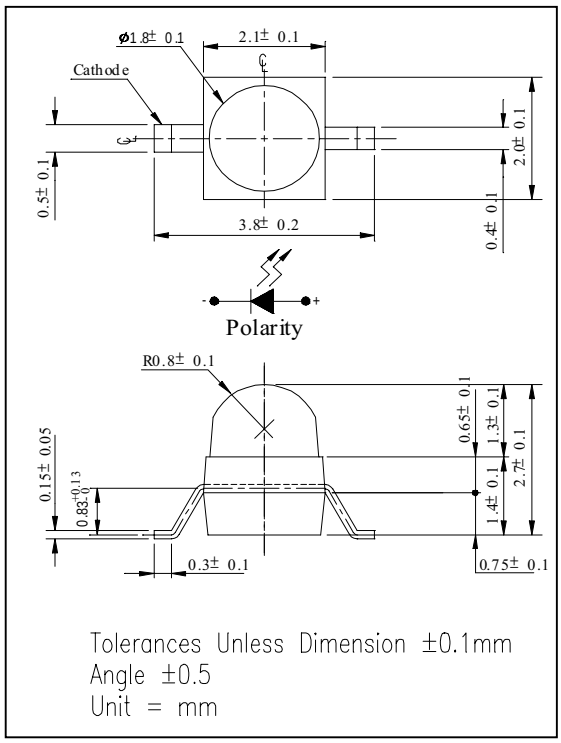
Descriptions :

- The 95-21 SMD taping is much smaller than leaded compoments. Thusenable smaller board size.Higher packing density. Reduced storage space and finally smaller equipment to be obtained.
- Besides, light weight makes them ideal for miniature application, ect.
- Furthermore by automation assembly machines the accuracy is anticipated.

Applications :

- Small indicator for outdoor applications.
- Flat backlight for LCD, switches and symbols.
- Indicator and backlight in offic equipment.
- Indicator and backlight for battery driven equipment.
- Indicator and backlight for audio and video equipment.
- Automotive : backlighting in dashboards and switches.
- Telecommunication：indicator and backlighting in telephone and fax.
- General use.

Package Dimensions :



Part No.	Chip		Lens Color
	Mterial	Emitted Color	
95-21UYD/S400-A5/S69/TR7	AlGaInP	Super Yellow	Color Diffused

OFFICE : NO. 25,Lane 76,Sec.3, Chung Yang Rd., Tucheng 236, Taipei, Taiwan, R.O.C.
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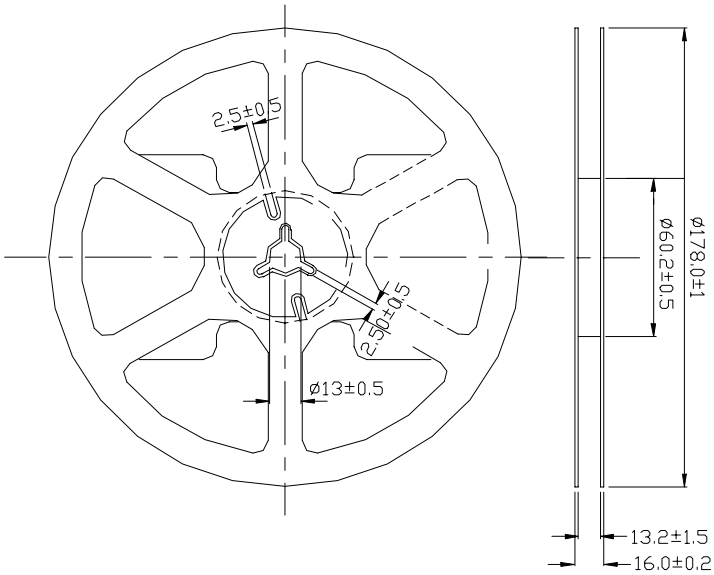
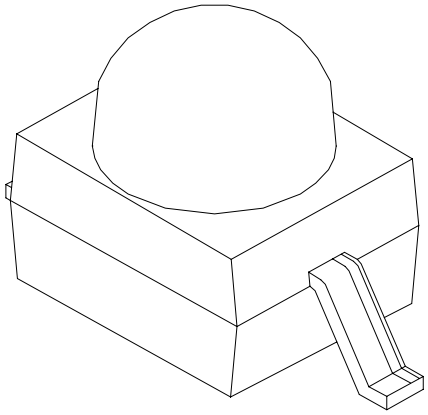
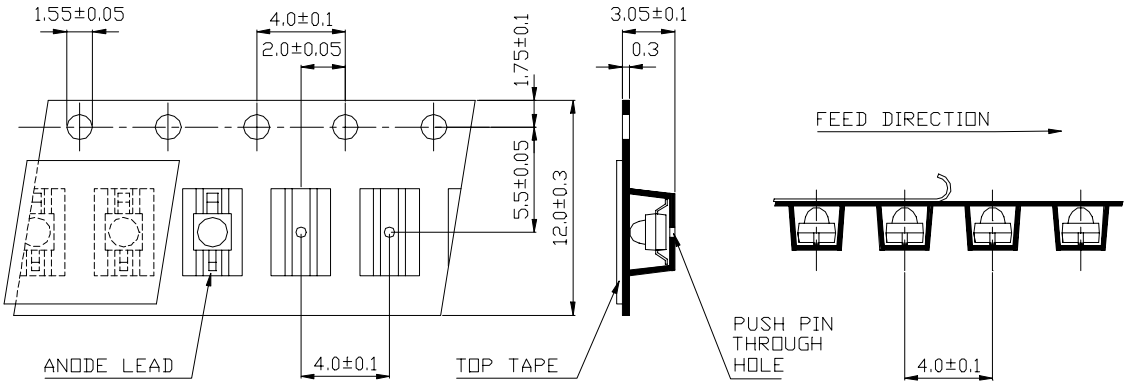
■ Package Dimensions





■ Loaded Quantity Per Reel 1000 Pcs/Reel



1. ALL DIMENSIONS ARE IN MILLIMETERS.
2. LEAD SPACING IS MEASURED WHERE THE LEAD EMERGE FROM THE PACKAGE
3. PROTRUDED RESIN UNDER FLANGE 1.5 mm (0.59") MAX.

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■ Absolute Maximum Ratings at Ta = 25℃

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_R	5	V
Forward Current	I_F	50	mA
Operating Temperature	Topr	-40 ~ +85	℃
Storage Temperature	Tstg	-40 ~ +100	℃
Soldering Temperature	Tsol	260 ± 5 for 5 sec	℃
Electrostatic Discharge	ESD	2000	V
Power Dissipation	Pd	120	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	I_F(Peak)	200	mA

■ Electronic Optical Characteristics :

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	Iv	200	270	----	mcd	I_F = 20mA
Viewing Angle	2θ 1/2	----	35	----	deg	
Peak Wavelength	λ p	----	591	----	nm	
Dominant Wavelength	λ d	585	----	592	nm	
Spectrum Radiation Bandwidth	△ λ	----	20	----	nm	
Forward Voltage (1)	V_F	----	2.0	2.4	V	
Forward Voltage (2)	V_F	1.7	----	2.1	V	I_F= 7mA
Reverse Current	I_R	----	----	10	μA	V_R=5V

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■ Reliability Test Items And Conditions

NO.	Item	Test Conditions	Test Hours/ Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260℃ ± 5 ℃	5 sec	76 pcs	0/1
2	Temperature Cycle	H : +85℃ 30 min ↕ 5 min L : -55℃ 30 min	50 cycle	76 pcs	0/1
3	Thermal Shock	H : +100℃ 5 min ↕ 10 sec L : -10℃ 30 min	50 cycle	76 pcs	0/1
4	High Temperature Storage	TEMP. : +100℃	1000 hrs	76 pcs	0/1
5	Low Temperature Storage	TEMP. : -55℃	1000 hrs	76 pcs	0/1
6	DC Operating Life	If = 20 mA	1000 hrs	76 pcs	0/1
7	High Temperature / High Humidity	85℃ / 85% R.H.	1000 hrs	76 pcs	0/1

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■ Specifications For Bin Grading :

Iv at If = 20 mA → " CAT "

Bin Grading	Min.	Typ.	Max.	Unit
Bin 1	200	-----	280	mcd
Bin 2	224	-----	313	
Bin 3	250	-----	350	

λ D at If = 20 mA → " HUE "

Bin Grading	Min.	Typ.	Max.	Unit
Bin 1	585	-----	588	nm
Bin 2	587	-----	590	
Bin 3	589	-----	592	

Vf at If = 7 mA → " REF "

Bin Grading	Min.	Typ.	Max.	Unit
Bin 1	1.7	-----	2.1	mcd
Bin 2	1.9	-----	2.3	mcd

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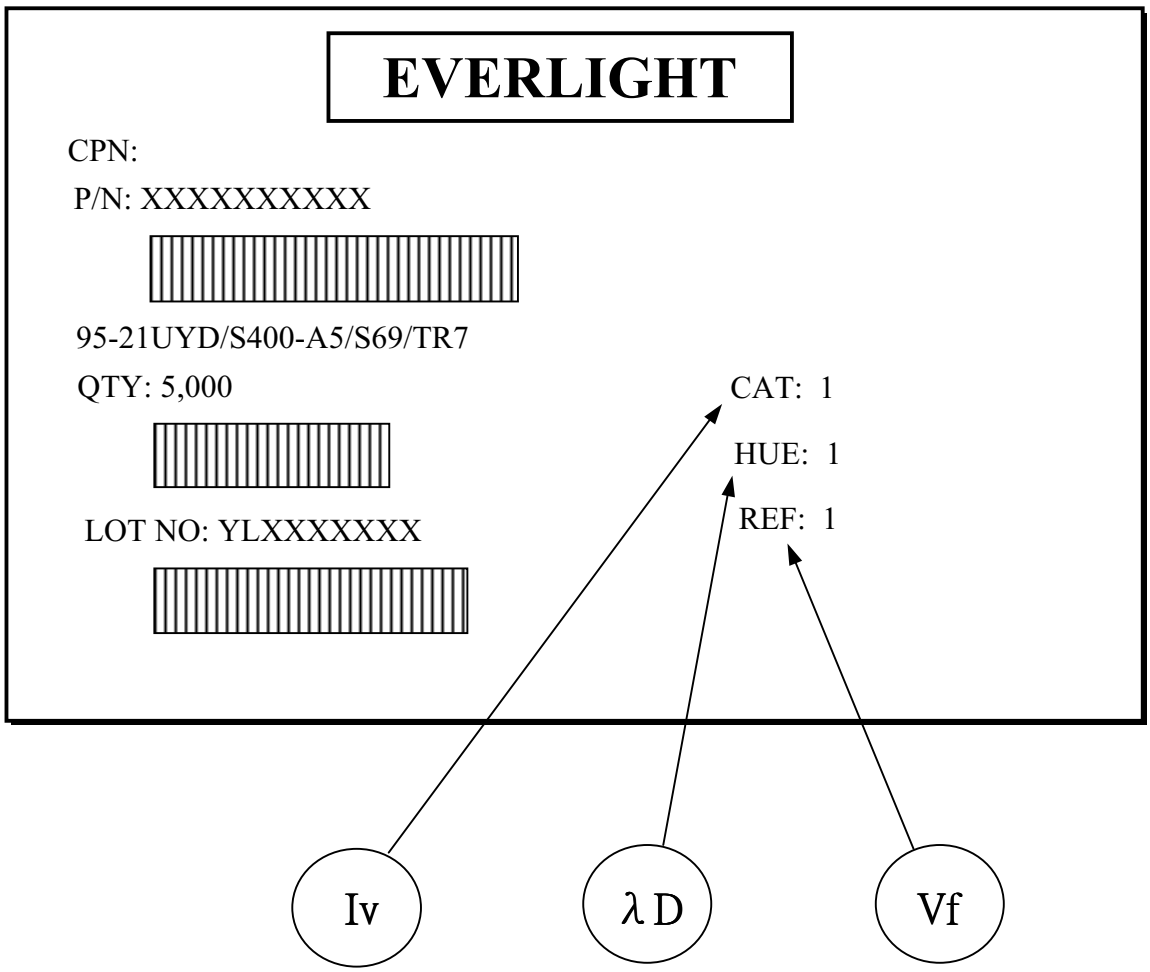
■ Signification Of The Lable：



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■ Typical Electro-Optical Characteristic Curves