



EVERLIGHT ELECTRONICS CO.,LTD.

DEVICE NUMBER : DLE-912-204 REV : 1.0

ECN : _____ PAGE : 1/5

1.8mm Round Subminiature "Gull Wing" Lead (Square Base) LEDs

MODEL NO : 91-21SYGC/S530-E1/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.

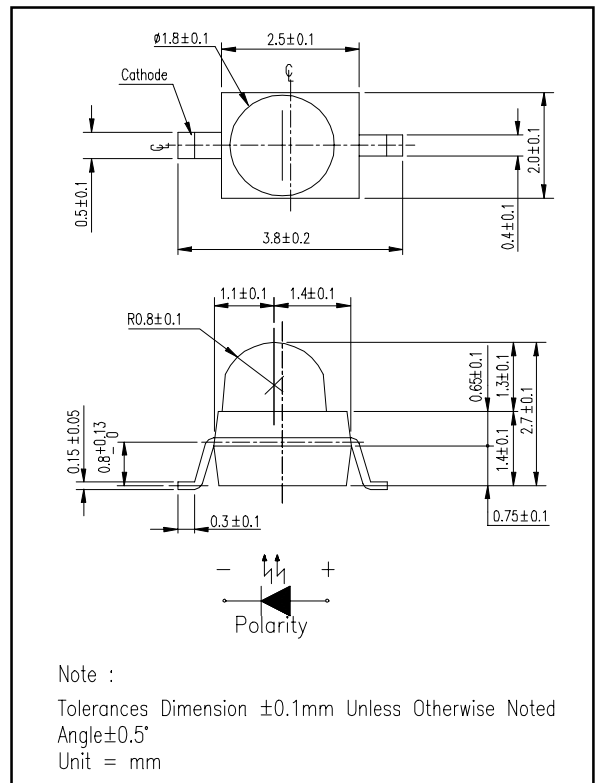
Descriptions :

- Besides, light weight makes them ideal for miniature applications, 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 |
|-----------------------|----------|--------------------|-------------|
| | Material | Emitted Color | |
| 91-21SYGC/S530-E1/TR7 | AlGaInP | Super Yellow Green | Water Clear |

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

TEL : 886-2-2267-2000,2267-9936

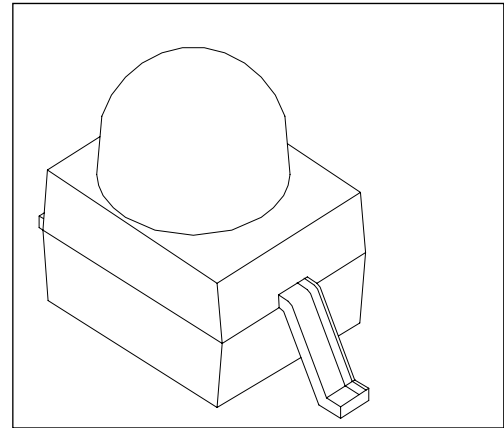
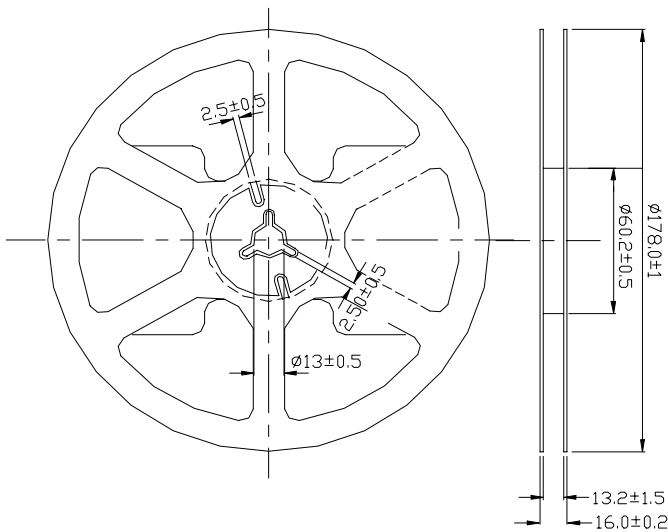
FAX : 886-2-2267-6244,22676189,22676306

<http://www.everlight.com>

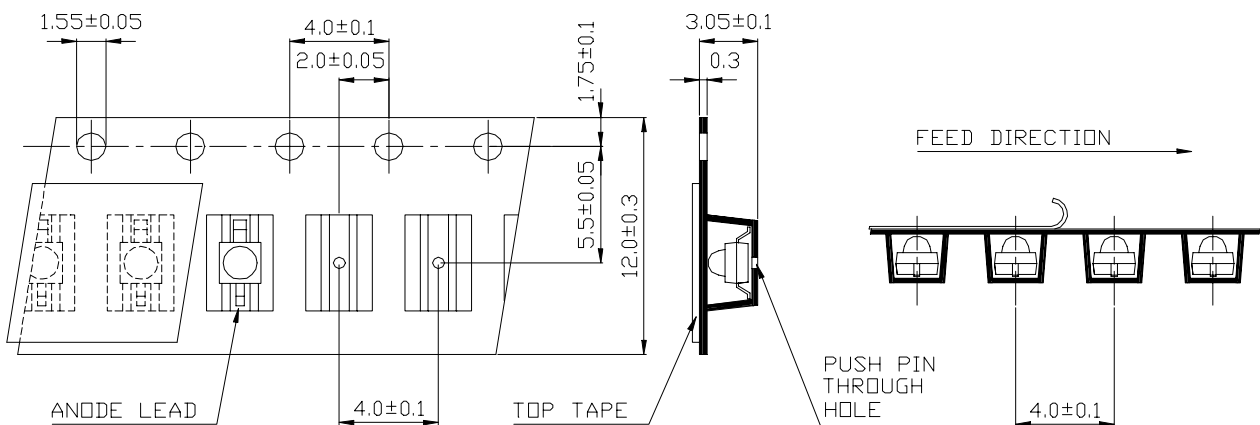
1.8mm Round Subminiature "Gull Wing" Lead (Square Base) LEDs

MODEL NO : 91-21SYGC/S530-E1/TR7

■ 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.



EVERLIGHT ELECTRONICS CO.,LTD.

DEVICE NUMBER : DLE-912-204 REV : 1.0
ECN : _____ PAGE : 1/5

1.8mm Round Subminiature "Gull Wing" Lead (Square Base) LEDs

MODEL NO : 91-21SYGC/S530-E1/TR7

■ Absolute Maximum Ratings at Ta = 25°C

| Parameter | Symbol | Rating | Unit |
|--|----------|-------------------|------|
| Reverse Voltage | Vr | 5 | V |
| Forward Current | If | 25 | mA |
| Operating Temperature | Topr | -40 ~ +85 | °C |
| Storage Temperature | Tstg | -40 ~ +100 | °C |
| Soldering Temperature | Tsol | 260 ± 5 for 5 sec | °C |
| Electrostatic Discharge | ESD | 2000 | V |
| Power Dissipation | Pd | 60 | mW |
| Peak Forward Current(Duty 1/10 @ 1KHZ) | If(Peak) | 160 | mA |

■ Electronic Optical Characteristics :

| Parameter | Symbol | MIN. | TYP. | MAX. | Unit | Condition |
|------------------------------|--------|------|------|------|------|-----------|
| Luminous intensity | Iv | ---- | 12 | ---- | mcd | If = 2mA |
| Luminous intensity | Iv | 132 | 198 | ---- | mcd | If = 20mA |
| Viewing Angle | 2θ 1/2 | ---- | 25 | ---- | deg | |
| Peak Wavelength | λp | ---- | 575 | ---- | nm | |
| Dominant Wavelength | λd | ---- | 573 | ---- | nm | |
| Spectrum Radiation Bandwidth | Δλ | ---- | 20 | ---- | nm | |
| Forward Voltage | Vf | ---- | 2.0 | 2.4 | V | |
| Reverse Current | Ir | ---- | ---- | 10 | μA | Vr=5V |



EVERLIGHT ELECTRONICS CO.,LTD.

DEVICE NUMBER : DLE-912-204 REV : 1.0

ECN : _____ PAGE : 1/5

1.8mm Round Subminiature "Gull Wing" Lead (Square Base) LEDs

MODEL NO : 91-21SYGC/S530-E1/TR7

■ Reliability Test Items And Conditions

| NO. | Item | Test Conditions | Test Hours/ Cycle | Sample Size | Ac/Re |
|-----|----------------------------------|--|----------------------|----------------|-------|
| 1 | Solder Heat | TEMP : 260°C ± 5 °C | 5 SEC | 76 PCS | 0/1 |
| 2 | Temperature Cycle | H : +85°C 30 min ↑ 5 min ↓ L : -55°C 30 min | 50 CYCLE | 76 PCS | 0/1 |
| 3 | Thermal Shock | H : +100°C 5 min ↑ 10 sec ↓ L : -10°C 30 min | 50 CYCLE | 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 | IF = 20 mA | 1000 HRS | 76 PCS | 0/1 |
| 7 | High Temperature / High Humidity | 85°C / 85% R.H. | 1000 HRS | 76 PCS | 0/1 |



EVERLIGHT ELECTRONICS CO.,LTD.

DEVICE NUMBER : DLE-912-204 REV : 1.0

ECN : _____ PAGE : 1/5

1.8mm Round Subminiature "Gull Wing" Lead (Square Base) LEDs

MODEL NO : 91-21SYGC/S530-E1/TR7

Typical Electro-Optical Characteristic Curves

