

1.8mm Round Subminiature "Yoke" Lead (Square Base) LEDs

 MODEL NO : 91-21VGC/TR9

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.

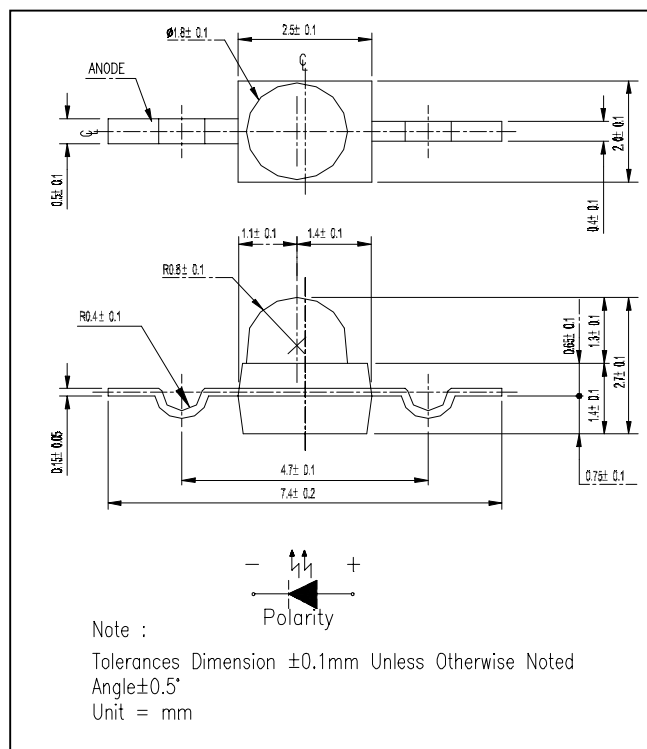
Descriptions :

- The 91-21 SMD taping is much smaller than lead frame type 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 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	
91-21VGC/TR9	GaP	Green	Water Clear

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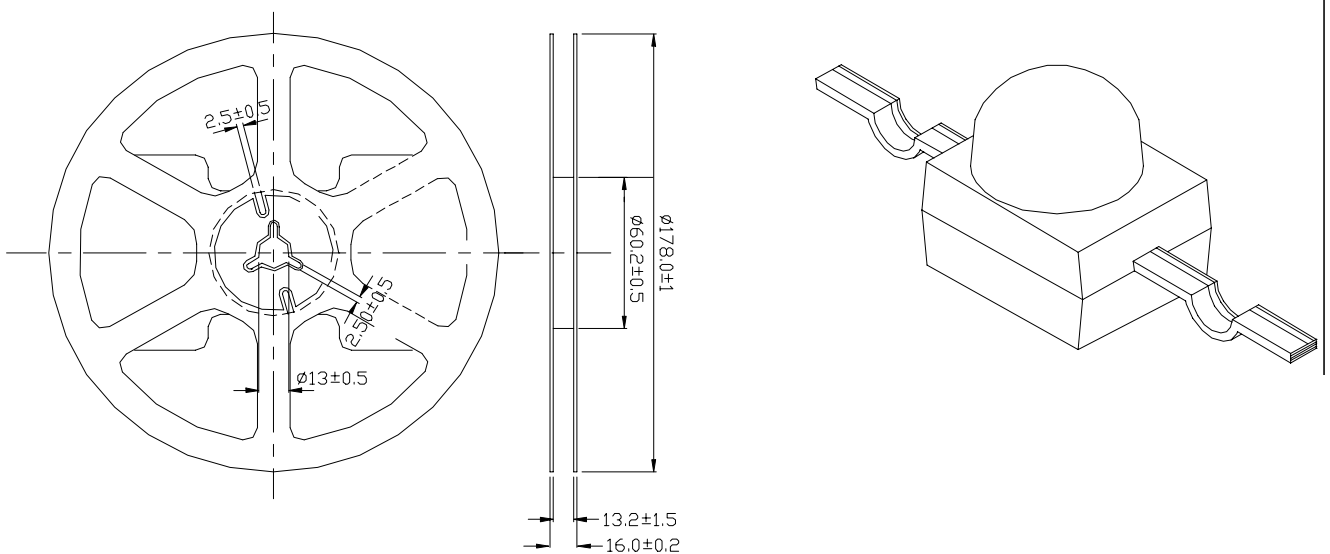
<http://www.everlight.com>



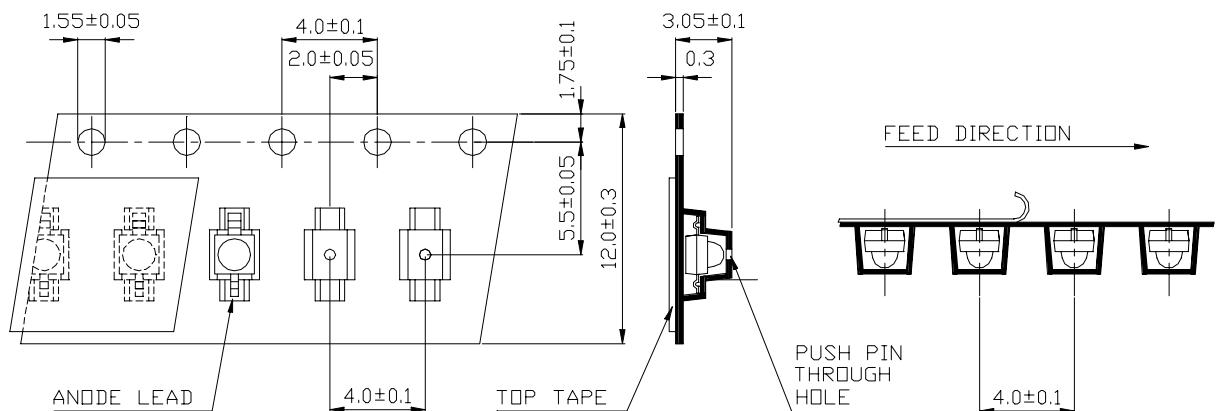
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■ Package Dimensions



■ 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.



EVERLIGHT ELECTRONICS CO.,LTD.

DEVICE NUMBER : DLE-912-120 REV : 1.3

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■ Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	Vr	5	V
Forward Current	If	30	mA
Operating Temperature	Topr	-40 ~ +85	°C
Storage Temperature	Tstg	-40 ~ +100	°C
Soldering Temperature	Tsol	260 ± 5 for 5 sec	°C
Power Dissipation	Pd	100	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	30	50	----	mcd	If = 20 mA
Viewing Angle	2 θ 1/2	----	25	----	deg	
Peak Wavelength	λ p	----	570	----	nm	
Dominant Wavelength	λ d	----	571	----	nm	
Spectrum Radiation Bandwidth	△ λ	----	30	----	nm	
Forward Voltage	Vf	1.7	2.1	2.4	V	
Reverse Current	Ir	----	----	10	μ A	Vr=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°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



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Typical Electro-Optical Characteristic Curves

