

DEVICE NUMBER : DLE-912-104

REV : 1.1

ECN :

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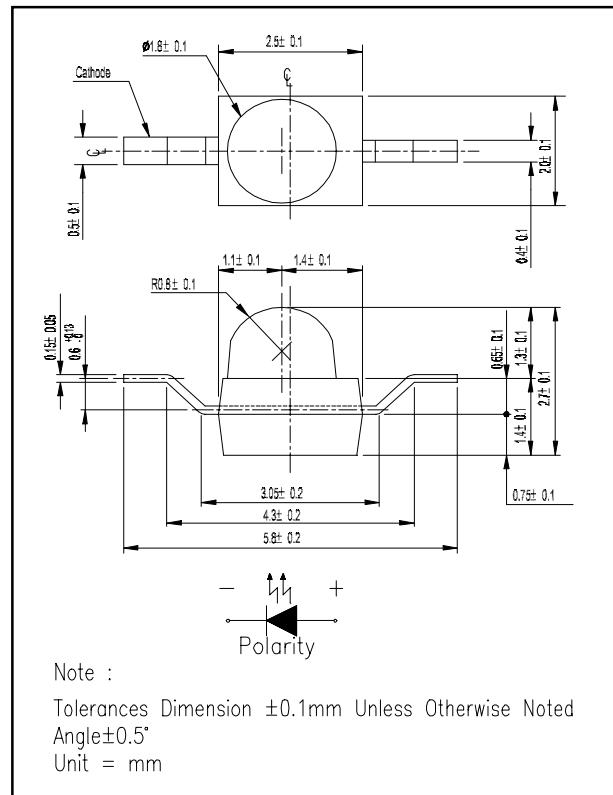
1.8mm Round Subminiature "Z-Bend" Lead (Square Base) LEDs

MODEL NO : 91-21VYC/TR10

■ Features :

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

■ Package Dimensions :



■ Descriptions :

- The 91-21 SMD taping is much smaller than leaded components. 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, etc.
- Furthermore by automation assembly machines the accuracy is anticipated.

■ Applications :

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

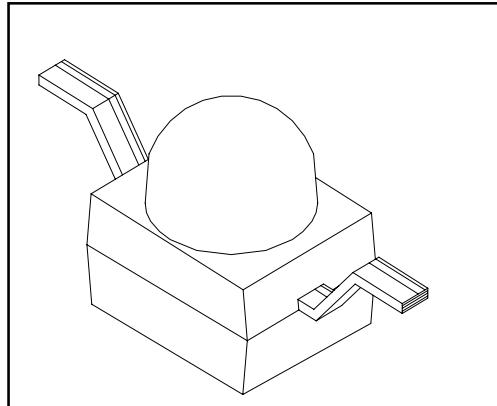
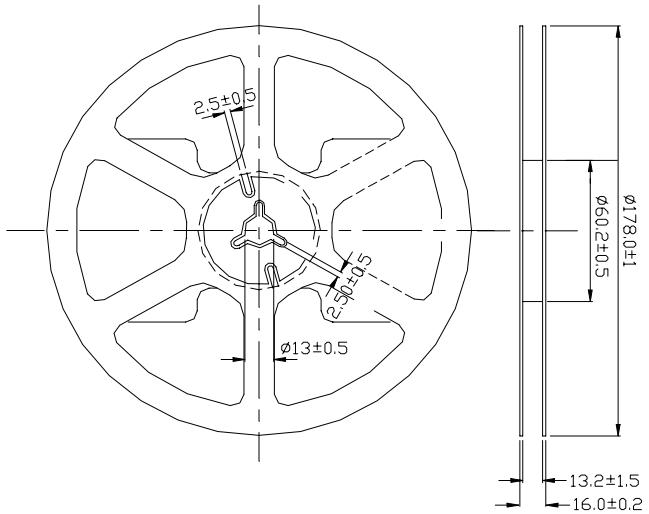
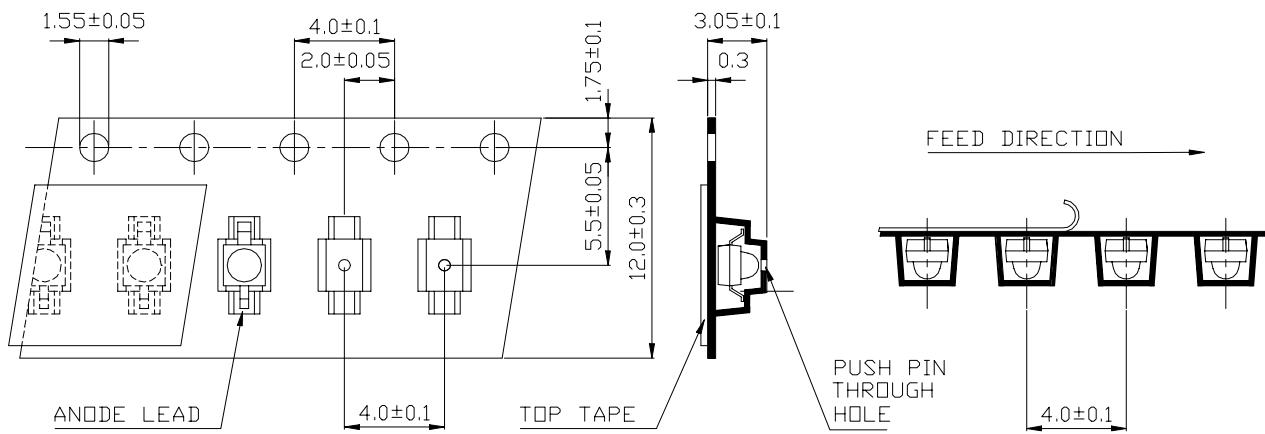
PART NO.	CHIP		Lens Color
	Material	Emitted Color	
91-21VYC/TR10	GaAsP/GaP	Yellow	Water Clear

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

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<http://www.everlight.com>

DEVICE NUMBER : DLE-912-104 REV : 1.1
ECN : _____ PAGE : 2/5**1.8mm Round Subminiature "Z-Bend" Lead (Square Base) LEDs**MODEL NO : 91-21VYC/TR10**■ 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°C

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _r	5	V
Forward Current	I _f	30	mA
Operating Temperature	T _{opr}	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Soldering Temperature	T _{sol}	260 ± 5 (for 5 sec)	°C
Power Dissipation	P _d	100	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	I _f (Peak)	160	mA

■ Electronic Optical Characteristics :

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous intensity	I _v	16	25	----	mcd	If = 20mA
Viewing Angle	2θ 1/2	----	25	----	deg	
Peak Wavelength	λ _p	----	585	----	nm	
Dominant Wavelength	λ _d	----	590	----	nm	
Spectrum Radiation Bandwidth	△λ	----	35	----	nm	
Forward Voltage	V _f	1.7	2.0	2.4	V	
Reverse Current	I _r	----	----	10	μA	



EVERLIGHT ELECTRONICS CO.,LTD.

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■ Reliability Test Item And Condition

NO.	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$	5 sec	76 pcs	0/1
2	Temperature Cycle	H : $+85^{\circ}\text{C}$ 30 min ↓ L : -55°C 30 min	5 min 50 cycle	76 pcs	0/1
3	Thermal Shock	H : $+100^{\circ}\text{C}$ 5 min ↓ L : -10°C 30 min	10 sec 50 cycle	76 pcs	0/1
4	High Temperature Storage	TEMP. : $+100^{\circ}\text{C}$	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	$85^{\circ}\text{C} / 85\% \text{ R.H.}$	1000 hrs	76 pcs	0/1

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1.8mm Round Subminiature "Z-Bend" Lead (Square Base) LEDsMODEL NO : 91-21VYC/TR10**■ Typical Electro-Optical Characteristic Curves**