

DEVICE NUMBER : DLE-912-267 REV : 1.0
 ECN : _____ PAGE : 1/4

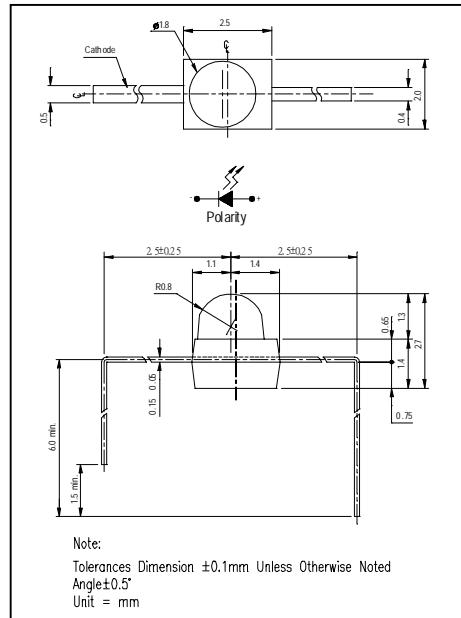
1.8mm Round Subminiature Special Forming Axial LEDs

PART NO. : 91-21UBC/C430/F2

■ 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.

■ Package Dimensions :



■ Descriptions :

- The 91-21 SMD taping is much smaller than leaded components. Thus enable 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, etc.
- 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 office 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.

PART NO.	Chip		Lens Color
	Material	Emitted Color	
91-21UBC/C430/F2	GaN/SiC Substrate	Blue	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 Special Forming Axial LEDs

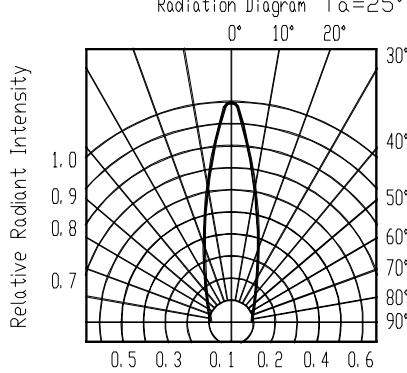
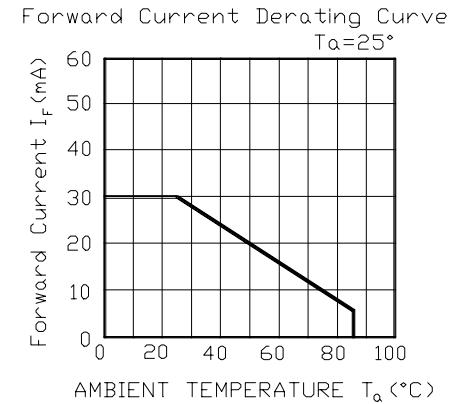
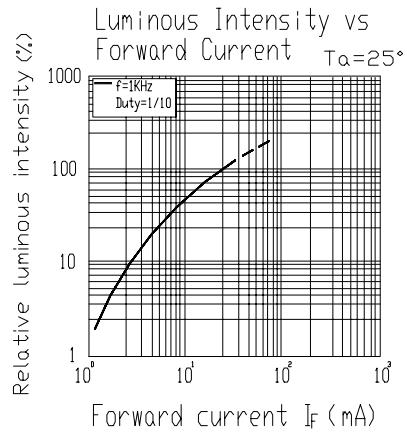
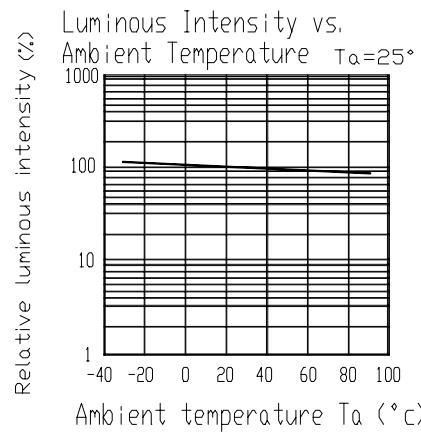
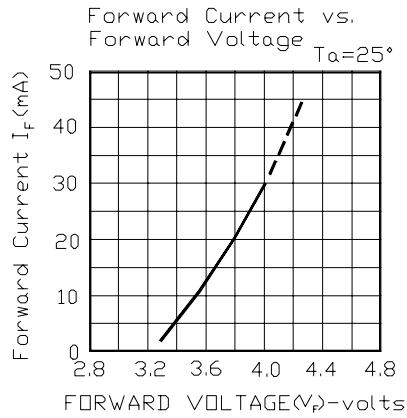
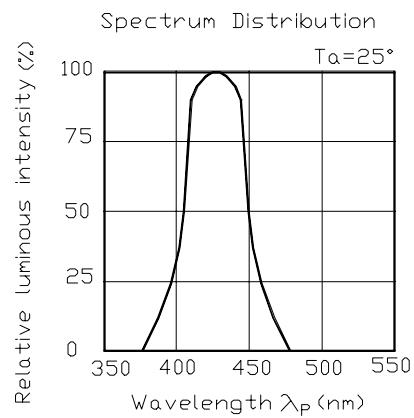
PART NO. : 91-21UBC/C430/F2

■ 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}	-20 ~ +80	°C
Storage Temperature	T _{stg}	-30 ~ +90	°C
Soldering Temperature	T _{sol}	260 ± 5 for 5 sec	°C
Electrostatic Discharge	ESD	1000	V
Power Dissipation	P _d	140	mW
Peak Forward Current(Duty 1/10 @ 1KHZ)	I _F (Peak)	70	mA

■ Electronic Optical Characteristics :

Parameter	Symbol	MIN.	TYP.	MAX.	Unit	Condition
Luminous Intensity	I _v	160	203	----	mcd	IF= 20mA
Viewing Angle	2θ 1/2	----	25	----	deg	
Peak Wavelength	λ _p	----	428	----	nm	
Dominant Wavelength	λ _d	----	466	----	nm	
Spectrum Radiation Bandwidth	△λ	----	65	----	nm	
Forward Voltage	V _F	----	3.8	4.5	V	
Reverse Current	I _R	----	----	10	μA	

DEVICE NUMBER : DLE-912-267 REV : 1.0ECN : _____ PAGE : 3/4**1.8mm Round Subminiature Special Forming Axial LEDs**PART NO. : 91-21UBC/C430/F2**■ Typical Electro-Optical Characteristic Curves**



EVERLIGHT ELECTRONICS CO.,LTD.

DEVICE NUMBER : DLE-912-267 REV : 1.0
ECN : _____ PAGE : 4/4

1.8mm Round Subminiature Special Forming Axial LEDs

PART NO. : 91-21UBC/C430/F2

■ Reliability Test Items And Conditions

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 CYCLES	76 PCS	0/1
3	Thermal Shock	H : $+100^{\circ}\text{C}$ 5 min. L : -10°C 30 min.	10 sec. 50 CYCLES	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	I _F = 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
