



LEDTECH ELECTRONICS CORP.

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## SPECIFICATION

*PART NO. : LT1821-81-URC4*

*5.0MM ROUND LED LAMP*

Approved by	Checked by	Prepared by
<i>San</i>	<i>Jang</i>	<i>Duan</i>



**5.0MM ROUND LED LAMP  
PART NO. : LT1821-81-URC4**

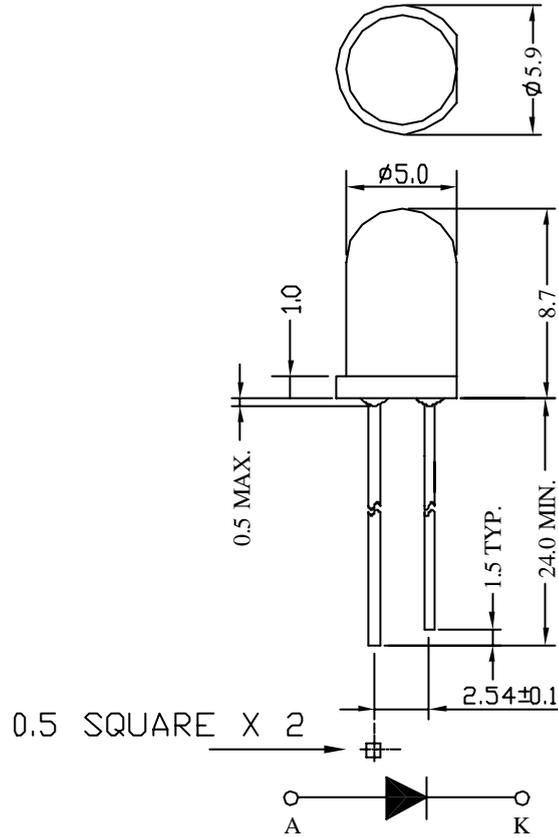
**Features**

- \* High intensity
- \* Reliable and rugged
- \* Low current requirement
- \* IC compatible

**Description**

The True green lamp are made with InGaN chip and green diffused epoxy resin.

**Package Dimensions**



Notes:

- 1.All dimensions are in millimeters.
- 2.Tolerance is  $\pm 0.25$ mm unless otherwise noted.

Part No.	Led Chip		Lens Color
	Material	Emitting Color	
LT1821-81-URC4	InGaN	True green	Green diffused



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**Absolute Maximum Ratings at Ta=25 :**

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	80	mW
Reverse Voltage	Vr	5	V
D.C. Forward Current	If	20	mA
Peak Current (1/10 Duty Cycle , 0.1 ms Pulse Width)	If(Peak)	100	mA
Operating Temperature Range	Topr	-25 to +85	
Storage Temperature Range	Tstg	-40 to +100	
Lead Soldering Temp.(1.6mm from body) for 5 seconds		260	
Electrostatic discharge (ESD)		300	V

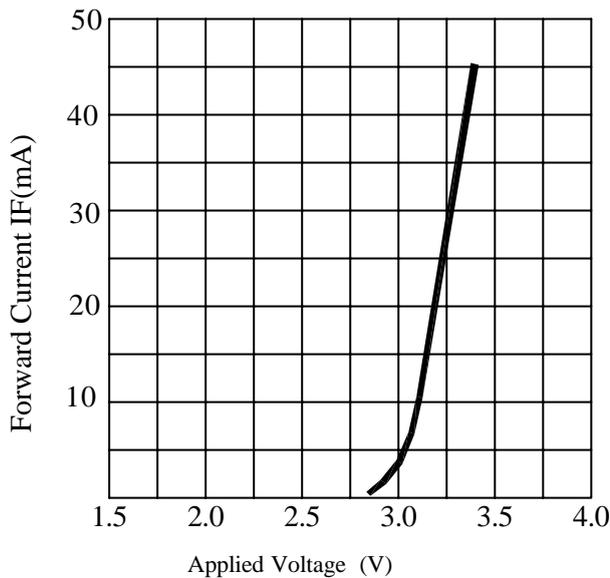
**Electrical and Optical Characteristics :**

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	500	900		mcd
Forward Voltage	Vf	If=20mA		3.2	4.0	V
Peak Wavelength	P	If=20mA				nm
Dominant Wavelength	D	If=20mA		525		nm
Reverse Current	Ir	Vr=5V			50	μ A
Viewing Angle	2 1/2	If=20mA		36		deg
Spectrum Line Halfwidth		If=20mA		35		nm

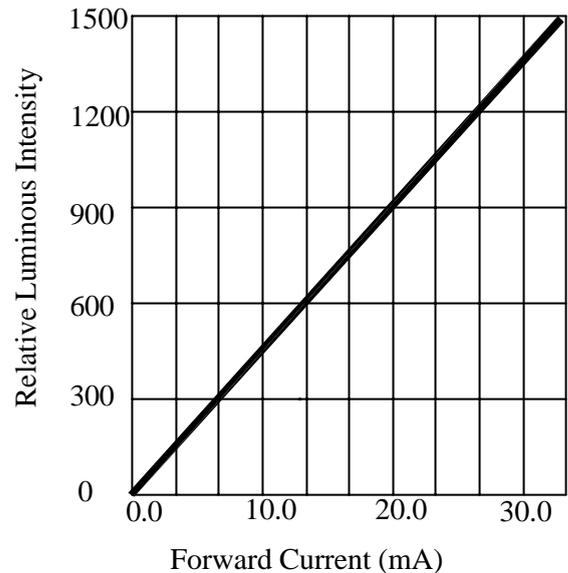


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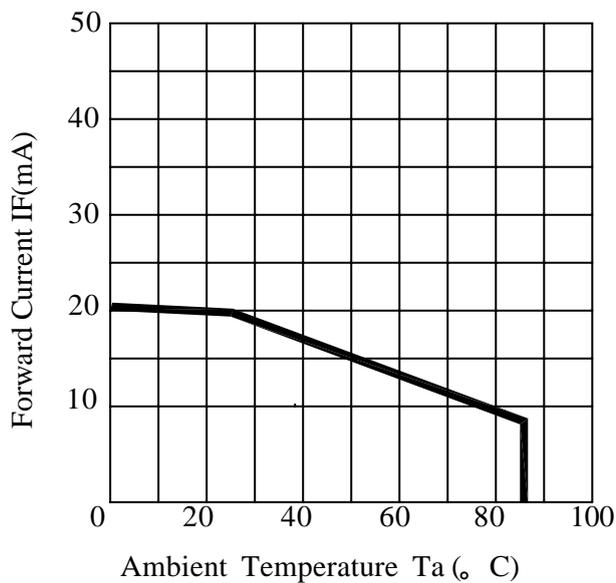
**Typical Electrical / Optical Characteristics Curves :**



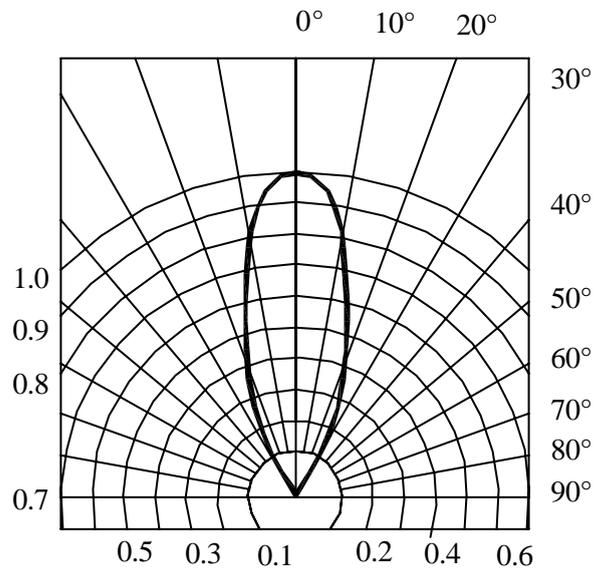
**FORWARD CURRENT VS. APPLIED VOLTAGE**



**FORWARD CURRENT VS. LUMINOUS INTENSITY**



**AMBIENT TEMPERATURE VS. FORWARD CURRENT**



**RADIATION DIAGRAM**



**5.0MM ROUND LED LAMP  
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**Reliability Test Method :**

Test Item	Test Condition	Duration Time
Operation Life	If=20mA / Ta=25	168hrs
Storage at High Temperature	Ta=100	168hrs
Storage at Low Temperature	Ta=-40	168hrs
Storage at High Temperature/High Humidity	Ta=85 /RH=85 %	168hrs
Operating at High Temperature	Ta=85 / If=20mA	168hrs
Operating at Low Temperature	Ta=-25 / If=20mA	168hrs
Thermal Shock	Ta/T=100 /30min~ -40 /30min	10 cycles
Solderability	Tsol=230	5 sec

**Criteria for Judging The Damage:**

Item	Symbol	Test Condition	Criteria for Judgment	
			Min.	Max.
Forward Voltage	Vf	If=20mA	-----	Initial Data x1.1
Reverse Current	Ir	Vr=5V	-----	50 $\mu$ A
Luminous Intensity	Iv	If=20mA	Initial Data x0.8	-----

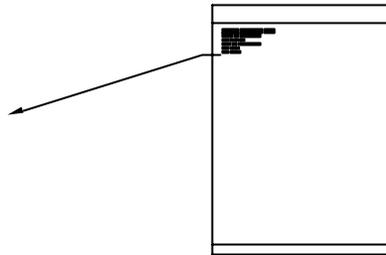


**5.0MM ROUND LED LAMP  
PART NO. : LT1821-81-URC4**

ENCASED TYPE

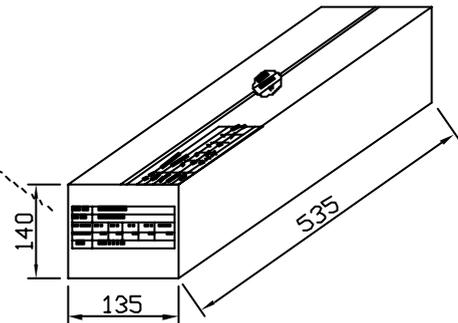
PLASTIC PACKAGE  
QUANTITY: 200 PCS

LEDTECH ELECTRONICS CORP.	
PART NO :LTXXXX-XX	
Q'TY	: PCS
LOT NO	:XXXXXXXXXX
DATE	:
BIN CODE:	



INNER BOX  
QUANTITY: 40 PACKETS  
TOTAL: 8,000 PCS

PART NO.	LXXXXX-XX-XX				
LOT NO.	XXXXXXXXXX				
BIN CODE	Xx X	Xx X	Xx X	Xx X	TOTAL
QUANTITY	PCS	PCS	PCS	PCS	PCS
DATE	XXXX , XX , XX				



OUTER CARTON  
QUANTITY: 4 BOX  
TOTAL: 32,000 PCS

C/T NO. 箱 號	XX
PART NO. 料 號	LXXXXX-XX-XX
QUANTITY 數 量	PCS
N.W. 淨 重	KGS
G.W. 毛 重	KGS
REMARK 備 註	

