



LEDTECH ELECTRONICS CORP.

NANYA ROAD, MUGANG ZHAOQING
CITY GUANGDONG CHINA.

TEL: 86-758-2875541, 2870651, 2877464, 2876185, 2877017

FAX: 86-758-2878014

Http://www.ledtech.com.tw

SPECIFICATION

PART NO. : LT1821-81-URE9

5.0MM ROUND LED LAMP

Approved by	Checked by	Prepared by
<i>San</i>	<i>Jang</i>	<i>Bao Min</i>



**5.0MM ROUND LED LAMP
PART NO. : LT1821-81-URE9**

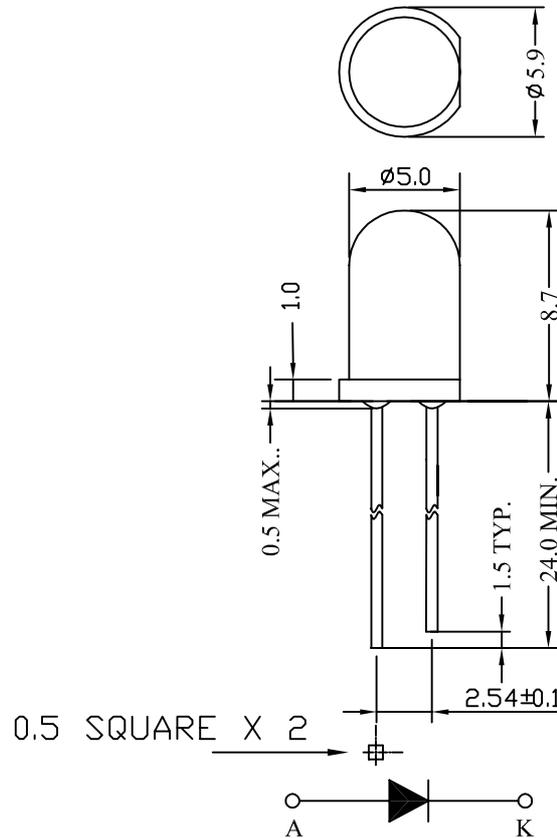
Features

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

Description

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

Package Dimensions



Notes:

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

Part No.	Led Chip		Lens Color
	Material	Emitting Color	
LT1821-81-URE9	InGaN	Green	Green diffused



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Absolute Maximum Ratings at Ta=25°C :

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	°C
Storage Temperature Range	Tstg	-40 to +100	°C
Lead Soldering Temp.(1.6mm from body) for 5 seconds		260	°C
Electrostatic discharge (ESD)		300	V

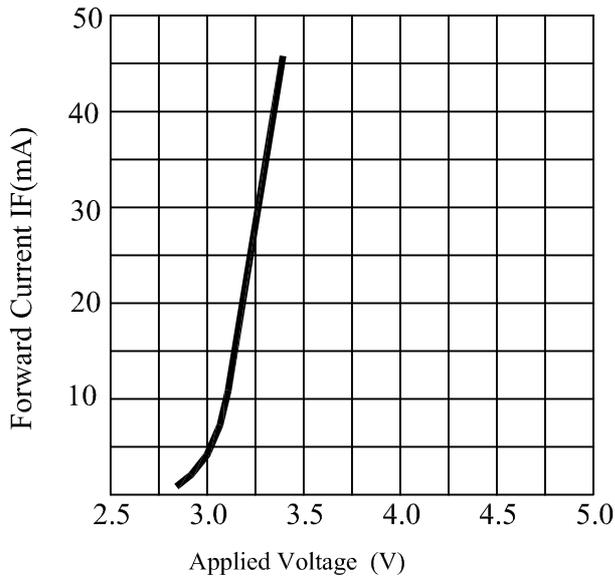
Electrical and Optical Characteristics :

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	480	800		mcd
Forward Voltage	Vf	If=20mA		3.2	4.0	V
Dominant Wavelength	λD	If=20mA	520		525	nm
Reverse Current	Ir	Vr=5V			50	μA
Viewing Angle	$2\theta 1/2$	If=20mA		40		deg
Spectrum Line Halfwidth	$\Delta \lambda$	If=20mA		35		nm

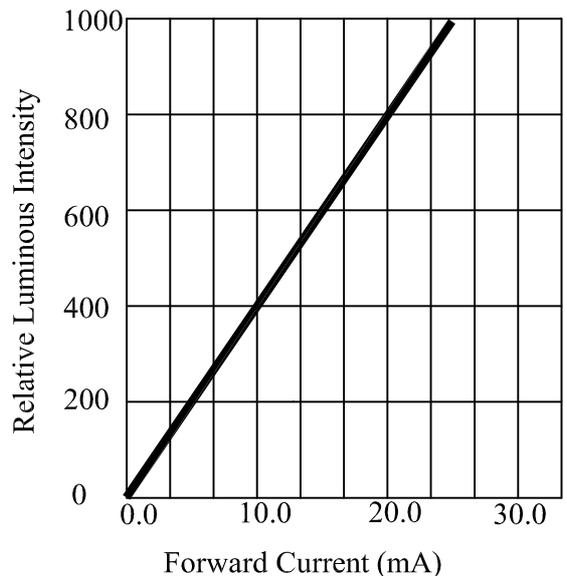


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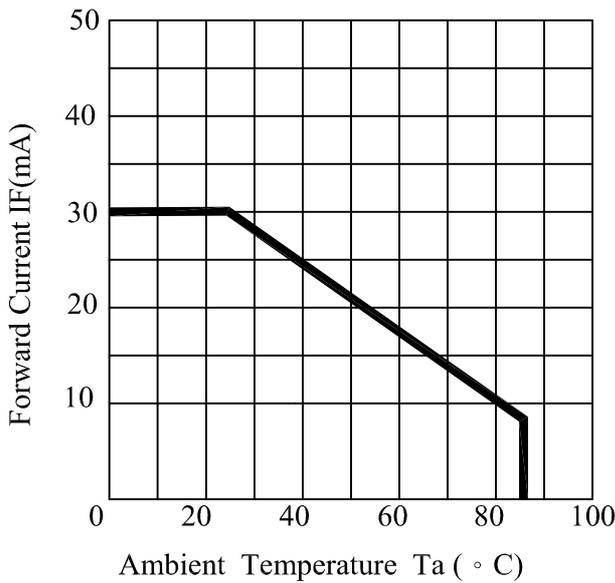
Typical Electrical / Optical Characteristics Curves :



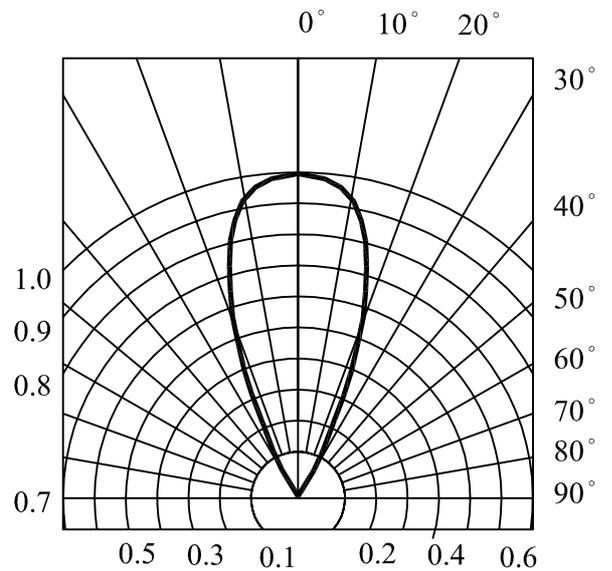
FORWARD CURRENT VS. APPLIED VOLTAGE



FORWARD CURRENT VS. LUMINOUS INTENSITY



AMBIENT TEMPERATURE VS. FORWARD CURRENT



RADIATION DIAGRAM



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Reliability Test Method :

Test Item	Test Condition	Duration Time
Operation Life	If=20mA / Ta=25°C	168hrs
Storage at High Temperature	Ta=100°C	168hrs
Storage at Low Temperature	Ta=-40°C	168hrs
Storage at High Temperature/High Humidity	Ta=85°C /RH=85%	168hrs
Operating at High Temperature	Ta=85°C / If=20mA	168hrs
Operating at Low Temperature	Ta=-25°C / If=20mA	168hrs
Thermal Shock	Ta/T=100°C/30min~ -40°C/30min	10 cycles
Solderability	Tsol=230°C	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 μ A
Luminous Intensity	Iv	If=20mA	Initial Data x0.8	-----

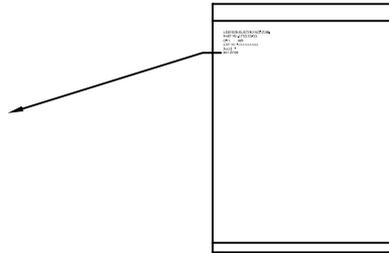


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ENCASED TYPE

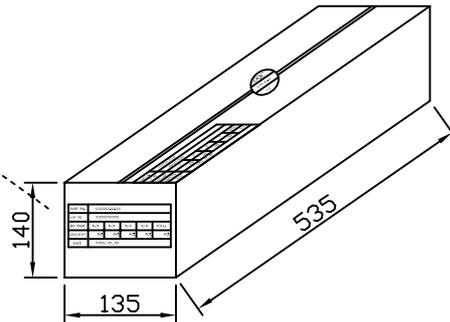
PLASTIC PACKAGE
 QUANTITY: 200 PCS

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	

