



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. : LT1831-81-UKE1-P27

5.0MM ROUND LED LAMP

Approved by

Checked by

Prepared by

San

Jang

Duan



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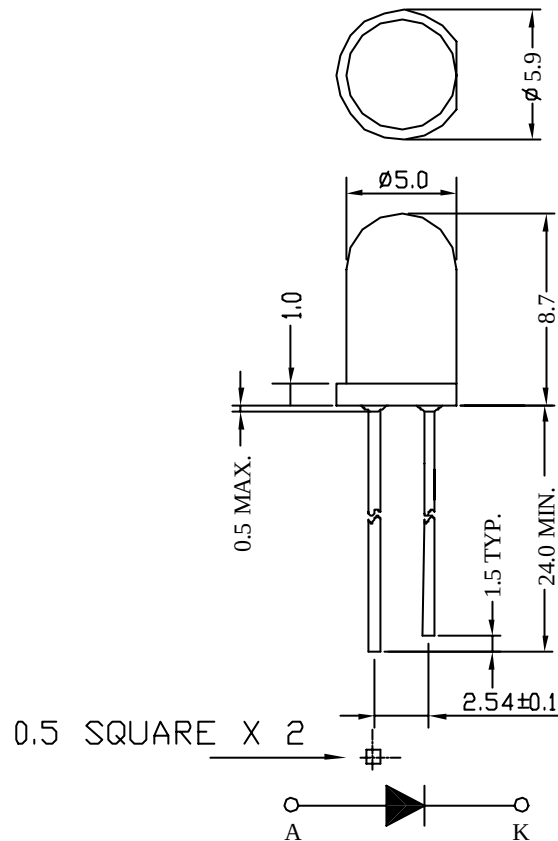
Features

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

Description

The Yellow lamp are made with AlGaInP/GaAs chip and yellow 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	
LT1831-81-UKE1-P27	AlGaInP/GaAs	Yellow	Yellow diffused



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Absolute Maximum Ratings at Ta=25 °C :

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	75	mW
Reverse Voltage	Vr	4	V
D.C. Forward Current	If	30	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 :

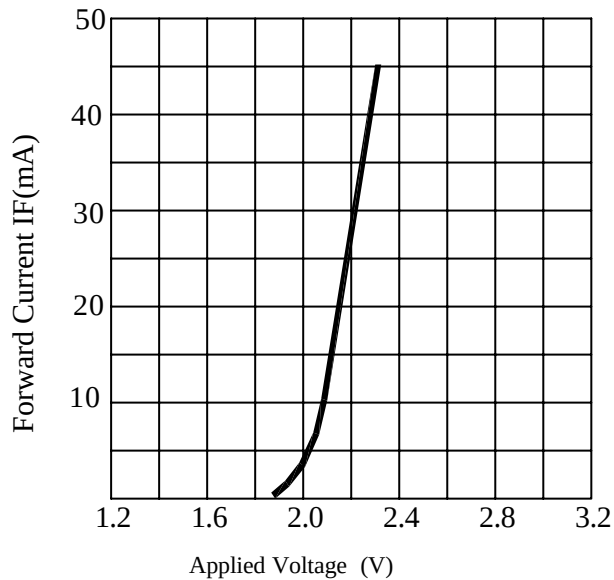
Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	800	1300		mcd
Forward Voltage	Vf	If=20mA		2.1	2.5	V
Peak Wavelength	λP	If=20mA		589		nm
Dominant Wavelength	λD	If=20mA		591		nm
Reverse Current	Ir	Vr=4V			100	μA
Viewing Angle	2 θ 1/2	If=20mA		40		deg
Spectrum Line Halfwidth	$\Delta \lambda$	If=20mA		15		nm



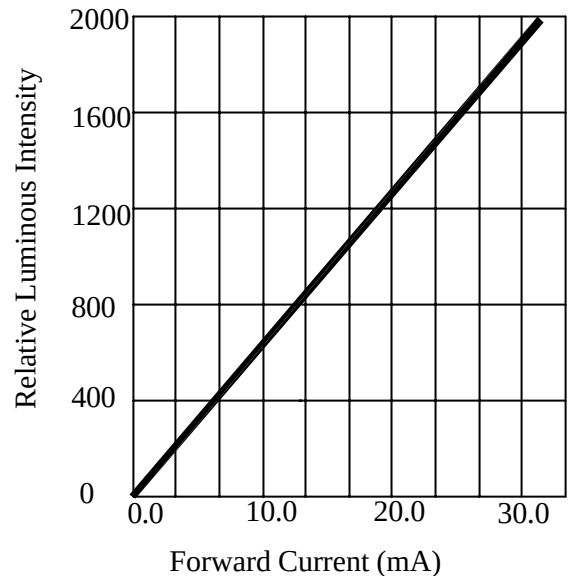
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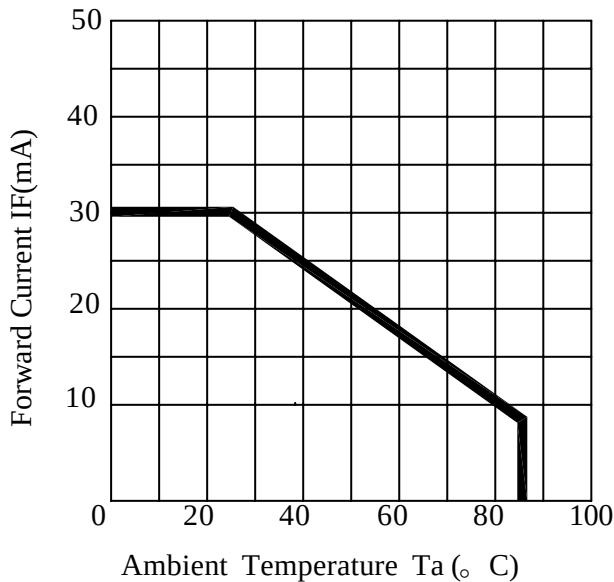
Typical Electrical / Optical Characteristics Curves :



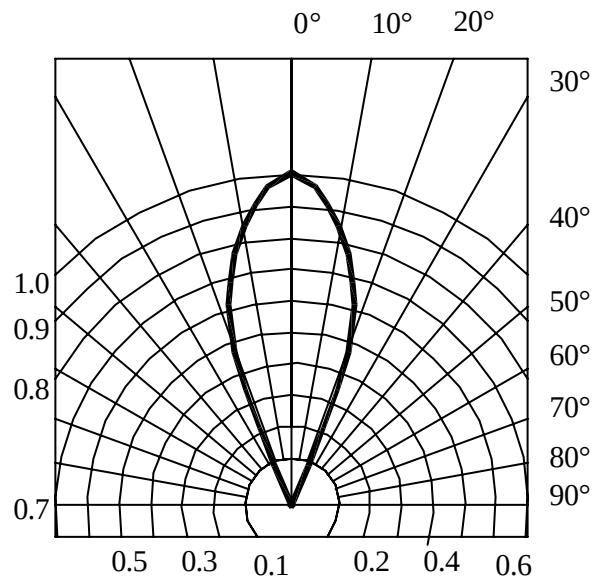
FORWARD CURRENT VS. APPLIED VOLTAGE



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=4V	-----	100 μ A
Luminous Intensity	Iv	If=20mA	Initial Data x0.8	-----



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ENCASED TYPE

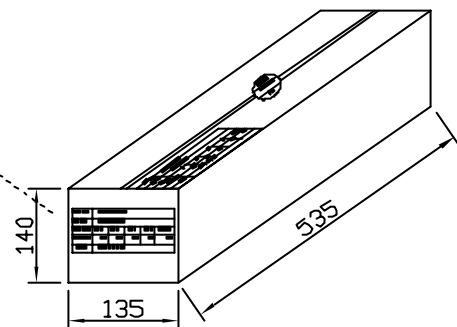
PLASTIC PACKAGE
QUANTITY: 200 PCS

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	

