



· NANYA ROAD,MUGANG ZHAOQING  
· CITY GUANGDONG CHINA.

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

· FAX:86-758-2878014

· [Http://www.ledtech.com.tw](http://www.ledtech.com.tw)

LEDTECH ELECTRONICS CORP.

## SPECIFICATION

*PART NO. : LT5271E-81*

**2.0×5.0MM RECTANGULAR LED LAMP**

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



## 2.0×5.0MM RECTANGULAR LED LAMP

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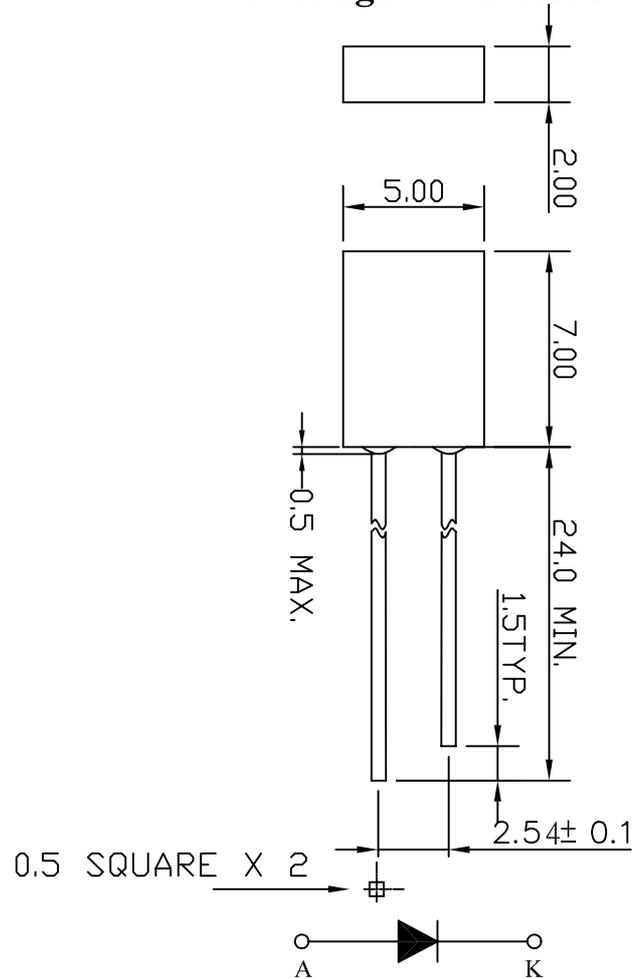
### Features

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

### Description

The Super red lamp are made with AlGaAs/GaAs chip and red 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	
LT5271E-81	AlGaAs/GaAs	Super red	Red diffused



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### Absolute Maximum Ratings at Ta=25°C :

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	72	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

### Electrical and Optical Characteristics :

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	20.0	35.0		mcd
Forward Voltage	Vf	If=20mA		1.8	2.2	V
Peak Wavelength	$\lambda P$	If=20mA		660		nm
Dominant Wavelength	$\lambda D$	If=20mA		643		nm
Reverse Current	Ir	Vr=4V			100	$\mu A$
Viewing Angle	$2\theta 1/2$	If=20mA		82		deg
Spectrum Line Halfwidth	$\Delta \lambda$	If=20mA		20		nm

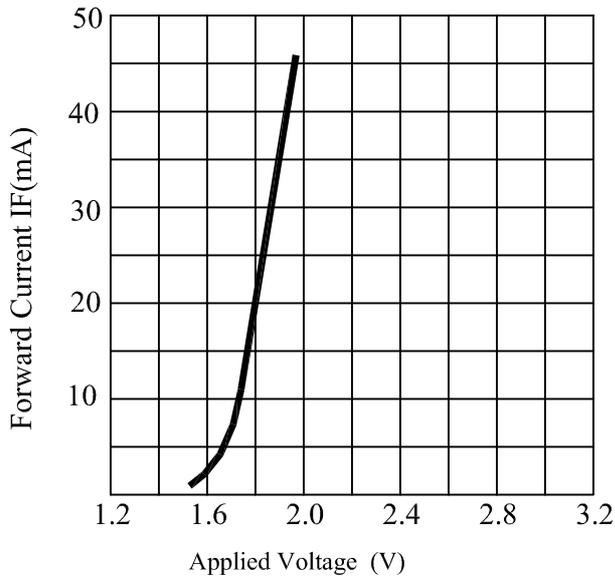


## 2.0×5.0MM RECTANGULAR LED LAMP

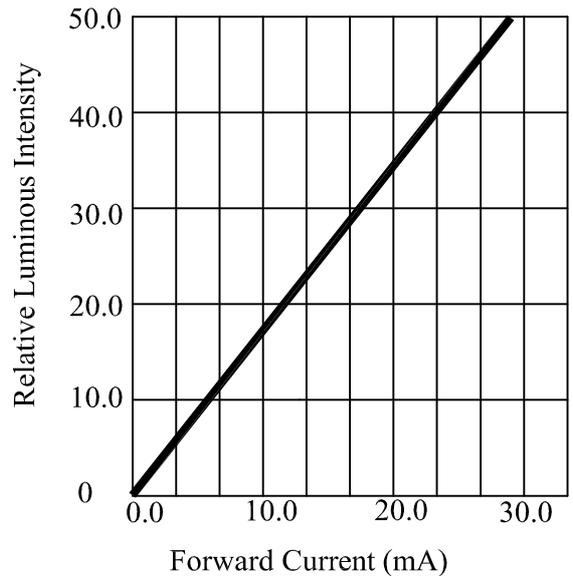
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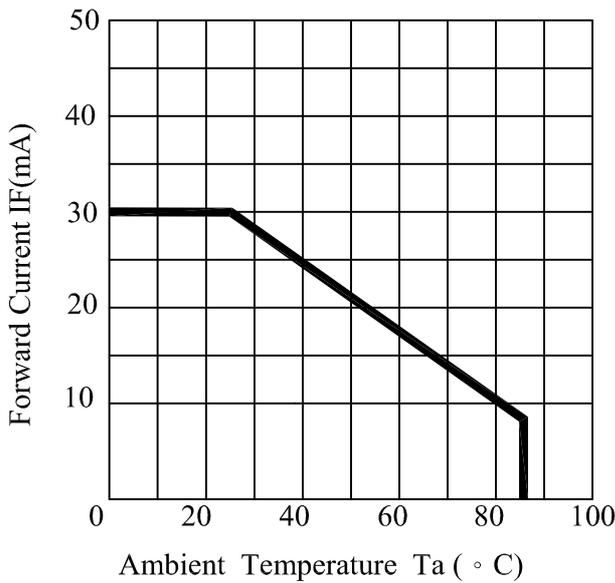
### Typical Electrical / Optical Characteristics Curves :



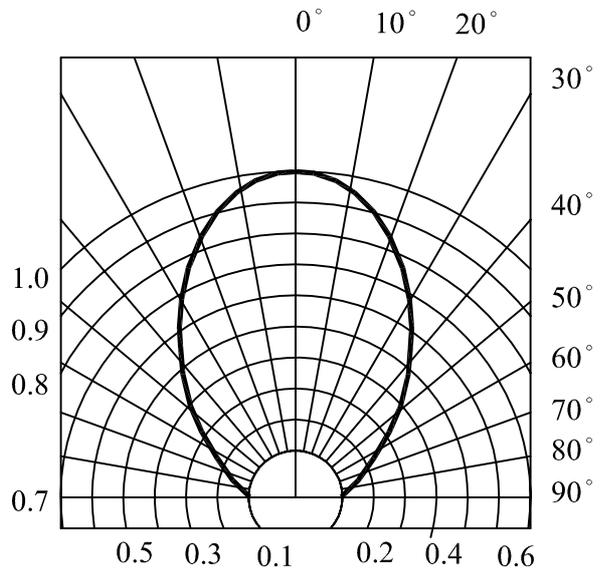
FORWARD CURRENT VS. APPLIED VOLTAGE



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 $\mu$ A
Luminous Intensity	Iv	If=20mA	Initial Data x0.8	-----



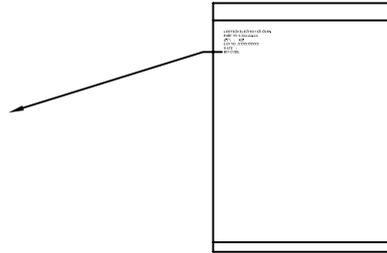
# 2.0x5.0MM RECTANGULAR LED LAMP

## PART NO. : LT5271E-81

### ENCASED TYPE

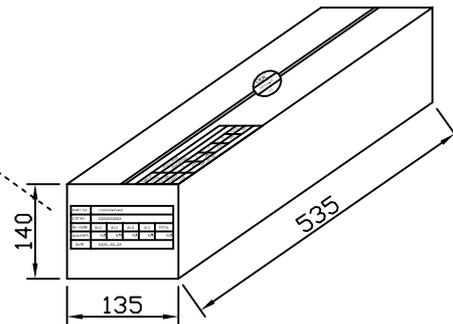
PLASTIC PACKAGE  
 QUANTITY: 1000 PCS

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



INNER BOX  
 QUANTITY: 15 PACKETS  
 TOTAL: 15,000 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: 60,000 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	

