SPECIFICATION FOR LED LAMP

PART NO. : LT9J31-81

2.43X5.0mm ARCH LAMP

Approved by: *Fang Po Wang* Prepared by: Tammy

LEDTECH ELECTRONICS CORPORATION

5TH FL,NO.542-5,CHUNG CHENG ROAD,
HSIN-TIEN CITY,TAIWAN.
TEL：886-2-22186891
FAX：886-2-22181222,22182894

2.43X5.0mm ARCH LAMP

PART NO.：LT9J31-81

Features

＊ High intensity

＊ Reliable and rugged

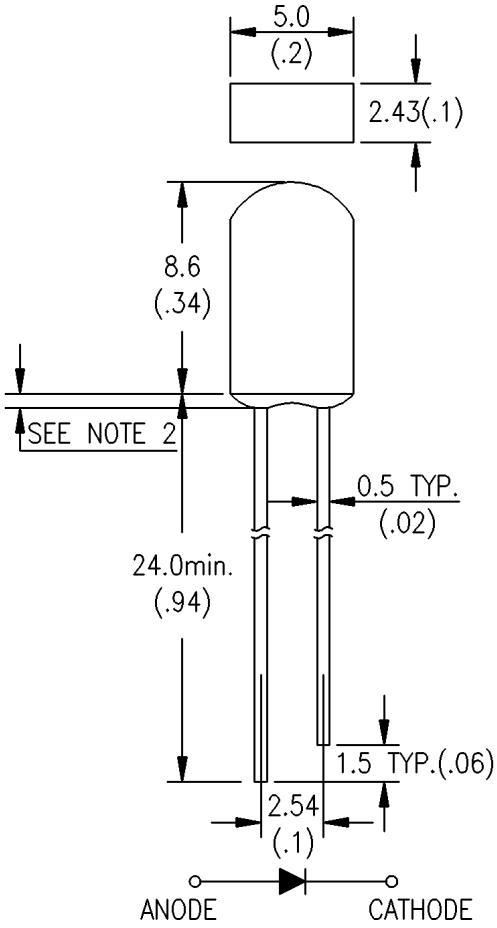
＊ Low current requirement

＊ IC compatible

Description

The yellow lamps are made with GaAsP chips and yellow diffused epoxy resin.

Package Dimensions



Notes：

1. All dimensions are in millimeters (inches).
2. Protruded resin under flange is 1.0mm (.04″) max.
3. Tolerance is ±0.25mm (0.01″) unless otherwise noted.

Part No.	Led Chip		Lens Color
	Material	Emitting Color	
LT9J31-81	GaAsP	Yellow	Yellow Diffused

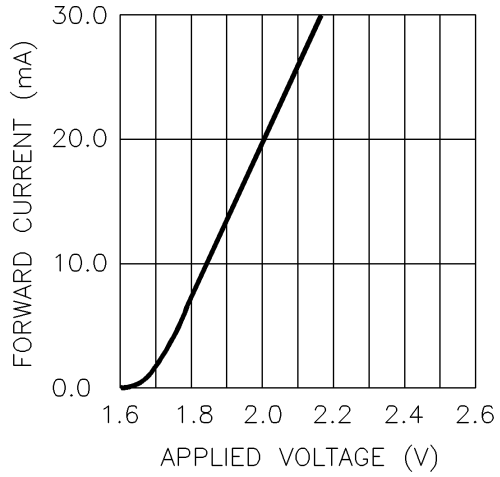
Absolute Maximum Ratings at Ta=25℃：

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	72	mW
Reverse Voltage	Vr	5	V
D.C. Forward Current	If	30	mA
Peak Current (1/10 Duty Cycle,0.1ms 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	℃

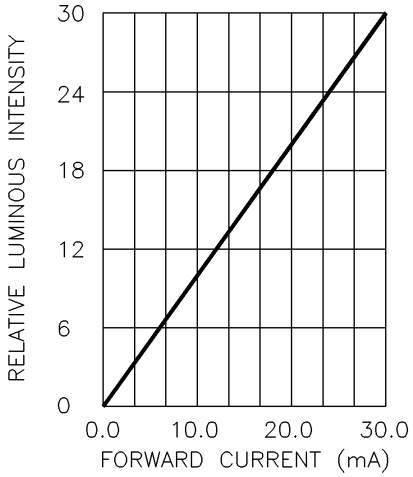
Electrical and Optical Characteristics：

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Luminous Intensity	Iv	If=20mA	12	20		mcd
Forward Voltage	Vf	If=20mA		2.1	2.4	V
Peak Wavelength	λp	If=20mA		587		nm
Dominant Wavelength	λd	If=20mA		590		nm
Reverse Current	Ir	Vr=5V			100	μA
Viewing Angle	2θ1/2	If=20mA		20		deg
Spectrum Line Halfwidth	Δλ	If=20mA		35		nm

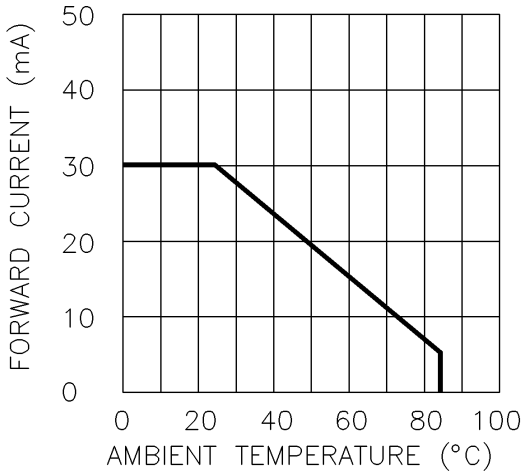
Typical Electrical / Optical Characteristics Curves：



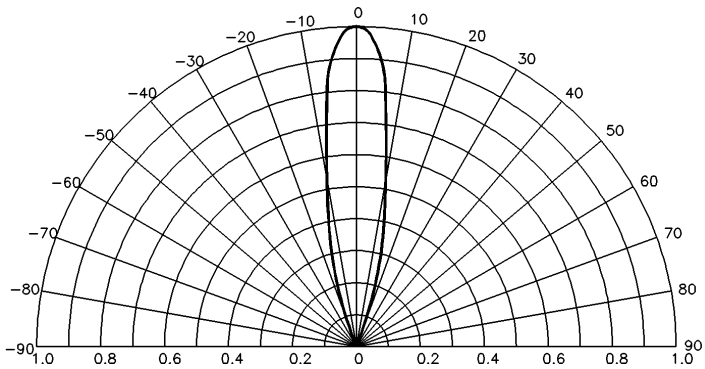
Forward Current vs. Forward Voltage



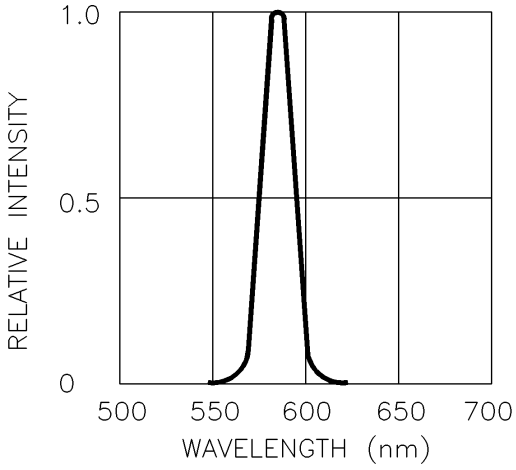
Forward Current vs. Relative Luminous Intensity



Ambient Temperature vs. Forward Current



Radiation Diagram



Relative Intensity vs. Wavelength

Reliability Test Method：

Test Item	Test Condition	Duration Time
Operation Life	If=20mA / Ta=25℃	168 hrs
Storage at High Temperature	Ta=100℃	168 hrs
Storage at Low Temperature	Ta=-40℃	168 hrs
Storage at High Temperature/High Humidity	Ta=85℃ / RH=85%	168 hrs
Operating at High Temperature	Ta=85℃ / If=20mA	168 hrs
Operating at Low Temperature	Ta=-25℃ / If=20mA	168 hrs
Thermal Shock	Ta/T=100℃/30min~ - 40℃/30min	10 cycles
Solderability	Tsol=260℃	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	— — —	100 μA
Luminous Intensity	Iv	If=20mA	Initial Data x0.8	— — —