SPECIFICATION

PART NO. : LT2N21-81 12mm ROUND LED LAMP



Approved by	Checked by	Prepared by
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Description

This green lamp is made with GaP/GaP chip and green diffused epoxy

resin.



Notes:

1. ALL DIMENSIONS ARE IN mm.

2. TOLERANCE IS±0.25mm UNLESS OTHERWISE NOTED.

Description

Part No.	LED Chip			
	Material	Emitting Color	Lens Color	
LT2N21-81	GaP/GaP	Green	Greed diffused	

	LT2N21-81	12mn	12mm ROUND LED LAM			
Absolute Maximu	m Ratings at Ta=25	i				
Parameter		Symbol	Rating	Unit		
Power Dissipation		PD	78	mW		
Reverse Voltage		VR	5	v		
D.C. Forward Current		If	30	mA		
Reverse (Leakage) Currer	nt	Ir	100	μA		
Peak Current(1/10Duty C	ycle,0.1ms Pulse Width.)	If(Peak)	100	mA		
Operating Temperature R	ange	Topr.	Topr25 to +85			
Storage Temperature Range		Tstg.	Tstg40 to +100			
Lead Soldering Temp.(1.6	for 5 seconds		260			

Electrical and Optical Characteristics:

Parameter	Symbol	Condition	Min.	Тур.	Max.	Unit
Luminous Intensity	Iv	If=20mA	16.5	35		mcd
Forward Voltage	Vf	If=20mA		2.1	2.6	V
Peak Wavelength	λΡ	If=20mA		567		nm
Dominant Wavelength	λD	If=20mA		572		nm
Reverse (Leakage) Current	Ir	Vr=5V			100	μΑ
Viewing Angle	2 1/2	If=20mA		42		deg
Spectrum Line Halfwidth	Δλ	If=20mA		30		nm
NOTE: THE DATAS TESTED BY IS TESTER						

LT2N21-81



12mm ROUND LED LAMP

Precautions:

TAKE NOTE OF THE FOLLOWING IN USE OF LED

1. Temperature in use

Since the light generated inside the LED needs to be emitted to outside efficiently, a resin with high light transparency is used; therefore, additives to improve the heat resistance or moisture resistance (silica gel, etc) which are used for semiconductor products such as transistors cannot be added to the resin.

Consequently, the heat resistant ability of the resin used for LED is usually low; therefore, please be careful on the following during use.

Avoid applying external force, stress, and excessive vibration to the resins and terminals at high temperature. The glass transition temperature of epoxy resin used for the LED is approximately 120-130 .

At a temperature exceeding this limit, the coefficient of liner expansion of the resin doubles or more compared to that at normal temperature and the resin is softened.

If external force or stress is applied at that time, it may cause a wire rupture.

2. Soldering

Please be careful on the following at soldering.

After soldering, avoided applying external force, stress, and excessive vibration until the products go to cooling process (normal temperature), <Same for products with terminal leads>

(1) Soldering measurements:

Distance between melted solder side to bottom of resin shall be 1.6mm or longer.

- (2) Solder dip: Preheat: 90 max. (Backside of PCB), Within 120 seconds
 Solder bath: 250 max. (Solder temperature), Within 5 seconds
- (3) Soldering iron : 250 max. (Temperature of soldering iron tip), Within 3 seconds
- 3. Insertion

Pitch of the LED leads and pitch of mounting holes need to be same

4. Others

Since the heat resistant ability of the LED resin is low, SMD components are used on the same PCB, please mount the LED after adhesive baking process for SMD components. In case adhesive baking is done after LED lamp insertion due to a production process reason, make sure not to apply external force, stress, and excessive vibration to the LED and follow the conditions below.

Baking temperature: 120 max. Baking time: Within 60 seconds

If soldering is done sequentially after the adhesive baking, please perform the soldering after cooling down the LED to normal temperature.

