

# SPECIFICATIONS CL30GT3D

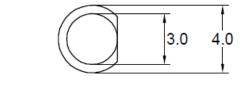
### **OUTLINES DIMENSIONS**

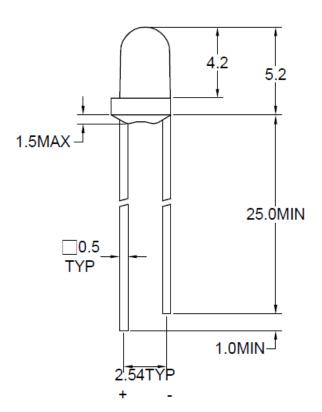
### **DESCRIPTION**

- Round Type
- 3mm Diameter
- Lens Color: Pure Green Diffused
- With Flange
- Solder leads without standoffs

### **FEATURES**

- Emitted Color: Pure Green
- Technology: InGaN/GaN
- High Luminous Intensity
- Dominant Wavelength  $\lambda_D = 525$ nm
- Viewing Angle: 34°





#### Notes:

- 1. All Dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm$  0.25mm (0.01") unless otherwise noted.
- 3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle	
CL30GT3D	InGaN	Green	Green Diffused	34°	



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# **ABSOLUTE MAXIMUM RATINGS**

(TA=25°C)

Parameter	Symbol	Max Rating	Unit			
Power Dissipation	Pb	120	mW			
Pulse Current Forward Current	lFP	100	mA			
Continuous Forward Current	lF	30	mA			
Reverse Voltage	VR	5	V			
Operating Temperature Range	Topr	-20~+80	°C			
Storage Temperature Range	Тѕтс	-30~+100	°C			
P = Pulse Width ≤ 10 ms, Duty Ratio ≤1/10. Soldering Condition: 260 °C/ 5sec						

# **OPTICAL-ELECTRICAL CHARACTERISTICS**

(TA=25°C)

Darameter	Symbol	Test Condition	Value			Lloit
Parameter			Min	Тур	Max	Unit
Luminous Intensity	lv	I <sub>F</sub> = 20mA	900	1500	1	mcd
Forward Voltage	VF	I <sub>F</sub> = 20mA	1	3.5	4.0	V
Reverse Leakage Current	lR	V <sub>R</sub> = 5V	-	ı	10	μΑ
Viewing Angle	201/2	I <sub>F</sub> = 20mA	1	34	ı	deg
Peak Wavelength	λР	I⊧ = 20mA	ı	518	-	nm
Dominant Wavelength	λD	I⊧ = 20mA	-	525	-	nm

<sup>\*</sup>Tolerance of viewing angle: -10 / +5 deg.



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0.0

450

500

Wavelength (nm)

550

## **OPTICAL CHARACTERISTIC CURVES**

Fig.1 Forward current vs. Forward Voltage Fig.2 Relative Intensity vs. Forward Current 3.0 1000 Forward Current(mA) 2.5 Relative Intensity Normalize @20mA 100 2.0 1.5 10 1.0 1.0 0.5 0.0 0.1 1.0 2.0 3.0 4.0 5.0 1.0 10 100 1000 Forward Voltage(V) Forward Current(mA) Fig.3 Forward Voltage vs. Temperature Fig.4 Relative Intensity vs. Temperature 1.2 3.0 Forward Voltage@20mA Normalize @25°C Relative Intensity@20mA Normalize @25じ 2.5 1.1 2.0 1.0 1.5 1.0 0.9 0.5 0.8 0.0 80 100 -40 -20 0 20 40 60 -40 -20 0 20 40 80 Ambient Temperature(℃) Ambient Temperature(°C) Directivity Radiation Fig.5 Relative Intensity vs. Wavelength 0 -30 30 Relative Intensity@20mA 0.5 -60

50%

25%

60

600



## **SOLDERING CONDITIONS – LAMP TYPE LED**

### SOLDERING PROFILE

1. Iron:

Soldering Iron: 30W max Temperature 350 °C max

Soldering Time: 3 seconds max (one time)
Distance: 2mm min (from solder joint to body)

2. Wave Soldering Profile:

Dip soldering

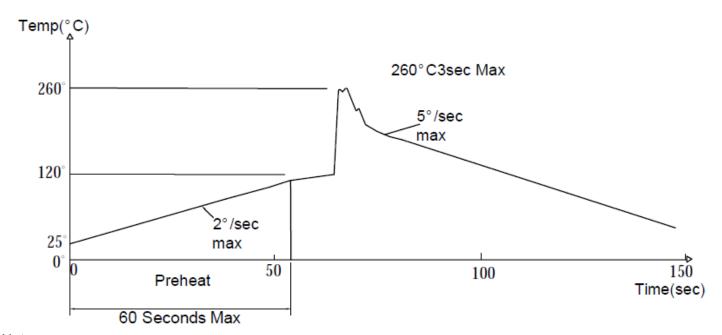
Preheat: 120 °C max

Preheat time: 120 seconds max

2 °C/sec (max)

Ramp-down: -5 °C/sec (max) Solder bath: 260 °C max Dipping time: 3 seconds max

Distance: 2mm min (from solder joint to body)



### Notes:

- 1. Wave solder should not be made more than one time.
- 2. Only select one of the soldering conditions as above.



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