



## DONGGUAN NANJING ELECTRONICS LTD.,

Long life GaN/GaN LED (White Mist Body Emits Red and Green Light)

### Features:

- ◇ Standard T-1 diameter package .
- ◇ Reliable and Rugged.
- ◇ Package: 1000pcs/Bag
- ◇ General Purpose Leads
- ◇ The product itself will remain within RoHS compliant Version.

### Descriptions:

- ◇ The series is specially designed for applications requiring general brightness.
- ◇ The LED lamps are available with Red & Jade Green colors, intensities.

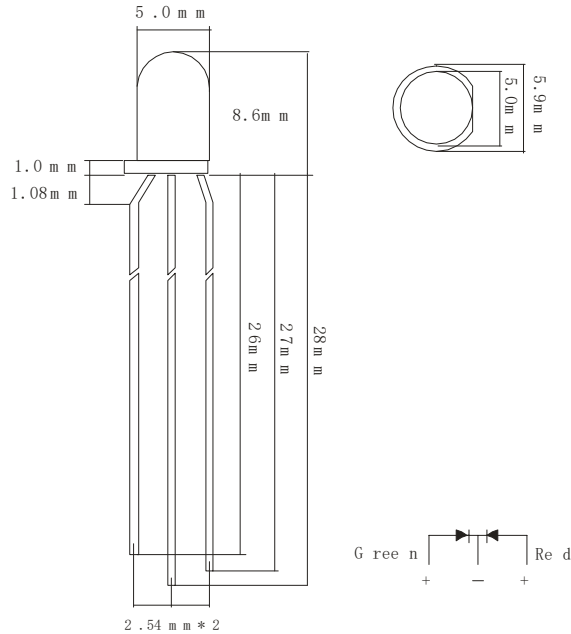
### Applications:

- ◇ PDA .MP3,DVD
- ◇ Communication
- ◇ Move Telephone.
- ◇ Computer.
- ◇ Recharge
- ◇ Gift
- ◇ Other





**Package Dimension:**



Part NO.	CHIP Material	Colloid Color	Colloid Material
NJ-DIP-05WMTRGD	InGaAlP/ GaAsP	Dispersant	Epoxy

**Notes:**

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25$  mm (.010") unless otherwise noted.
3. Protruded resin under flange is 1.00 mm (.039") max.
4. Specifications are subject to change without notice.

**Absolute Maximum Ratings (Ta = 25°C)**

Parameter	Symbol	Absolute maximum Rating	Unit
Max Power Dissipation	$P_M$	80	mW
Max Continuous Forward Current	$I_{FM}$	20	mA
Max Reverse Voltage	$V_{RM}$	5	V
Peak Forward Current	$I_{FP}$	75	mA
Lead Soldering Temperature/Time	$T_{SOL}$	260/≤3S	°C/S
Operating Temperature Range	$T_{OPR}$	-25~+85	°C
Storage Temperature Range	$T_{STR}$	-30~+100	°C

**Typical Electrical & Optical Characteristics(Ta=25°)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	$I_v$	200/30	300/50	500/80	mcd	$I_F=20mA$
Viewing Angle	$2\theta_{1/2}$	/	40	/	deg	$I_F=20mA$
Peak Wave Length	$\lambda_p$	/	630/570	/	nm	$I_F=20mA$
Dominant Wave Length	$\lambda_d$	620/565	/	640/575	nm	$I_F=20mA$
Spectral Width at half height	$\Delta\lambda$	/	30	/	nm	$I_F=20mA$
Forward Voltage	$V_F$	1.8/2.0	2.0/2.2	2.2/2.4	V	$I_F=20mA$
Reverse Current	$I_R$	/	/	≤30	μA	$V_R=5V$

## Notes:

- 1、 Through aging experiment certificate:This LED at normal work under condition:Then  $I_F=20 mA$ ,  $V_F=2.5 V$ , the service life is 3-100,000 hours.
- 2、 Press anti-electrostatic weld an operation(connect a ground of line,wear static electricity wreath and wear a pure cotton finger set).
- 3、 The LED product that our company provide can order to do according to customer's need, the related technique parameter will take place variety, the detailed circumstance please consult with a relevant personnel of my company.

**RELIABILITY**

Test Item	Standard Test Method	Test Conditions	Note	Number of Damaged
Resistance to Soldering Heat (Reflow Soldering)	JEITA ED-4701 300 301	Tsld=260°C, 10sec. (Pre treatment 30°C,70%,168hrs)	2times	0/50
Solderability (Reflow Soldering)	JEITA ED-4701 300 303	Tsld=215±5°C, 3sec. (Leader Soldr)	1time Over 95%	0/50
Thermal Shock	JEITA ED-4701 300 307	-40°C~100°C 5min.5min.	100cycles	0/50
Temperature Cycle	JEITA ED-4701 100 105	-40°C~25°C~100°C~25°C 30min.5min.30min.5min.	100cycles	0/50
Moisture Resistance Cycle	JEITA ED-4701 200 203	25°C~65°C~-10°C 90RH 24hrs/1cycle	10 cycles	0/50
High Temperature Storage	JEITA ED-4701 200 201	Ta=100°C	1000hrs	0/50
Temperature Humidity Storage	JEITA ED-4701 100 103	Ta=60°C, 90%RH	1000hrs	0/50
Low Temperature Storage	JEITA ED-4701 200 202	Ta=-40°C	1000hrs	0/50
Steady State Operating Life		Ta=25°C,IF=20mA	1000hrs	0/50
Steady State Operating Life of High Temperature		Ta=85°C,IF=5mA	1000hrs	0/50
Steady State Operating Life of High Humidity Heat		60°C, 90%RH,IF=15mA	500hrs	0/50
Steady State Operating Life of Low Temperature		Ta=30°C,IF=20mA	1000hrs	0/50
Drop		H=75cm	3 cycles	0/50
Substrate Bending	JEITA ED-4702	3mm,5±1sec.	1 time	0/50
Stick	JEITA ED-4702	5N,10±1sec.	1time	0/50

**■ Application Notes**

- Operating Temperature: -25 to 85 °C
- Storage Temperature: -40 to 100 °C
- Soldering Temperature: 260°C, t<5 sec; Distance From Solder Joint To Case >2mm;Please Avoid Any Stress To Led Lamp During Soldering;
- Humidity Range: 50-70%
- LED is ESD Sensitive.Please observe appropriate precautions during handling and processing.