

# 規 格 書

## SPECIFICATION

品名：

**LED LAMP**

PART NAME

---

料號：

**MT-3NH4G(HTG)**

PART NO :

---



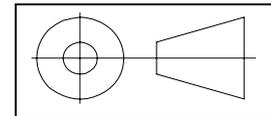
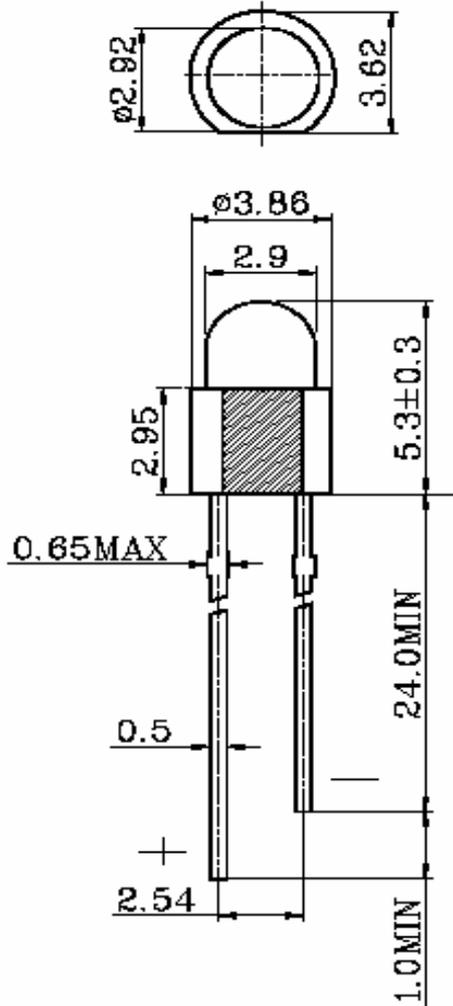
洺辰科技有限公司

MENTOR TECHNOLOGIES CO., LTD.

新北市中和區中正路700號7樓-6

TEL:(02)8227-8556 FAX:(02)8227-8551

■ Package Dimension:



Part Number	Chip		Lens Color
	Material	Emitting Color	
MT-3NH4G(HTG)	GaP	GREEN	Green Diffused

■ Material List:

Item	Part No.
Lead Frame	2004S
Chip	108YGK
Gold Wire	0.9mil
Silver Epoxy	T-3007-20
Epoxy	6671D/H592

■ NOTES:

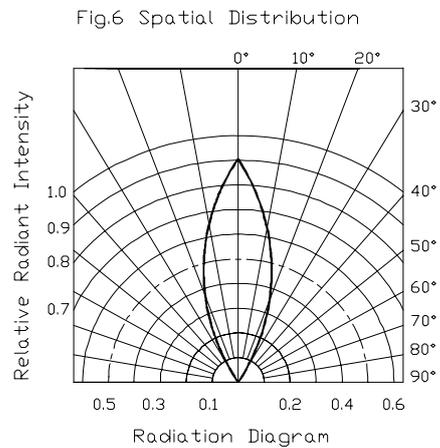
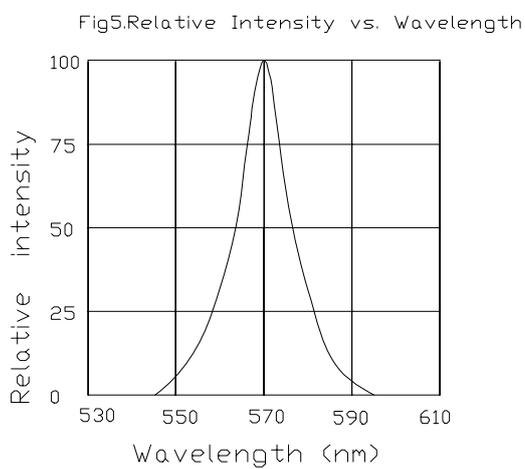
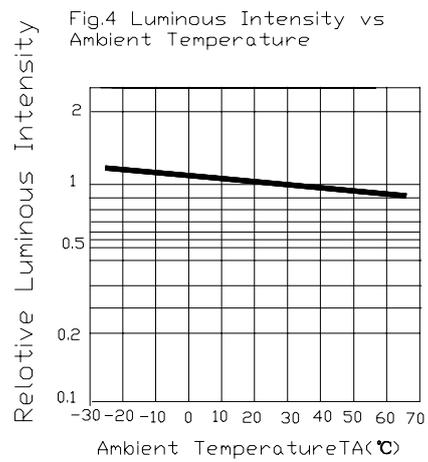
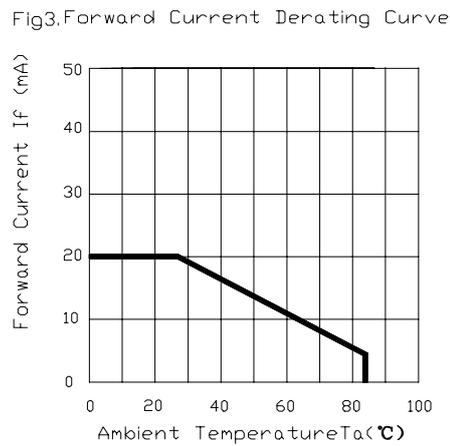
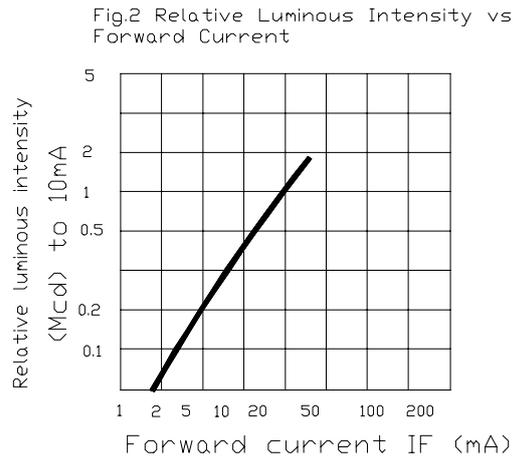
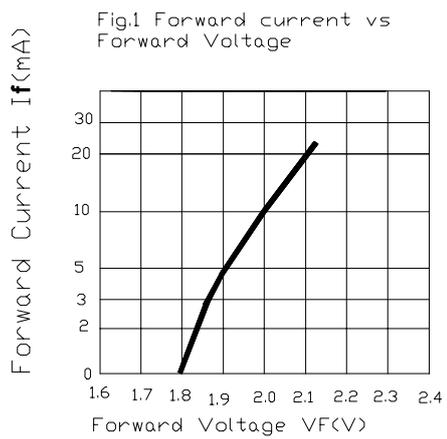
- 1.All dimension are millimeters.
- 2.Tolerance is  $\pm 0.25$ mm unless otherwise noted.

1.SPECIFICATIONS (GREEN)						
(1) Absolute Maximum Rating				(Ta=25°C)		
Item	Symbol	Absolute Maximum Rating		Unit		
Forward Current	If	20		mA		
Peak Forward Current	Ifp	100		mA		
Reverse Voltage	Vr	5		V		
Power Dissipation	Pd	80		mW		
Electrostatic Discharge (HBM)	/	/		V		
Operating Temperature	Top	-40°C~80°C		°C		
Storage Temperature	Tstg	-40°C~100°C		°C		
Lead Soldering Temperature	Tsol	260°C FOR 5 SECONDS				
IFP Conditions: Pulse Width ≤ 0.1msec.and duty ≤ 1/10						
(2) Initial Electrical/Optical Characteristics				(Ta=25°C)		
Item	Symbol	Condition	Min	Typ	Max	Unit
Forward Voltage	Vf	If=20(mA)	1.9	2.1	2.8	V
Reverse Current	Ir	Vr=5(V)	/	/	10	μ A
Viewing Angle	2 <sup>θ</sup> 1/2	If=20(mA)	/	30	/	deg
Luminous Intensity	Iv	If=20(mA)	30	50	/	mcd
Peak Wavelength	λ p	If=20(mA)	560	565	570	nm
Dominant Wavelength	λ d	If=20(mA)	565	570	575	nm
Recommend Forward Current	IF(Rec)	/	/	10~20	/	mA
2.TYPICAL INITIAL OPICAL/ELECTRICAL CHARACTERISTICS						
Please refer to Figures : in Page 3						
3.OUTLINE DIMENSION AND MATERIALS						
Please refer to drawing: in Page 2						
Material as follows: Resin :Epoxy						
Lead frame:Ag plating Copper ally						

### 3. Typical Electro-Optical Characteristic Curves:

#### GREEN

(25°C) Ambient Temperature Unless Otherwise Noted



#### 4. Reliability Performance

##### (1) Reliability test item and condition

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP:260±5°C	5 SEC	76pcs	0/1
2	Temperature Cycle	H:+85°C 30min δ 5min L:-40°C 30min	50CYCLE	76pcs	0/1
3	Thermal Shock	H:+100°C 5min δ 10sec L:-10°C 5min	50CYCLE	76pcs	0/1
4	High Temperature Storage	TEMP:100°C	1000HRS	76pcs	0/1
5	Low Temperature Storage	TEMP:-40°C	1000HRS	76pcs	0/1
6	DC Operating Life	If=20mA	1000HRS	76pcs	0/1
7	High Temperature High Humidity	85°C/85%RH	1000HRS	76pcs	0/1

##### (2) CRITERIA FOR JUDGING THE DAMAGE

		Test Conditions	Criteria for judgement	
			Min	Max
Voltage(Forward)	VF	IF=20mA	-	U.S.L*)×1.1
Current(Reverse)	IR	VR=5V	-	U.S.L*)×2.0
Luminous Intensity	IV	IF=20mA	L.S.L**)*0.7	-

\*)U.S.L.: Upper Standard Level.

\*\*)L.S.L.:Lower Standard Level.