

# 規 格 書

## SPECIFICATION

品名：

**LED LAMP**

PART NAME

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料號：

**MT-3NH4Y(HTG)**

PART NO :

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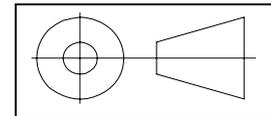
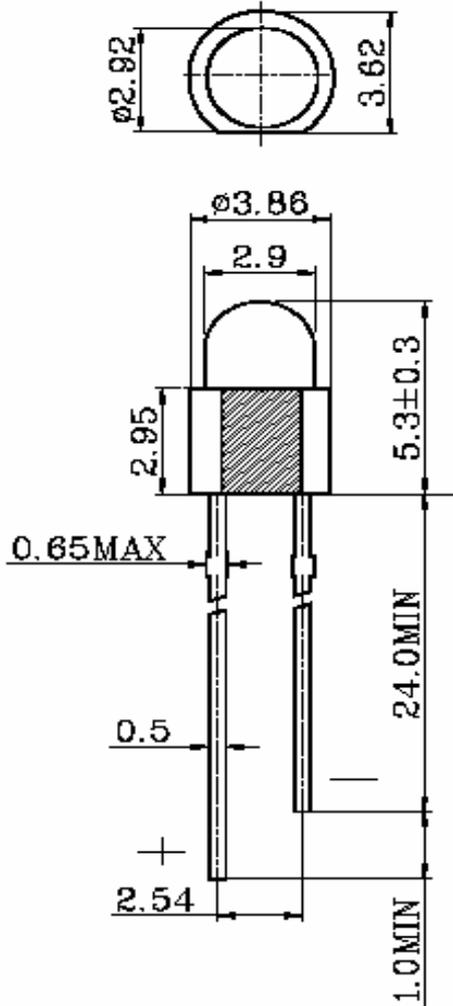
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■ Package Dimension:



Part Number	Chip		Lens Color
	Material	Emitting Color	
MT-3NH4Y(HTG)	GaAsP	YELLOW	Yellow Diffused

■ Material List:

Item	Part No.
Lead Frame	2004S
Chip	108HY
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 (YELLOW)						
(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	70			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)	1.8	2.1	2.8	V
Reverse Current	Ir	Vr=5(V)	/	/	10	μA
Viewing Angle	2θ	If=20(mA)	/	30	/	deg
Luminous Intensity	Iv	If=20(mA)	20	30	/	mcd
Peak Wavelength	λp	If=20(mA)	580	585	590	nm
Dominant Wavelength	λd	If=20(mA)	585	590	595	nm
Recommend Forward Current	IF(Rec)	/	/	20	/	mA
2.TYPICAL INITIAL OPICAL/ELECTRICAL CHARACTERISTICS						
Please refer to Figures : in Page 3						
3.OUTLINE DIMENSIONS AND MATERIALS						
Please refer to drawing: in Page 2						
Material as follows: Resin :Epoxy						
Lead frame:Ag plating Copper ally						

■ Typical Electro-Optical Characteristic Curves:

YELLOW

(25°C) Ambient Temperature Unless Otherwise Noted

Fig1. Forward Current vs Forward Voltage

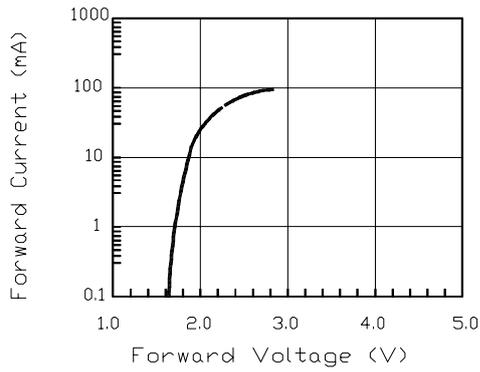


Fig.2 Relative Luminous Intensity Vs Forward current

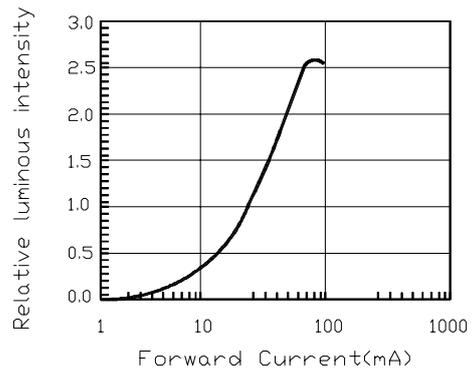


Fig3. Forward Current Derating Curve

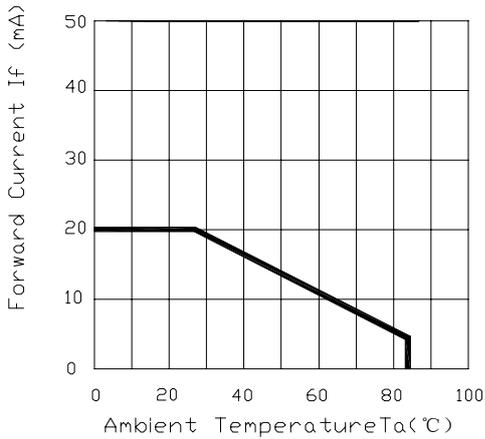


Fig4. Relative Luminous Intensity vs Ambient Temperature

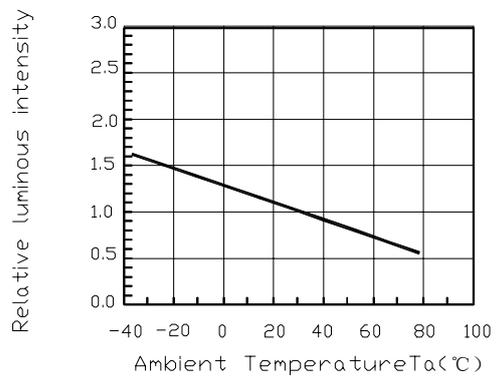


Fig5. Relative Intensity vs Wavelength

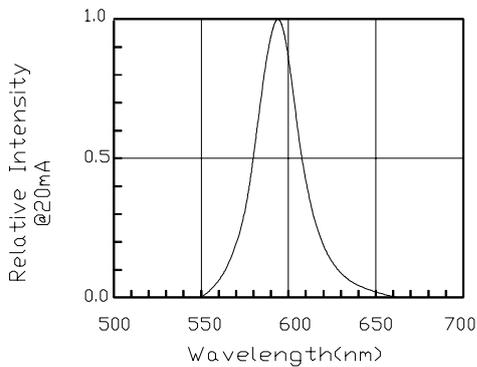
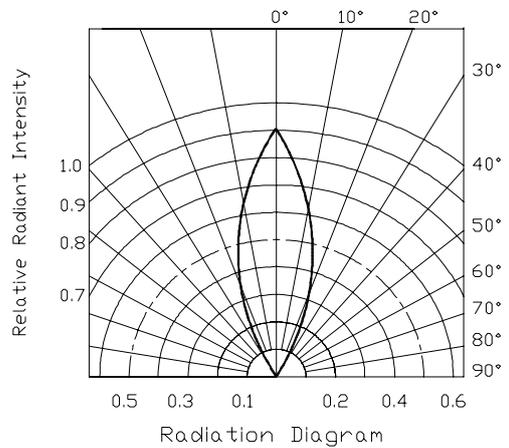


Fig.6 Spatial Distribution



4.Rreliability 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:-40C	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.					