

# 規 格 書

## SPECIFICATION

品名：

**LED LAMP**

PART NAME

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料號：

**MT-3N4Y(HTG)**

PART NO :

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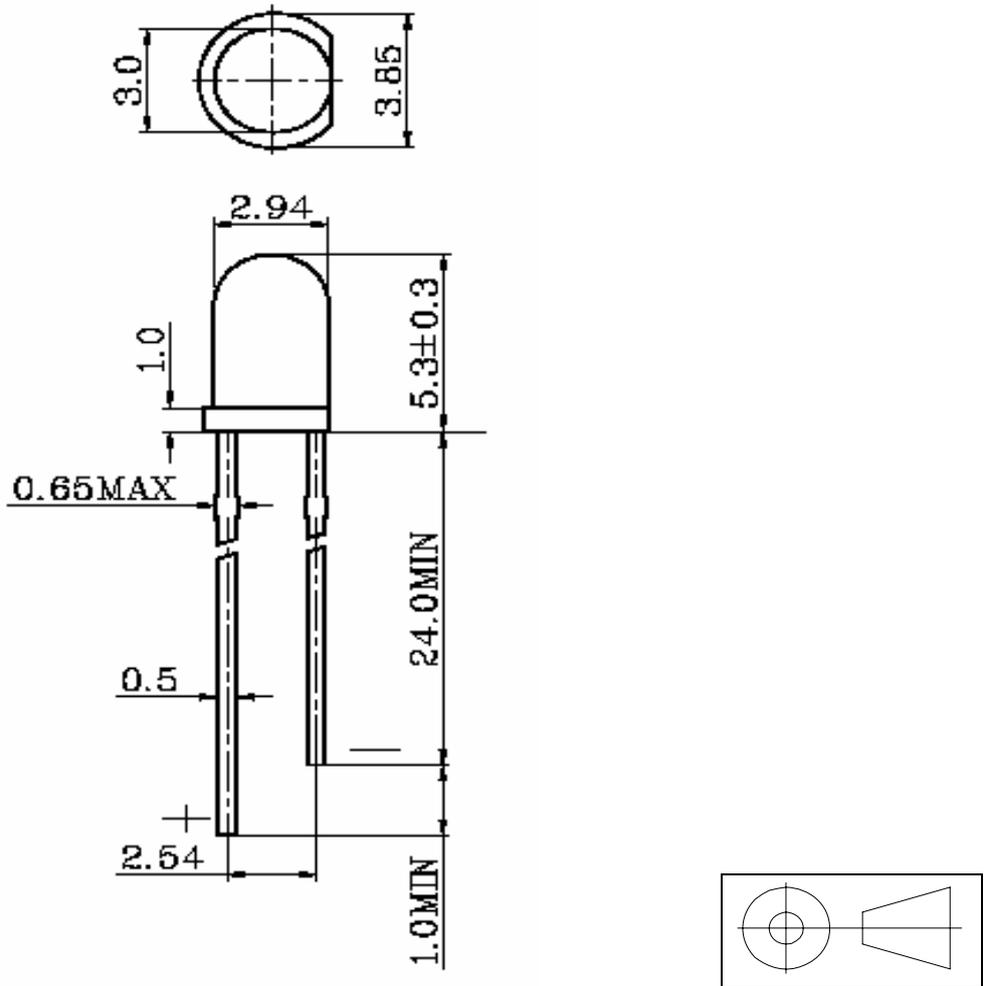
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■ Package Dimension:



Part Number	Chip		Lens Color
O V/5P 6Y*J VI + "	Material	Emitting Color	
	GaAsP	YELLOW	Yellow Diffused

■ Material List:

Item	Part No.
Lead Frame	2004S
Chip	108HY
Gold Wire	0.9mil
Silver Epoxy	T3007-20
Epoxy	6671D/H592

■ NOTES:

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

1.SPECIFICATIONS GNNQY +						
(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	μ A
Viewing Angle	2 θ 1/2	If=20(mA)	/	30	/	deg
Luminous Intensity	Iv	If=20(mA)	16	30	/	mcd
Peak Wavelength	λ p	If=20(mA)	580	585	590	nm
Dominant Wavelength	λ d	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						

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

Fig1.Forward Current vs.Forward Voltage

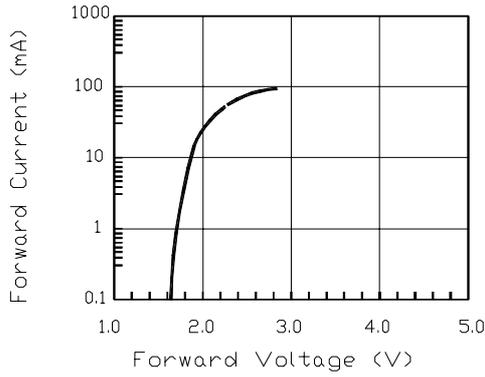


Fig2.Relative Intensity vs. Forward Current

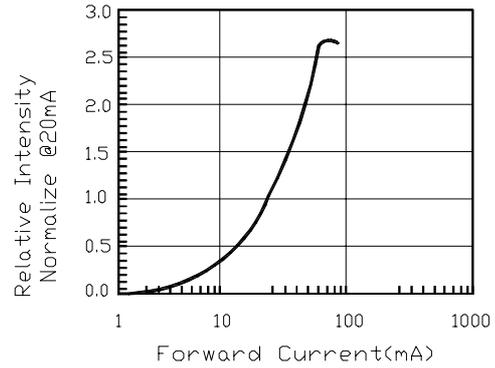


Fig3.Forward Voltage vs. Temperature

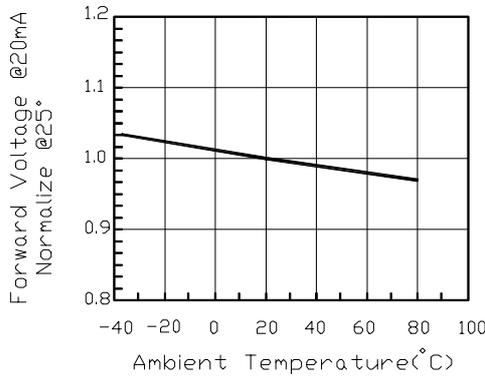


Fig4.Relative Intensity vs. Temperature

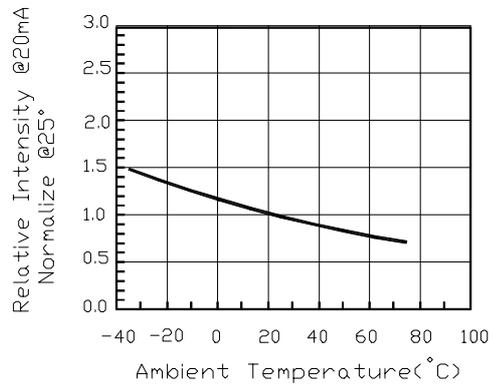
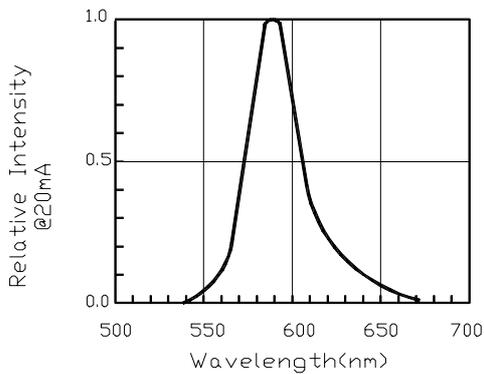
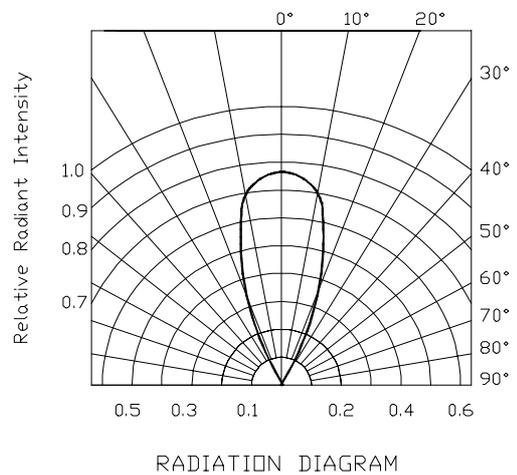


Fig5.Relative Intensity vs. Wavelength



Radiation Diagram Ta=25°C



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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℃	5 SEC	76pcs	0/1
2	Temperature Cycle	H:+85℃ 30min δ 5min L:-40℃ 30min	50CYCLE	76pcs	0/1
3	Thermal Shock	H:+100℃ 5min δ 10sec L:-10℃ 5min	50CYCLE	76pcs	0/1
4	High Temperature Storage	TEMP:100℃	1000HRS	76pcs	0/1
5	Low Temperature Storage	TEMP:-40℃	1000HRS	76pcs	0/1
6	DC Operating Life	If=20mA	1000HRS	76pcs	0/1
7	High Temperature High Humidity	85℃/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.					