ATTENTION

OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC DISCHARGE SENSITIVE DEVICES

HL-798H256WC-MD

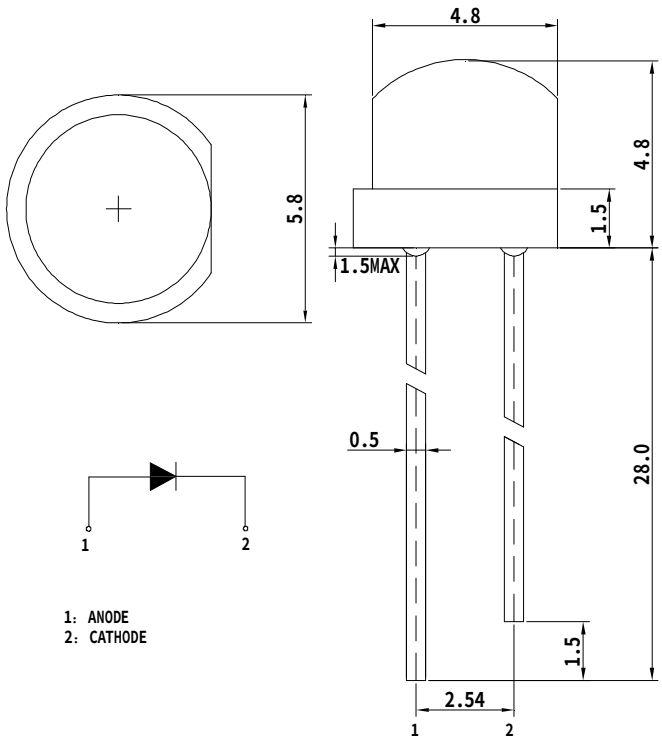
Features

- Φ4.8 HAT STRAW LAMP LED
- LOW POWER CONSUMPTION.
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT、LIGHTING AND INDICATOR.
- PACKAGE:1000PCS / BAG.

Package Dimensions

Description

This devices are made with TS InGaN.



Tolerance Grade	Dimension Tolerance (UNIT:mm)			
	0.5~3	3~6	6~30	30~120
	±0.1	±0.2	±0.3	±0.5

Chip		Lens Color
Material	Emitting Color	Water Clear
InGaN	White	

■Absolute Maximum Rating

Item	Symbol	Value	Unit
Forward Current	I_F	20	mA
Peak Forward Current*	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	80	mW
Electrostatic discharge	E_{SD}	1000	V
Operation Temperature	T_{opr}	-30∽+80	℃
Storage Temperature	T_{stg}	-30∽+80	℃
Lead Soldering Temperature*	T_{sol}	Max. 260℃ for 5sec Max.	

*I_{FP} Conditions：Pulse Width≤10msec

*T_{sol} Conditions：3mm from the base of the epoxy bulb

■ Typical Optical/ Electrical Characteristics Ta=25℃

Item	Symbol	Condition	Rank	Min.	Typ.	Max.	Unit
Luminous Intensity	I_V	I_F=20mA	S	1015		1320	mcd
			T	1320		1715	mcd
			U	1715		2230	mcd
Forward Voltage	V_F			2.8	3.2	3.6	V
Viewing Angle	2θ 1/2			--	120	--	deg
Chromaticity coordinates	X			--	0.31	--	X:±0.015
	Y			--	0.33	--	Y:±0.025
Recommend Forward Current	I_F(rec)	--		--	--	20	mA
Reverse Current	I_R	Vr=5V		--	--	10	uA

Notes:

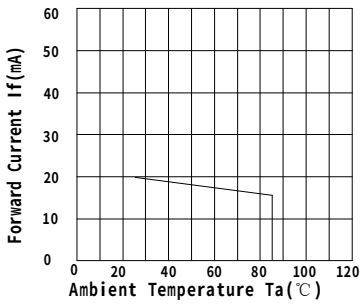
Tolerance ：VF±0.1V， λd±2 nm，IV(ΦV) ±15%，2θ 1/2±15%

The above color coordinates measurement allowance tolerance ±0.003

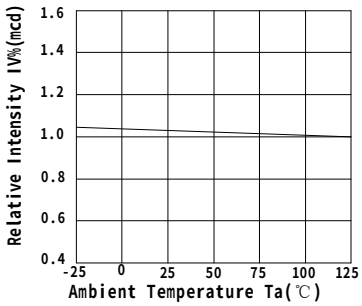
■ Reliability Performance
Test Items And Result

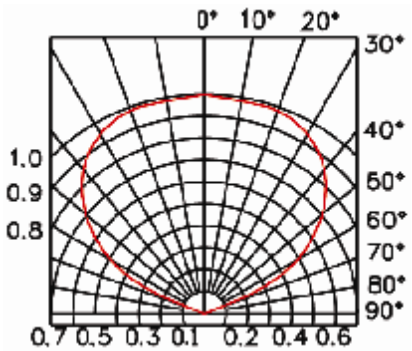
Test Classification	Test Item	Test Conditions	Test Duration	Sample Size	AC/RE
Life Test	Room Temperature DC Operating Life Test	Ta=25℃±5℃, I_F=20mA	1000 hrs	22 pcs	0/1
Environment Test	Thermal Shock Test	100℃±5℃ 5min ↑↓ -40℃±5℃ 5min.	100 cycles	22 pcs	0/1
	Temperature Cycle Test	100℃±5℃ 30min ↑↓5min -40℃±5℃ 30min.	100 cycles	22 pcs	0/1
	High Temperature & High Humidity Test	85℃±5℃/85% RH I_F=5mA	1000 hrs	22 pcs	0/1
	High Temperature Storage	Ta=100℃±5℃	1000 hrs	22 pcs	0/1
	Low Temperature Storage	Ta=-40℃±5℃	1000 hrs	22 pcs	0/1
Mechanical Test	Resistance to Soldering Heat	Temp=260℃max T=5sec max	1times	22 pcs	0/1
	Lead Integrity	Load 2.5N(0.25kgf) 0° ~ 90° ~0°	3times	22 pcs	0/1

Forward Current vs. Ambient Temperature

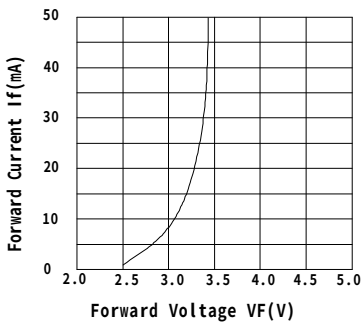


Relative Intensity vs. Ambient Temperature

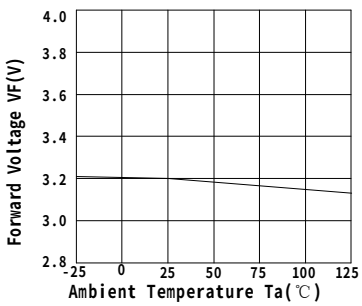


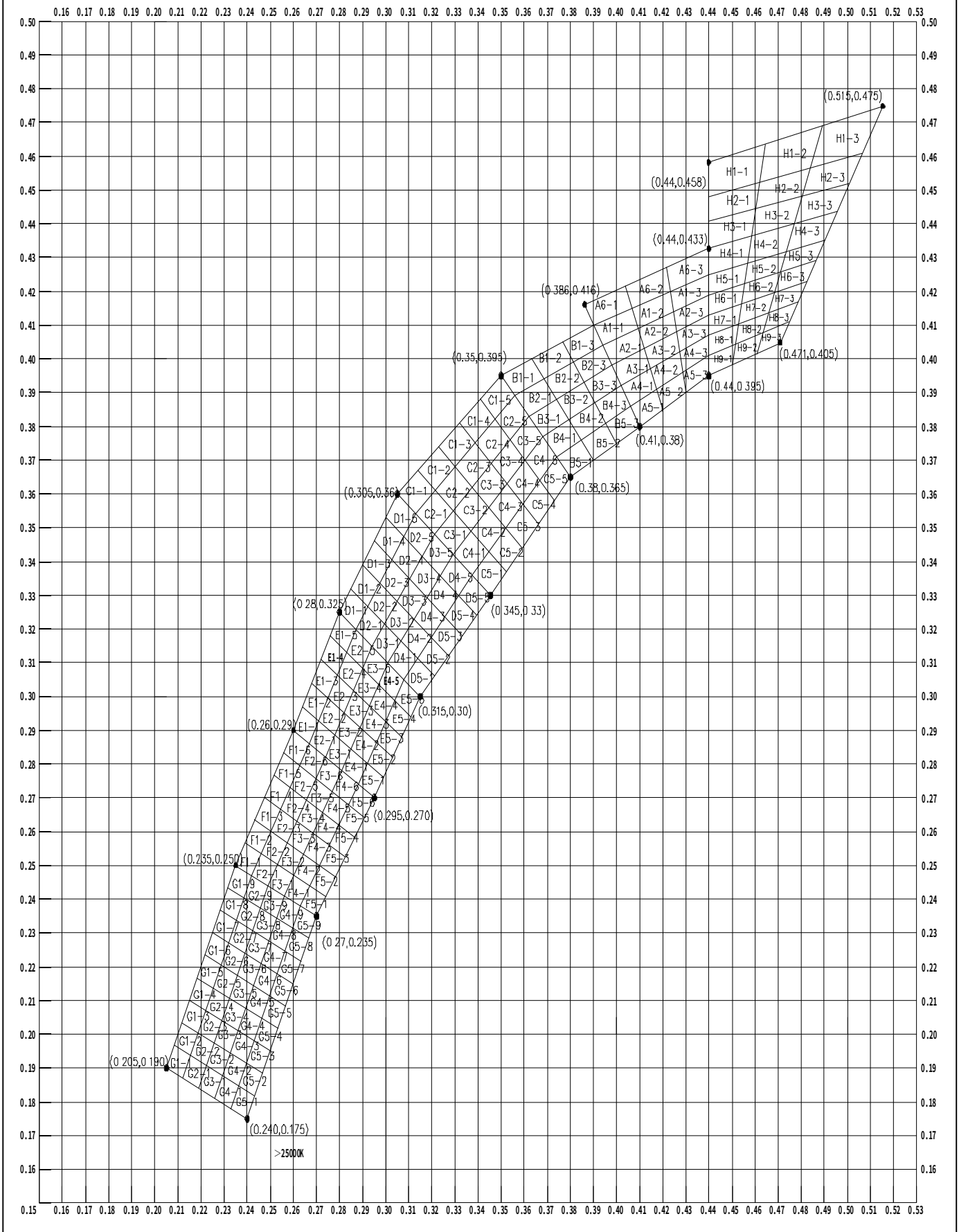


Forward Current vs.Forward Voltage



Forward Voltage vs. Ambient Temperature





Soldering

1. Manual Of Soldering
   The temperature of the iron tip should not be higher than 300℃and Soldering within 3 seconds per solder-land is to be observed.
2. DIP soldering (Wave Soldering):
   Preheating:120℃~150℃,within 120~180 sec.
   Operation heating:245℃±5℃ within 5 sec.260℃(Max)
   Gradual Cooling (Avoid quenching).