

VISIBLE LIGHT PRODUCTS SPECIFICATION

Surface Mount LEDs



Drawn by	Checked by	Approved by



DATE:2007/11/19

REV:E



HUEY JANN ELECTRONICS INDUSTRY CO., LTD.

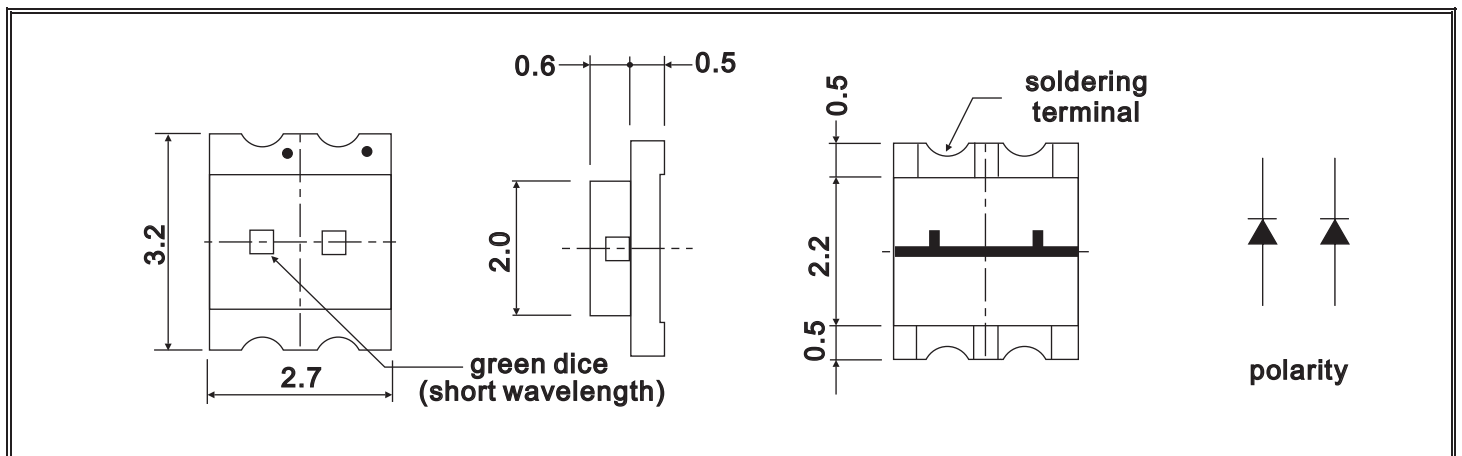
No.27 Line 466 Sec.2,Cannng-nan Rd. Wu-chi Town Taichung Shien, Taiwan, R.O.C.

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DEVICES

Part Number	Lens		Source	
	Color	Diffusion	Dice Source	Color
HCL-155Y/YG	Water clear	Non-Diffused	GaP/GaP & GaP/GaP	Yellow & Yellow Green

PACKAGE DIMENSIONS

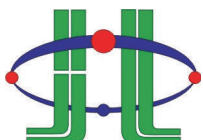
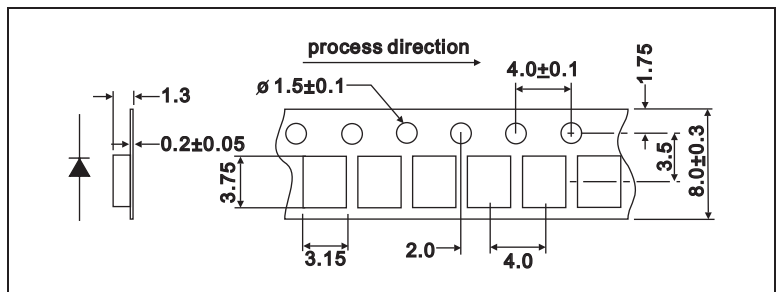
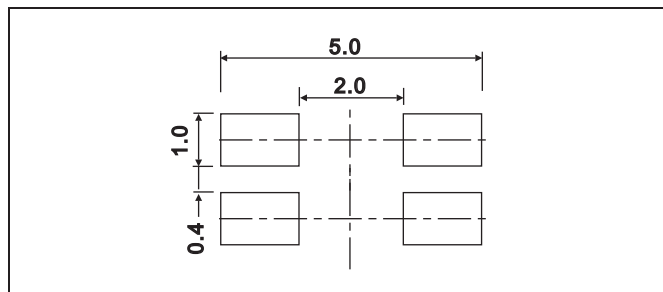


NOTE:

- 1.All dimensions are in millimeter.
- 2.specifications are subject to change without notice.
- 3.Tolerance is 0.3mm unless otherwise noted.

RECOMMENDED SOLDERING PATTERN

TAPE SPECIFICATIONS



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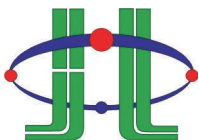
ABSOLUTE MAXIMUM RATINGS

TA=25°C

PARAMETER	SYMBOL	MAX. RATING		UNIT
		Yellow	Yellow Green	
Power Dissipation	Pd	90	84	mW
Continuous Forward Current	IF	25	25	mA
Peak Forward Current *1	IFM	50	50	mA
Reverse Voltage	VR	5	5	V
LED Junction Temperature	Tj	100		°C
Operating Temperature	Topr	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		°C
Dip Soldering Temperature (3mm from case Bottom 260 °C for 5 seconds)				

*1.Duty Ratio=0.1%,Pulse Width=10us.

*2.Iron soldering in 350°C within 5 seconds will not cause damage to the dice. But be aware of the high temperature will not only make the epoxy soften but also cause the lead moving and the gold wire broken and even open. So before returning to the normal temperature PLEASE AVOID any serious pressure on the top of epoxy and lead.



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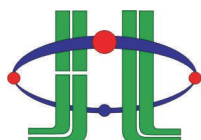
ELECTRIC-OPTICAL CHARACTERISTICS

TA=25°C

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
View Angle of Half Power	2θ1/2	Yellow		120		deg
		Yellow Green				
Forward Voltage	VF	Yellow		2.05	2.60	V
		Yellow Green		2.15	2.80	
Luminous Intensity *2	IV	IF=20mA	Yellow	3.0	6.5	mcd
			Yellow Green	6.0	9.5	
Peak Emission Wavelength	λp	IF=20mA	Yellow		589	nm
			Yellow Green		570	
Dominate Wave Length *3	λd(HUE)	IF=20mA	Yellow		585	nm
			Yellow Green		567	

*2.Tolerance:±15% HUEY-JANN measuring equipment : EXELTRON 2001. 2.S370 made by U.D.T.

*3.The dominate wavelength , λ d , is derived from the CIE Chromaticity Diagram and represents the color of the device.



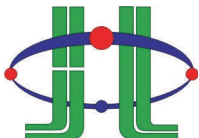
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RELIABILITY TEST

Classification	Test Item	Reference Standard	Test Conditions	Result
Endurance Test	Operation Life	MIL-STD-750:1026 MIL-STD-883:1005 JIS-C-7021 :B-1	Connect with a power if=20mA Ta=Under room temperature Test Time=1,000hrs	0/22
	High Temperature High Humidity Storage	MIL-STD-202:103B JIS-C-7021 :B-11	Ta=+65°C±5°C RH=90% ~ 95% Test Time=240hrs	0/22
	High Temperature Storage	MIL-STD-883:1008 JIS-C-7021 :B-10	High Ta=+100°C±5°C Test Time=1,000hrs	0/22
	Low Temperature Storage	JIS-C-7021 :B-12	Low Ta=-40°C±5°C Test Time=1,000hrs	0/22
	Environmental Test	Temperature Cycling	MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1010 JIS-C-7021 :A-4	-35°C ~ +25°C ~ +85°C ~ +25°C 60min 20min 60min 20min Test Time=5cycle
Thermal Shock		MIL-STD-202:107D MIL-STD-750:1051 MIL-STD-883:1010	-40°C±5°C ~ +85°C±5°C 20min 20min Test Time=10cycle	0/22

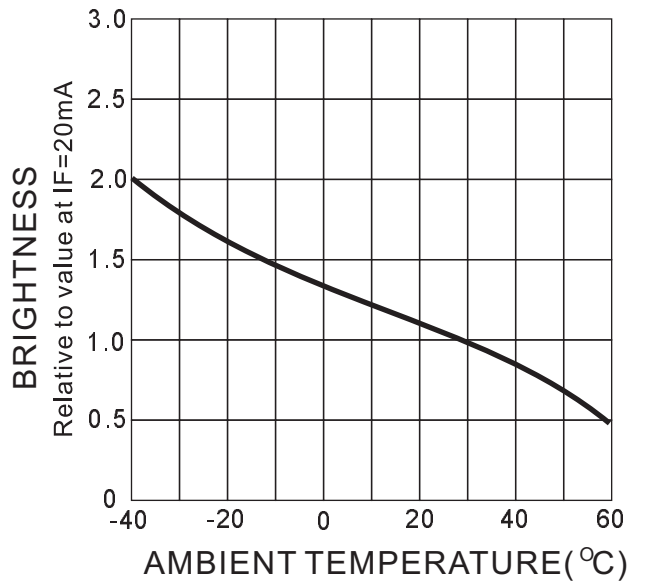
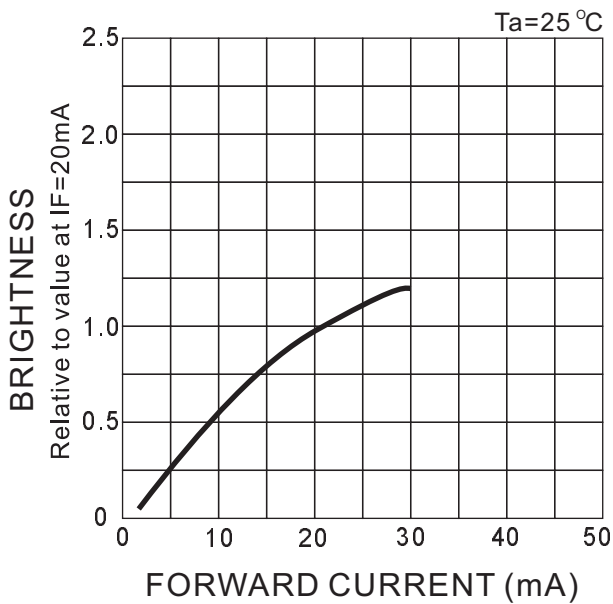
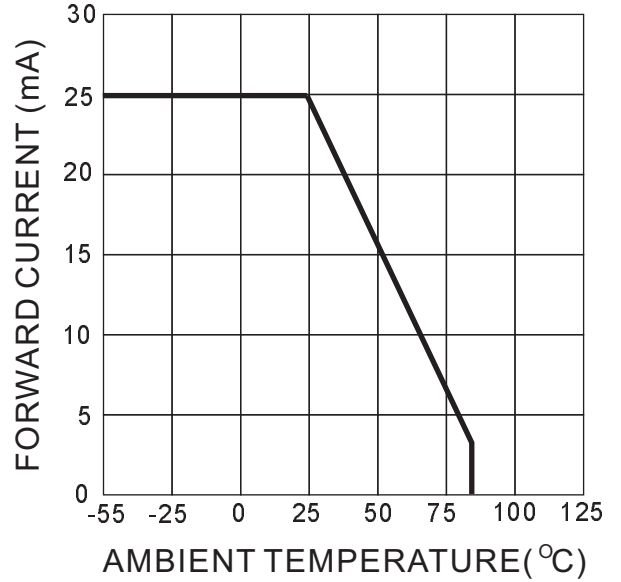
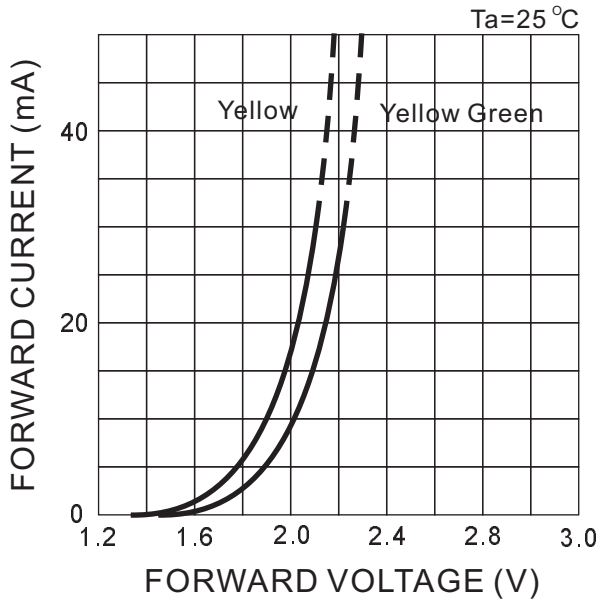


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TYPICAL ELECTRICAL OPTICAL CHARACTERISTICS CURVES

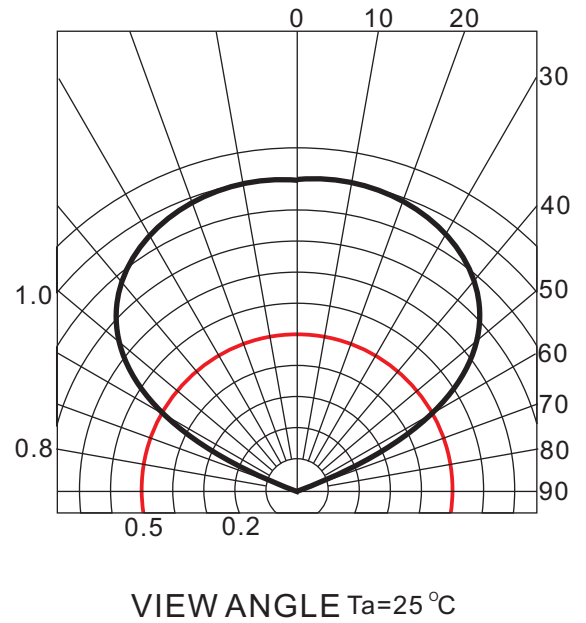
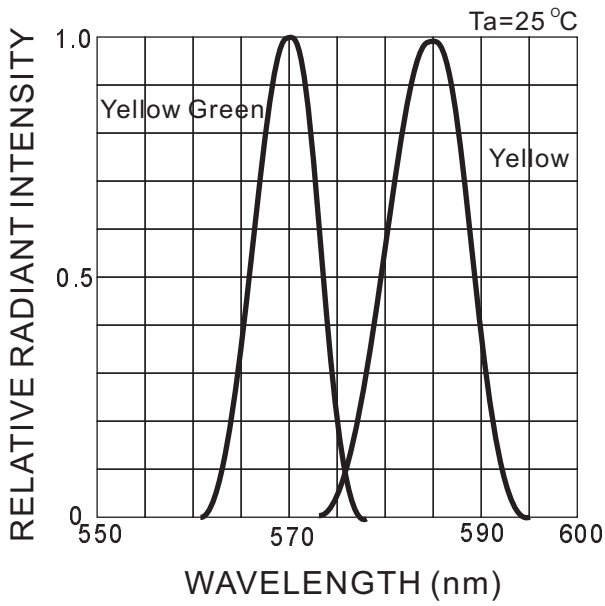


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