

XH 深圳市兴和伟业电子

SHENZHEN XING HE ELECTRON WORKS

承 认 书

SPECIFICATION

兴和伟业 XING HE ELECTRON	客 户 资 料 CUSTOMER'S INFORMATION
产品名称: LED 数码屏 PRODUCTION NAME:	客户: CUSTOMER:
产品型号: XH-5215 PRODUCTION TYPE:	机型: MODEL NO:
规格摘要:红色、灌胶封装、共阴、环保 TYPE:	料号: PART NO:

日期:2019-06-21 DATE:	承办人: 王晓 ISSUEDER:
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客户确认 APPROVED BY

签名:
SIGN:

日期:
DATE:

结论 RESULT:

确认后请回传 PLEASE RETURN BY ONE COPY

深圳市兴和伟业电子有限公司

SHENZHEN XING HE ELECTRON WORKS

可向您提供各种规格型号, 数码显示屏(数码管)、点阵、背光源

设计 (DESIGN): 张国存

检查 (CHECKED):

批准 (APPROVED):

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并向您提供全面的优质服务

产品说明书

1. 型号 (PART NO.) : XH-5215

2. 说明 (Description):

发光颜色 (Emitted Color): **橙色 (ORANGE)**

外观颜色 (Lens Color): 黑、白两色 (Black & White)

外形尺寸 (Max Size): 如结构尺寸图所示 (As shown in the structural dimension drawing)

极限参数 (Absolute Maximum Ratings) ———> 建议使用驱动检测

橙色 (Orange) (Drive detection is recommended (Orange))

参数 (Parameter)	单位 (Symbol)	极限值 (Maximum Rating)	单位 (Unit)
功耗 (Power Dissipation)	Pd	42	mW
脉冲电流 (Peak Forward Current)	Ifp	100	mA
直流电流 (Continuous Forward Current)	Ifm	20	mA
反向电压 (Reverse Voltage)	VR	5	V
工作温度 (Operating Temperature Range)	Topr	-40 → +80	℃
储藏温度 (Storage Temperature Range)	Tstg	-40→ +85	℃
静电电压 (Static Voltage)	Var	1000	V

*焊接温度 (Lead Soldering Temperature): 260℃ for 3 seconds

*当工作温度高于 25℃时, Ifm,Ifp 和 Id 必须降低; 电流降低率是-0.36mA/℃ (直流驱动), 或-0.86mA/℃ (脉冲驱动) 功耗降低率是-0.75mW/℃。产品的工作电流不能大于对应工作温度条件 Ifm 或 Ifp 的 60%。

For operation above 25℃, The Ifm Ifp & Pd must be derated, the Curent derating is -0.36mA/℃ for DC drive and -0.86mA/℃ for Pulse drive, the power dissipation is -0.75mW/℃. The product working current must not more than the 60% of the Ifm or Ifp according to the working temperature.

光电特性 (Optical-Electrical Characteristic) ———> 建议使用驱动检测

红色 (Red)

参数 (Parameter)	测试条件 (Test CONDITING)	单位 (Symbol)	Min	Type	Max	单位 (Unit)
发光强度 (Luminous Intensity)	If=10mA	Iv	30		50	Mcd
正向电压 (Forward Voltage)	If=10mA	VF	1.8	-	2.2	V
反向电流 (REVERSE Current)	VR = 5V	IR	-	-	50	uA
波长 (Peak Wavelength)	If=10mA	λ p	602		605	nm

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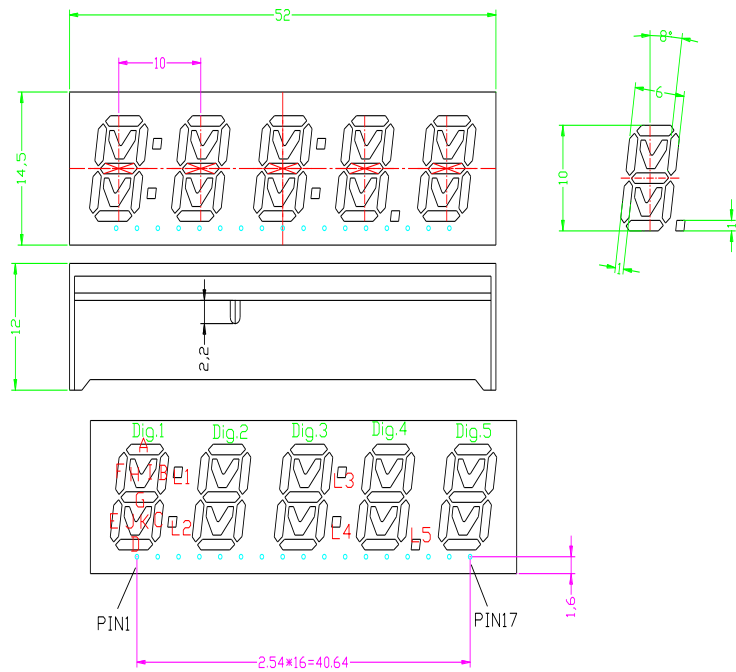
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带宽 (Spectral Bandwidth)	$I_F=10\text{mA}$	$\Delta\lambda$	-	5	-	nm
查看角度 (View Angle)	$I_F=10\text{mA}$	$2\theta_{1/2}$	-	60	-	Deg.

3. 结构尺寸 (Mechanical Outline) :

(未注尺寸公差 Unspecified Tolerances is: ± 0.2)

发光颜色: 全橙色 (Luminous color: full orange)

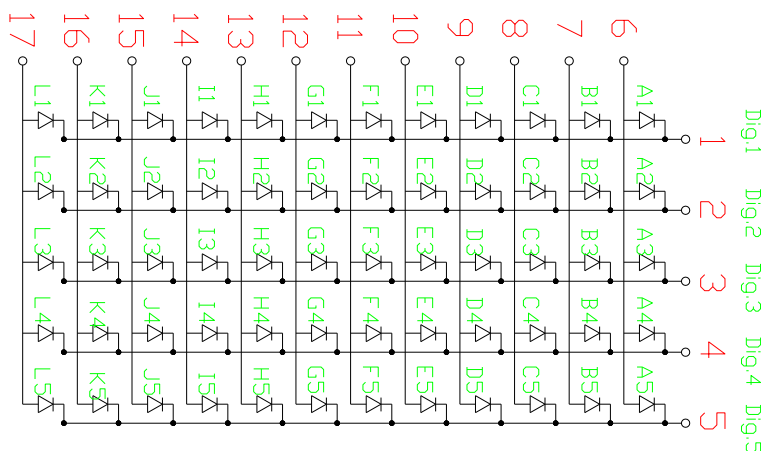


4. 电路图 (Circuit Diagram) :

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批准 (APPROVED):



5. 保存和焊接条件 (Storage & Soldering Condions) :

- Store with care. Storing the units in bad condition will cause the reflector sheet and decrease it's adhesive power. Storage the products under the condition :temperature ($25^{\circ}\text{C} \pm 10^{\circ}\text{C}$) and humidity ($65^{\circ}\text{C} \text{ CRH} \pm 20^{\circ}\text{C} \text{ CRH}$) our recommendation.
- The Soldering Temperature is $260 \pm 5^{\circ}\text{C}$ and Soldering Time should be less than 3 sec, and soldering iron power should be less than 30W.
- The soldering point should be farther than 1.6mm
- 注意保存, 保存条件不好时, 会降低膜片与反射壳 (导光板) 的粘附力。
推荐保存条件为: 温度 $25^{\circ}\text{C} \pm 10^{\circ}\text{C}$
湿度 $65^{\circ}\text{C} \text{ CRH} \pm 20^{\circ}\text{C} \text{ CRH}$
- 焊接温度 $260^{\circ}\text{C} \pm 5^{\circ}\text{C}$, 焊接时间小于 3 秒, 烙铁功率小于 30W.
- 焊接点应离产品实体大于 1.6mm.

6. 外观判定条件 (Surface check condition)

外观目测条件: 40W 日光灯作光源与产品相距约 1 米 (环境亮度) 200 Lux) 检测者与产品视距为 25-30cm.

Visual check condition: Use a 40W lamp as light (Ambient luminance about 200Lux), the distance between lamp and product about one meter, between checker and product about 25-30cm for check.

标准: 黑. 白点大小为 $0.1 \leq \phi < 0.15$ 最多允许有 3 个, 且间距必须大于 1cm,
Standard: the size of black dot and white dot is $0.1 \leq \phi < 0.15$ and the quantity of the dot for three are accepted, and the distance must be more than 1cm,

黑. 白点大小为 $0.15 \leq \phi < 0.20$ 最多允许有 2 个, 且间距必须大于 1cm,

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the size of black dot and white dot is $0.15 \leq \phi < 0.20$ and the quantity of the dot for two are accepted, and the distance must be more than 1cm,

黑.白点大小为 $0.20 \leq \phi < 0.25$ 最多允许有一个, 划伤 $\phi \leq 0.1\text{mm}$, 长度 $< 1\text{mm}$, 最多允许 1 条; 面花, 膜纸花, 当产品不反光, 且发光效果不见该缺陷时, 则可接受。

Below the condition are accepted:

The size of black dot and white dot is $0.20 \leq \phi < 0.25$ and the quantity of the dot for one is accepted.

The scar is $\phi \leq 0.1\text{mm}$ and the length less than 1mm, the quantity of this scar for one is accepted.

Surface scar, if that cannot found when the product was luminous so that is accepted.

7. 发光效果检验条件: 在环境亮度 $< 9\text{Lux}$ 的条件下目测, 视距应在 25-30cm 。

Luminescence check condition: Visual check under ambient luminance is less than 9Lux and distance at 25-30cm

标准: 黑.白点大小为 $0.1 \leq \phi < 0.15$ 最多允许有 3 个, 且间距必须大于 1cm,
Standard: the size of black dot and white dot is $0.1 \leq \phi < 0.15$ and the quantity of the dot for three are accepted, and the distance must be more than 1cm,

黑.白点大小为 $0.15 \leq \phi < 0.20$ 最多允许有 2 个, 且间距必须大于 1cm,
the size of black dot and white dot is $0.15 \leq \phi < 0.20$ and the quantity of the dot for two are accepted, and the distance must be more than 1cm,

黑.白点大小为 $0.20 \leq \phi < 0.25$ 最多允许有一个, 划伤 $\phi \leq 0.1\text{mm}$, 长度 $< 1\text{mm}$, 最多允许 1 条; 面花, 膜纸花, 当产品不反光, 且发光效果不见该缺陷时, 则可接受。

Below the condition are accepted:

The size of black dot and white dot is $0.20 \leq \phi < 0.25$ and the quantity of the dot for one is accepted.

The scar is $\phi \leq 0.1\text{mm}$ and the length less than 1mm, the quantity of this scar for one is accepted.

Surface scar, if that cannot found when the product was luminous so that is accepted.

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尺寸检测条件：依据图纸，使用计量卡尺，注意检测人为误差。

Size check condition: Use the measure ruler based on the product drawing for check, and need note that the tolerance make by operator.

电性能检测条件：依据图纸，工艺，在额定工作电压或恒定的电流下，执行《QA 成品检验方法》功能的相关内容，带针脚产品须作 5PCS 上锡实验。

Electrical check condition: use the rated voltage or constant current for the product based on the product drawing and IE document and performance the 《QA 成品检验方法》 for check,

8. 《QA 成品检验方法》:

	判定范围 ITEM	MAJOR	MINOR
成品 检验 判定 标准 Final product check standard	外观 检 验 Surface check condition	A. 膜纸：不齐、贴歪 $\geq 0.25\text{mm}$ 。 Membrane: not uniform or deflective that must be less than 0.25mm , B. 引脚氧化或掉铜皮、或不按要求上锡披峰。 The pins are oxygenation or lose copper or cannot meet the SPEC of soldering reliability. C. 条形歪斜、松脱、脚短/长、膜纸变形、翘起。 Bar deflective, loss, pins short/longer, membrane distortion, tilt. D. 产品弯曲、变形、划伤、毛刺。 Product inflect, scar, burr,	A. 膜纸不齐导致露出或超宽 0.25mm 内进 0.25mm 以下， 0.15mm 以上；脏、皱等。 Make for bare or exceed width between 0.25mm and 0.15mm caused by membrane were not uniform; dirty, ruck etc. B. 产品反面非有效发光区域有手印、水渍印。 Has the fingerprint or watermark on the background of the product there are not the area of luminous.
	尺 寸 检 验 Size check condition	A. 长、宽、厚等重要尺寸超差 $\geq 0.2\text{mm}$ ，其它尺寸超差在 0.25mm 以上。 The tolerance of Length, width and thick must $\geq 0.2\text{mm}$ and other tolerance more than 0.25mm . B. 膜纸过大在 0.25mm 以上。 Membrane over than 0.25mm	A. 虚边、毛刺等引起的尺寸超差在 0.2mm 以下， 0.1mm 以上。 The size tolerance of product that caused by burr edge shall between $0.1-0.2\text{mm}$. B. 小于严重缺陷的尺寸超差。 Less than the important tolerance .

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	功 能 发 光 效 果 检 查 Functional check condition	A. 管芯发光颜色不符合图纸要求。 The color of luminous is differenced for the SPEC. B. 闪亮、颜色/色差、暗光、暗带与样板相差较大。 Flash, color, dark light that more difference than the golden sample. C. 膜纸漏光直径 ≥ 0.25 。 For the membrane the diameter of light Leakage ≥ 0.25 .	A. 轻微色差、暗光、暗带、暗斑。 Minor of the chromatism, dark light, dark spot. B. 两端部发光不均匀。. The luminescence is asymmetry at the two ends.
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