# **Specification**

Customer	:	
Model number	:	MMA3950RPGB-6
Part number	•	
Customer mode	el:	
Date	:	2018-1-29

Sales	Draft	Re-check	Audit

Sample quantity: PCS	Confirm:			
Total Page	Engineer	QC	Purchasing	
The <u>1<sup>st</sup></u> time samples				

#### 1. 产品说明 (Description)

型号 (Part number): MMA3950RPGB-6

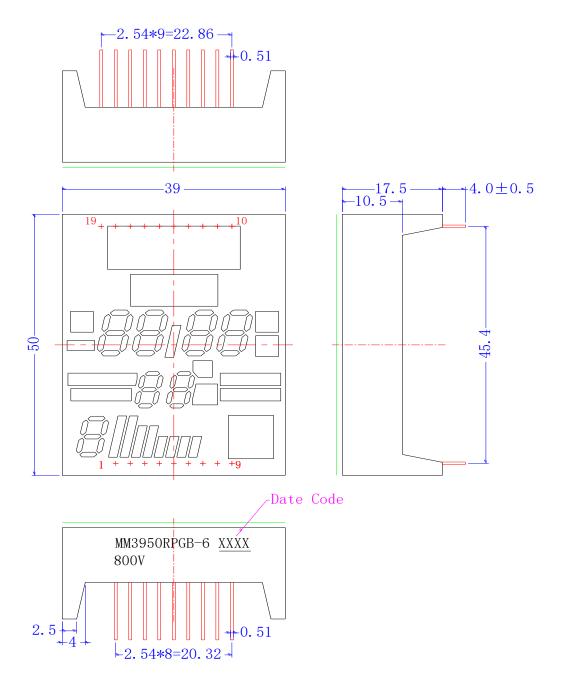
尺寸 (Size): 39.0\*50.0\*17.50mm

外观颜色 (Appearance color): black surface

发光颜色 (Emitting color): Red, Pure green, Blue, common cathode

#### 2. 封装结构与线路 (Package Dimensions& Internal Circuit Diagram)

结构图 (structure)

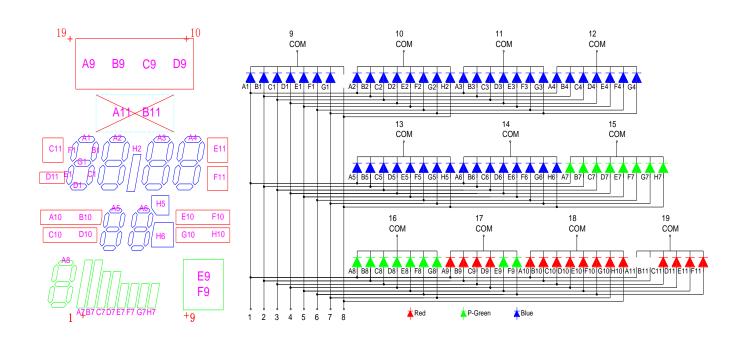


## 贴膜效果图 (sticker)

尺寸 (Sticker Size): 39.0\*50.0\*0.2mm, 黑色亮面透明



## 线路图 (circuit)



#### 3. 光电特性 (Electrical / Optical Characteristics at TA=25°C)

红色 (Red)

参数 (Parameter)	测试条件 (Test	单位	Min	Туре	Max	单位
	CONDITION)	(Symbol)				(Unit)
发光强度 Luminous Intensity	I <sub>F</sub> =20mA	Iv	_	50	_	mcd
直流正向电压 DC Forward Voltage	$I_F=20$ mA	$V_{\mathrm{F}}$	1.7	2.0	2. 4	V
直流逆向电流 DC Reverse Current	$V_R = 5V$	${ m I}_{ m R}$	_	-	100	uA
波长 Wavelength Characteristic	I <sub>F</sub> =20mA	$\lambda_{\mathrm{p}}$	_	635	_	nm
建议使用顺向电流 Suggestion Forward Current	_	IF (Sug)	5	10	20	mA

#### 翠绿色 (pure green)

参数 (Parameter)	测试条件 (Test	单位	Min	Туре	Max	单位
	CONDITION)	(Symbol)				(Unit)
发光强度 Luminous Intensity	$I_F=20$ mA	Iv	25	26.5	30	Mw
直流正向电压 DC Forward Voltage	$I_F=20$ mA	$V_{\mathrm{F}}$	2. 43	2.45	25	V
直流逆向电流 DC Reverse Current	$V_R = 5V$	IR	_	_	100	uA
波长 Wavelength Characteristic	$I_F=20$ mA	$\lambda_{\mathrm{p}}$	525	525.6	526.	nm
建议使用顺向电流 Suggestion Forward Current	-	IF (Sug)	5	10	20	mA

## 蓝色 (blue)

参数 (Parameter)	测试条件 (Test	单位	Min	Туре	Max	单位
	CONDITION)	(Symbol)				(Unit)
发光强度 Luminous Intensity	I <sub>F</sub> =20mA	Iv	23.5	24. 3	25	Mw
直流正向电压 DC Forward Voltage	$I_F=20$ mA	$V_{\mathrm{F}}$	2.65	2.66	2. 68	V
直流逆向电流 DC Reverse Current	$V_R = 5V$	IR	-	-	100	uA
波长 Wavelength Characteristic	$I_F=20$ mA	$\lambda_{\mathrm{p}}$	-	462	-	nm
建议使用顺向电流 Suggestion Forward Current	_	IF(Sug)	5	10	20	mA

Note: 1. Soldering Bath: not more than 5 seconds at 260℃. The bottom ends of plastic

2. Soldering Iron: not more than 3 seconds at  $300^{\circ}\text{C}$  under  $30\text{W}_{\circ}$ 

Reflector should be at least 2mm above the solder surface.

3. 引脚镀层材料为锡, 其镀层厚度等于或大于 3um。

#### 4. 绝对最大额定值 Absolute Maximum Ratings at TA=25°C

参数 Parameter	参考值 (reference value)	单位 Unit
功耗 Power Dissipation	50	mW
脉冲顺向电流 Peak Forward Current	100	mA

反向电压 Reverse Voltage	7	V
工作温度 Operating Temperature	-25~+85	°C
储存温度 Storage Temperature	-30~+85	$^{\circ}$
储存湿度 Storage Humidity	45~85%	ρw

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

● Store with care. Storing the units in bad condition ● 注意保存,保存条件不好时,会降低膜片 will cause the reflector sheet and decrease it's 与反射壳(导光板)的粘附力。

adhesive power. Storage the products under the 推荐保存条件为: 温度 25℃±10℃ condition :temperature (25℃ ± 10℃ ) and humidity 湿度 65℃CRH±20℃CRH

(65℃ CRH±20℃ CRH) our recommendation.

- The Soldering Temperature is 260±5℃ and Soldering 焊接温度 260℃±5℃, 焊接时间小于 3 秒,
   Time should be less than 3 sec, and soldering iron 烙铁功率小于 30W。
   power should be less than 30W.
- The soldering point should be farther than 1.6mm
   ◆ 焊接点应离产品实体大于 1.6mm。
   from body.

## 6. 外观判定条件(Surface check condition)

1.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: 1.黑/白点大小为 0≤ ¢ < 0.2mm,允许有 3 个,且不在同一字划。黑/白点大小 ¢ >0.2mm,不可接 受。

Standard: the size of black dot and white dot is 0≤ ¢ < 0.2mm, and the quantity of the dot for three are accepted, and those distance must be not in same segment. the size of black dot and white dot is ¢>0.2mm, that is not accepted.

2.划伤 ¢ ≤0.1mm,长度 < 1mm,最多允许 1 条;机壳表面刮花,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 scar is ¢≤0.1mm 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.

- 2.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.
- 3.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《FQC 成品检验标准》功能的相关内容。 Electrical check condition: use the rated voltage or constant current for the product based on the product drawing and IE document and performance the 《FQC 成品检验标准》for check.

判定类别	判定范围		
Standard	ITEM	MAJOR	MINOR

		1.膜纸:不齐、贴歪≥0.25mm。	
	外 观 检 验 Surface check condition	Membrane:not uniform or deflective that must be less than 0.25mm.  2.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.  3.条形歪斜、松脱、脚短/长、膜纸变形、翘起。  Bar deflective, loss, pins short or longer, membrane distortion, tilt.  4.产品弯曲、变形、划伤、毛刺。  Product inflect, scar, burr.	1.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.  2.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.
成五	尺寸	1.长、宽、厚等重要尺寸超差 ≥0.2mm,其它尺寸超差在 0.25mm 以上。	1.虚边、毛刺等引起的尺寸超差在 0.2mm 以下,0.1mm 以上。
Final product check stan	检验 Size check condition	The tolerance of Length, width and thick must ≥0.2mm and other tolerance more than 0.25mm.  2.膜纸过大在 0.25mm 以上。  Membrane over than 0.25mm	The size tolerance of product that caused by burr edge shall between 0.1-0.2mm.  2.小于严重缺陷的尺寸超差。  Less than the important tolerance.
判定标	功能 发光 效果	1.发光颜色不符合图纸要求。  The color of luminous is differenced for the SPEC.  2.闪亮、颜色/色差、暗光、暗带与样板相差较大。	1.轻微色差、暗光、暗带、暗斑。 Minor of the chromatism, dark light, dark
准	检查 Functional check condition	Flash, color, dark light that more difference than the golden sample.  3.膜纸漏光直径≥0.25。  For the membrane the diameter of light Leakage≥0.25.	spot.  2.两端部发光不均匀。.  The luminescence is asymmetry at the two ends.