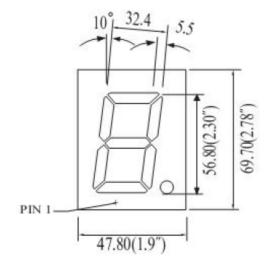
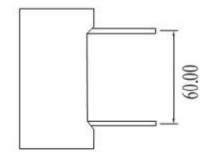
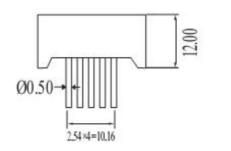
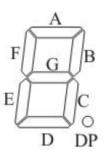


# **Package Dimensions**



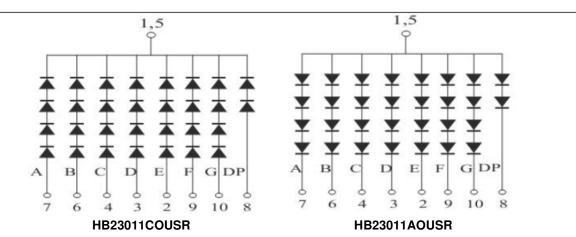






UNIT: MM(INCH) TOLERANCE: ±0.25(0.01")

## Internal Circuit Diagram





## HB23011AOUSR/COUSR

### DESCRIPTION

- 56.8mm (2.3") Single digital displays series, common Anode ,black face and white segment
- Standard brightness.
- Low current operation.
- Excellent character apperance.
- Easy mounting on P.C.boards or sockets.

产品最大绝对参数值 Absolute maximum ratings (Ta=25℃)

每段参数	符号	最大数	单位				
PARMETER PER SEGMENT	SYMBOL	MAX	UNIT				
反向电压 Reverse Voltaget	VR	5	V/Seg				
正向电流 Forward Current	IF	20	mA/Seg				
峰值电流( <b>0.1ms)</b>	lan	400					
Peak Faward current(1/10 Duty Cycle)	IPEAK	120	mA/Seg				
功耗 Power Dissipation	ΡΑ	120	mW/Seg				
工作条件温度 Operating Temperature Range	-25°C to +85°C						
储存温度 Storage Temperature Range	-30°C to +85°C						
距离胶体 1.6mm 焊接, 温度 260℃,焊接时间最多 3 秒							
Lead soldering Temperatur260°C at 1.6mm Form Body For 3 Seconds							

### 产品光电参数值 ELECTRICAL/OPTICAL CHARACTERISTICS (Ta=25℃)

参数	符号	MIN	MIN		мах	UNIT	测试条件
PARMETER	SYMBOL		IT	IVIAA	UNIT	Test condition	
每段亮度	lv	140	155	168	mcd	IF=20mA	
Luminous Intensity Per Segment	IV	IV 140	100	100	mcu		
每段正向电压 Forward							
Voltage Per segment 2.0V*4	VF	7.2	8.0	8.8	v	IF=20mA	
小数点正向电压 Forward		20	4.0		v	15-00-0	
Voltage Per DP 2.0V*2	VF	3.6	4.0	4.4	V	IF=20mA	
波长 Wavelength	λ <b>p</b> / λ d		620/625		nm	IF=20mA	
半波长度	٨λ		20			IE-20 A	
Spectrum width of half value	Δ ^		20		nm	IF=20mA	
每段反向电流 Reverse Current	IR			10		VR=5V	
Per Segment	IK			10	μA	VK=3V	

#### 器件表面及封装颜色Surface / Lens color

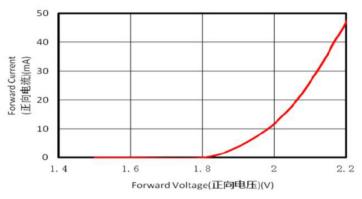
Number	0	1	2	3	4
Ref Surface Color	White	<mark>Black</mark>	Gray	Red	Green
Epoxy Color	Water clear	White Diffused	Red Diffused	Green Diffused	Yellow Diffused



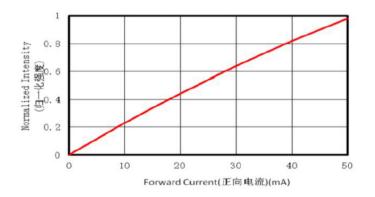
### HB23011AOUSR/COUSR

特性曲线 (Characteristic Curves)

I-V 曲线 Forward Voltage Vs.Forward Current

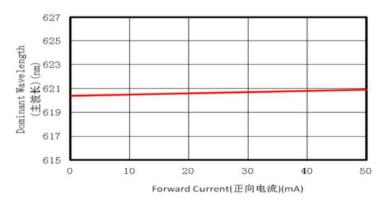


L-I 曲线 Forward Current Vs. Relative Luminous Intensity



#### WLD-I 曲线

Forward Current Vs.Dominant Wavelength



#### Notes:

1、 主波长的测量误差为±1 nm (Tolerance of dominant wavelength is ±1 nm)。

2、发光强度测量误差为±10% (Luminous intensity measured allows a tolerance of ±10%)。

3、砷化镓 LED 芯片为静电敏感产品,请在运输与使用当中注意静电防护 (GaAs LEDs are ESD sensitive. Please observe appropriate precautions during handling and processing).