承 认 书

SPECIFICATION FOR APPROVAL

客户(CUSTOMER):	
产品名称 (PRODUCT NAME): 贴片式蜂鸣器 (外部驱动)	
型号 (TYPE):YS-SBZ5020C03R12	
客户料号(CUSTOMER NO)	
日期 (DATE):	
客户确认:(签章)	
日期:	

东莞市锋鸣电子有限公司

电话: 0769-88036425 传真: 0769-85474556

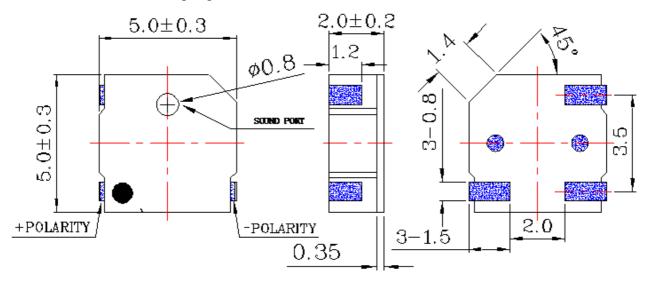
制单: 李琳 业务: 宋浩亮 工程: 黄鑫

FENGMING TECH OF DONGGUAN CO.,LTD

YS-SBZ5020C03R12

DIMENSIONS (UNIT: mm)

Tolerance: ±0.5mm Except Specified

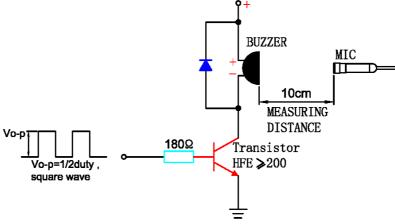


SPECIFICATION:

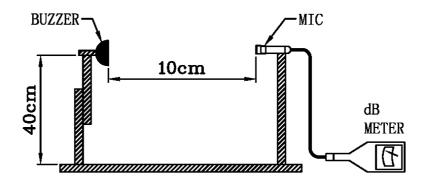
Model NO	YS-SBZ5020C03R12
Rated Voltage	3V
Operating Voltage	2.0~5.0V
Rated Current	Max. 100mA
Coil Resistance	12±3 Ω
sound Pressure level(dB/4000Hz/at 10cm)	Min.75dB
Resonant Frequency	4000Hz
Operating Temperature	-30℃~+70℃
Storage Temperature	-40°C∼+80°C

Acoustic Characteristics:

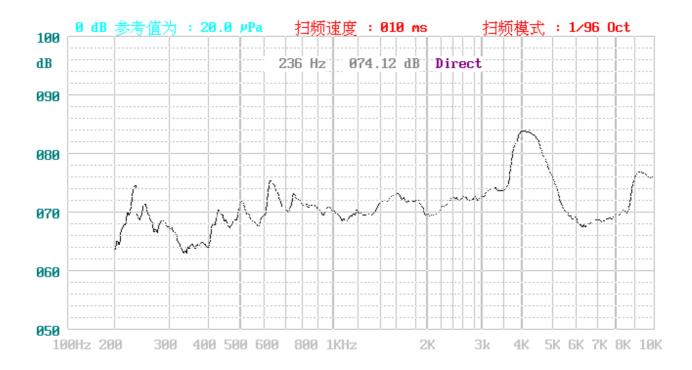
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



In the measuring test, buzzer is placed as follows:



Typical Frequency Response Curve

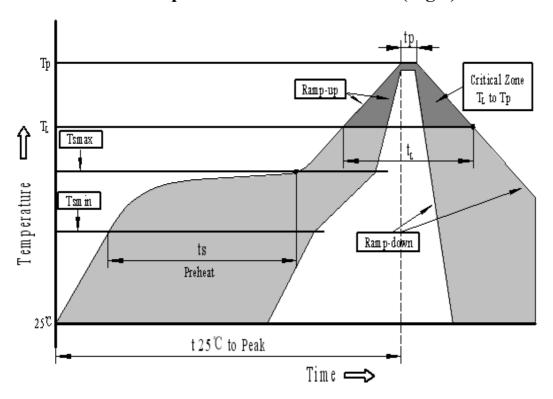


RELIABLY TEST:

NO.	ITEM	TESTING CONDITION	VARIANCE AFTER TEST	
1	High temp. storage life	The part shall be capable of withstanding a storage temperature is +120°C for 120 hours		
2	Low temp. storage life	The part shall be capable of withstanding a storage temperature is -40°C for 120 hours		
3	Temp. Cycle	Total 5 cycles, 1 cycle consisting of $-40\pm2^{\circ}$ C, 30 minutes $20\pm5^{\circ}$ C 15 minutes $120\pm2^{\circ}$ C, 30 minutes $20\pm5^{\circ}$ C 15 minutes	After the test the part	
4	Humidity Test	40±2℃, 90∼95% RH, 120 hours	shall meet	
5	Vibration Test	The vibration test shall consist of 2 hours per plane in each three mutually perpendicular	-	
6	Shock	Sounder shall be measured after being applied shock (980m/s²) for each three mutually perpendicular directions to each of 3 times by half sine wave.		
7	Drop Test	Dropped naturally from 700mm height onto the surface of 10mm thick wooden board. 2 directions-upper and side of the part are to be applied.		
8	Lead pull	The part shall be pushed with a force of 9.8N for 10 ± 1 seconds behind the part.	After the test part shall meet specifications without any degradation in appearance and performance.	
9	Recommended temp. Profile for Reflow Oven	Shown in Fig.1		

Warranty: For a period of one year from date of manufcture under normal operations.

Recommended Temp. Profile for Reflow Oven (Fig.1)



Profile Feature	Pb-Free Assembly
Average ramp-up rate(T _L to Tp)	3°C/second max.
Preheat	
-Temperature Min.(Ts _{min})	150℃
-Temperature Min.(Ts _{max})	200℃
-Temperature Min.(ts)	60∼180 seconds
Ts _{max} to T _L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
- Temperature(T_L)	217℃
-Time(T _L)	60∼150 seconds
Peak temperature(Tp)	250°C+0/-5°C
Time within 5°C of actual Peak temperature (tp)	6 seconds max.
Ramp-down Rate	6°C/second max.
Time 25 °C to Peak Temperature	8 minutes max.