MESSRS.

SPECIFICATION FOR APPROVAL
承 认 书

Product	PIEZO BUZZER
Part No.	HZ-1640E-W12 (RoHS)
Customer Approval	

Approved By	Checked By	Made By
王台平 OCT-17-2016	曹丽萍 OCT-17-2016	LILY OCT-17-2016

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EDITION:1.1

1. Specifications

HZ-1640E-W12 (RoHS)

Items		Units	Specifications	Conditions
01	Rated Voltage	Vp-p	9	Square Wave
02	Operating Voltage	Vp-p	3-30	
03	Rated Current (Max)	mA	7	at 4KHz / 9Vp-p
04	Min Sound Output	dB	80	at 4KHz / 9Vp-p
05	Resonant Frequency	Hz	4000	
06	Operating Temp.	℃	-20 ~ +60	
07	Storage Temp.	℃	-30 ~ +70	
08	Capacitance at 1KHz	pF	15000 ± 30%	
09	Weight	g	1	

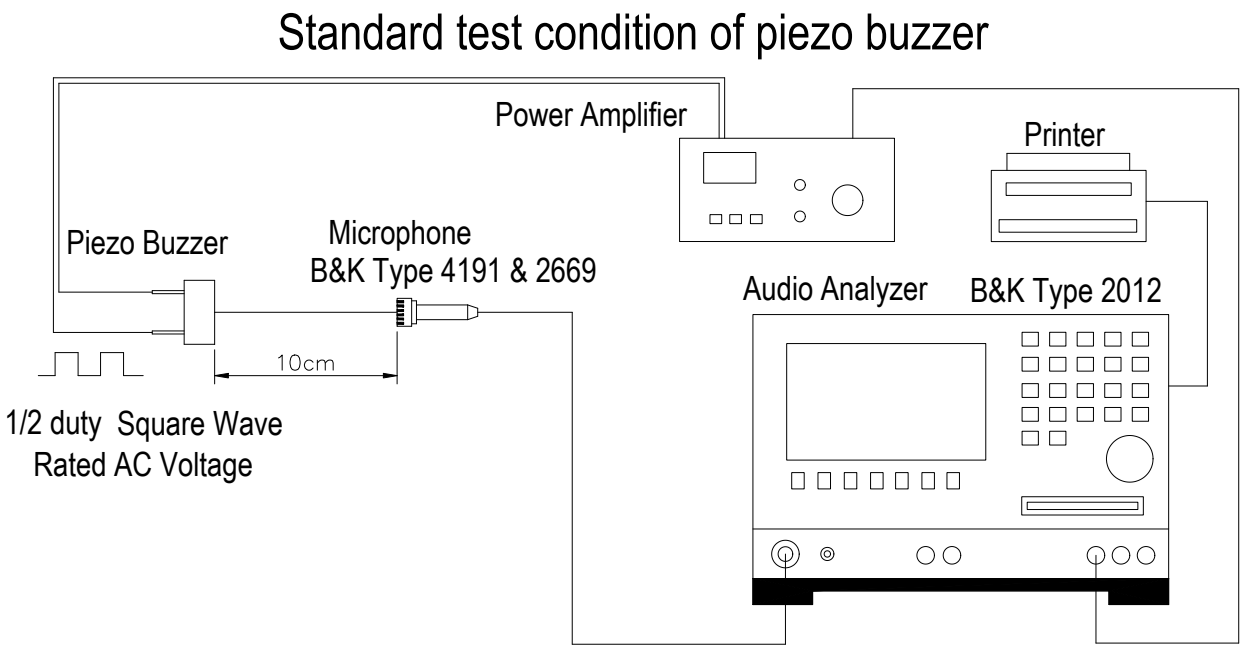
2. Measuring Method

2-1. Test Condition

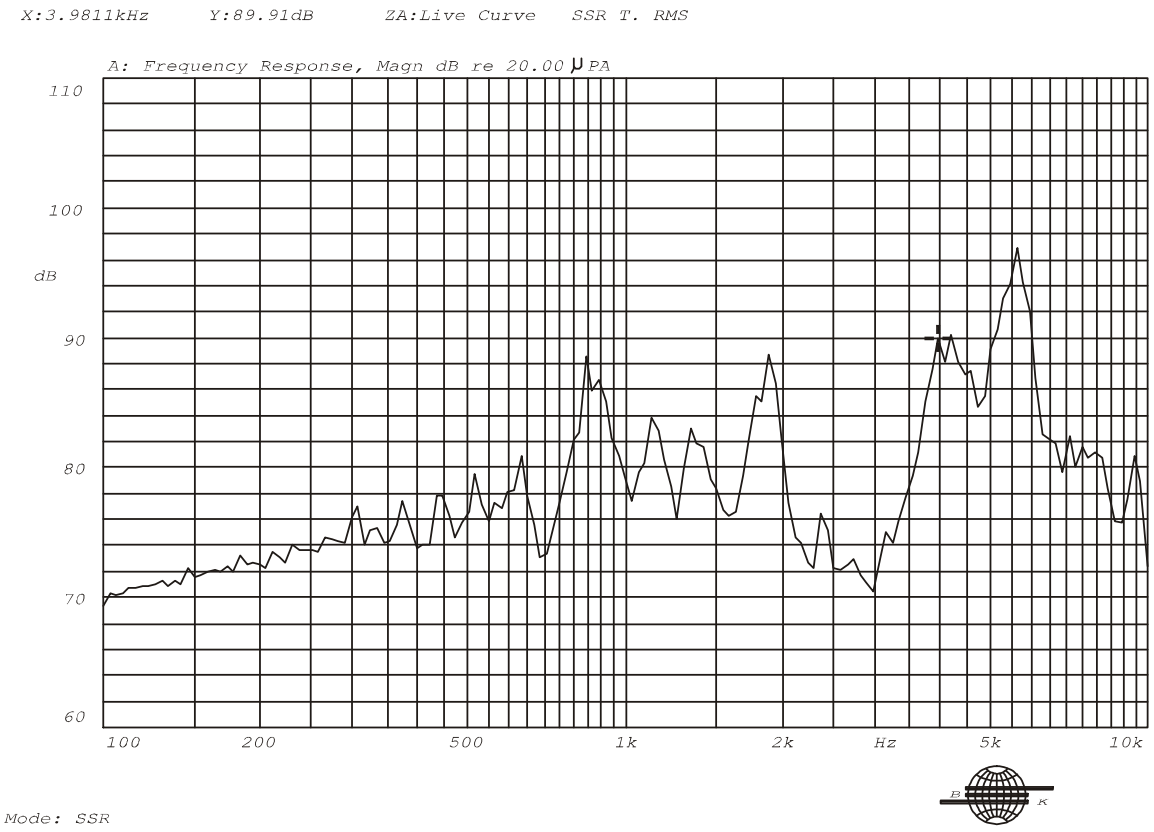
STANDARD
Temperature : 15 ~ 35℃
Relative humidity : 25% ~ 85%,
Atmospheric pressure : 860mbar to 1060mbar.

JUDGEMENT
Temperature : 20±3℃
Relative humidity : 60% ~ 70%,
Atmospheric pressure : 860mbar to 1060mbar

2-2. Standard Test Fixture

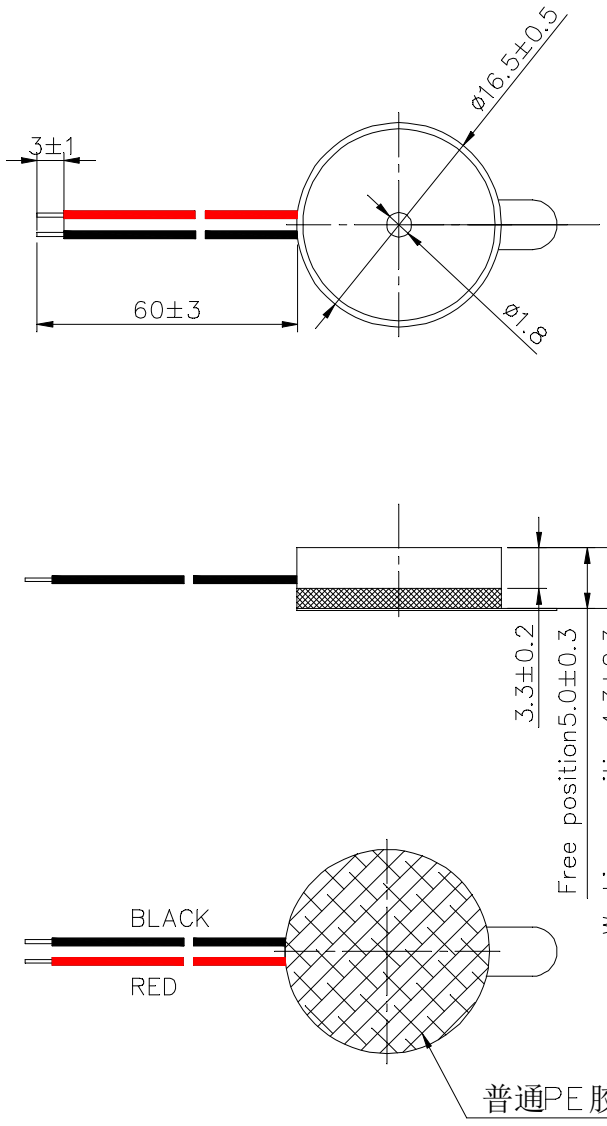


2-3. Frequency Response Curve



3. Dimension

REV NO.	REVISION NOTE	APPROVAL	DATE



NOTE:

LEAD WIRES SPEC.: AWG 30 UL1571

背胶沾粘性：将贴于产品背面的背胶不压重力下自然撕下隔离纸，检查隔离纸上有无残胶， 将双面胶从产品背面撕开，在产品上无残胶

TITLE: PIEZO BUZZER EXTERNAL		DRAWN: Lily 2016/10/17	SCALE: 2:1	SHEET: 1 : 1
PART NO. HZ-1640E-W12	1	DESIGNED: R & D OF D.S.	UNITS: mm	
DWG NO. DPE-1477	REV	CHECKED: Emily	TOLERANCE ± 0.5	
		APPROVAL: Eric	UNLESS OTHERWISE SPECIFIED: ONE PLACE DECIMAL ± *** TWO PLACE DECIMAL ± *** THREE PLACE DECIMAL ± ***	
		MATERIAL: ABS		

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4.Reliability Test

Item		Conditions	Evaluation standard
01	Low Temp. Storage Test	A℃±2℃ ,240Hr	(S.P.L)Test before numerical ±10dB *wrong (Frequency)Test before numerical ±10% (Current)Test before numerical ±10% (No crake is allowed on the part surface after Free drop test) ● After the test ,the part shall meet the specifications without any degradation in appearance and performance
02	High Temp. Storage Test	B℃±2℃ RH50% ,240Hr	
03	Temp./Humidity Storage Test	40℃±2℃ , RH90-95% 240Hr	
04	Thermal Shock Test	A℃±2℃(1Hr)→ ,20℃±2℃(1Hr) B℃±2℃(1Hr)→ ,20℃±2℃(1Hr)10 cycle	
05	Vibration Test	10-55Hz/1min amplitude1.5mm,X,Y,Z,3 directions	
06	Mechanical Shock Test	+100G,Sine wave, XYZ , 3 impacts per axis	
07	Free Drop Test	The part shall be dropped freely from a height of 75 cm onto concrete 1 time in 2 axes (total 4 times)	
08	Life Burning Test	The part shall be subjected to 240 hrs in the room temp with rated voltage applied	
09	Lead Wire / Pin Pull Test	The Part checking standard : Following supplier’ s Spec. Finished-part checking Standard vertical Pull i)100g MIN 0.05mm Thickness of ceramic ii)300g MIN 0.1mm≦Thickness of ceramic b: Horizontal Pull i)700g MIN	

Remark : “A” means Storage low temp. “B” means Storage high temp

5. History change record

Change Items	Date	Note	Drawn by	Checked by
	2016-10-17	First Issue	Lily	王台平 2016-10-17