

MESSRS.

SPECIFICATION FOR APPROVAL**承 認 书**

Product	PIEZO BUZZER
Part No.	HZ-1640E-W13 (RoHS)
Customer Approval	

Approved By	Checked By	Made By
王台平 NOV-28-2016	曹丽萍 NOV-28-2016	LILY NOV-28-2016

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EDITION:1.1

1. Specifications

HZ-1640E-W13 (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	Capacitance at 1KHz	pF	15000 ± 30%	
07	Operating Temp.	°C	-20 ~ +60	
08	Storage Temp.	°C	-30 ~ +70	
09	Weight	g	1	

2. Measuring Method

2-1. Test Condition

STANDARD

Temperature : 15 ~ 35°C

Relative humidity : 25% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

JUDGEMENT

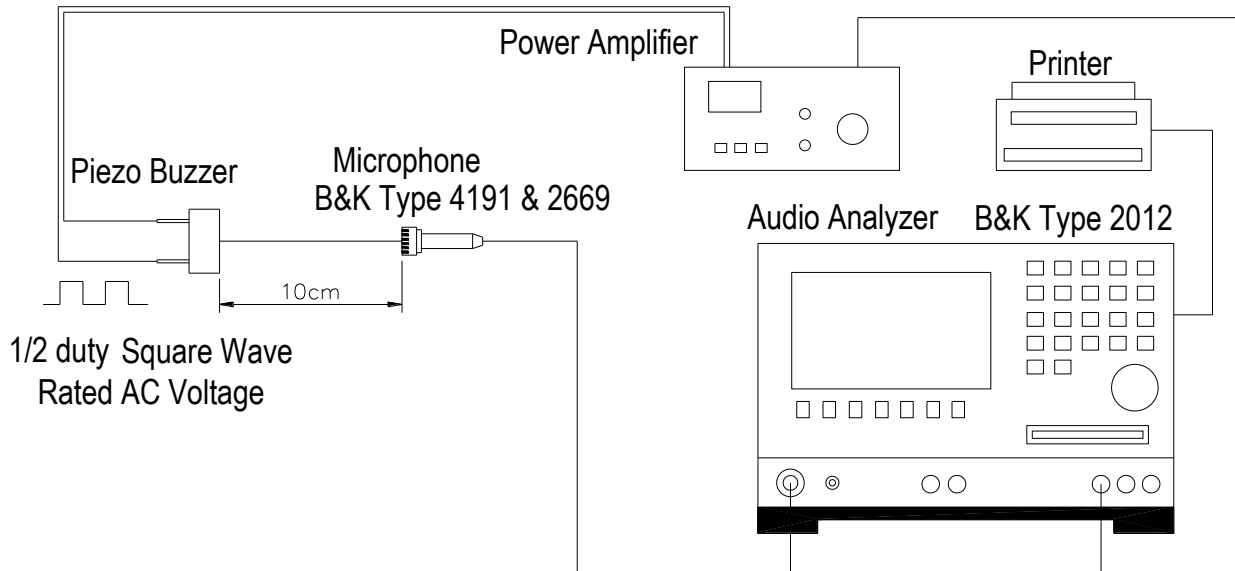
Temperature : 20±3°C

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

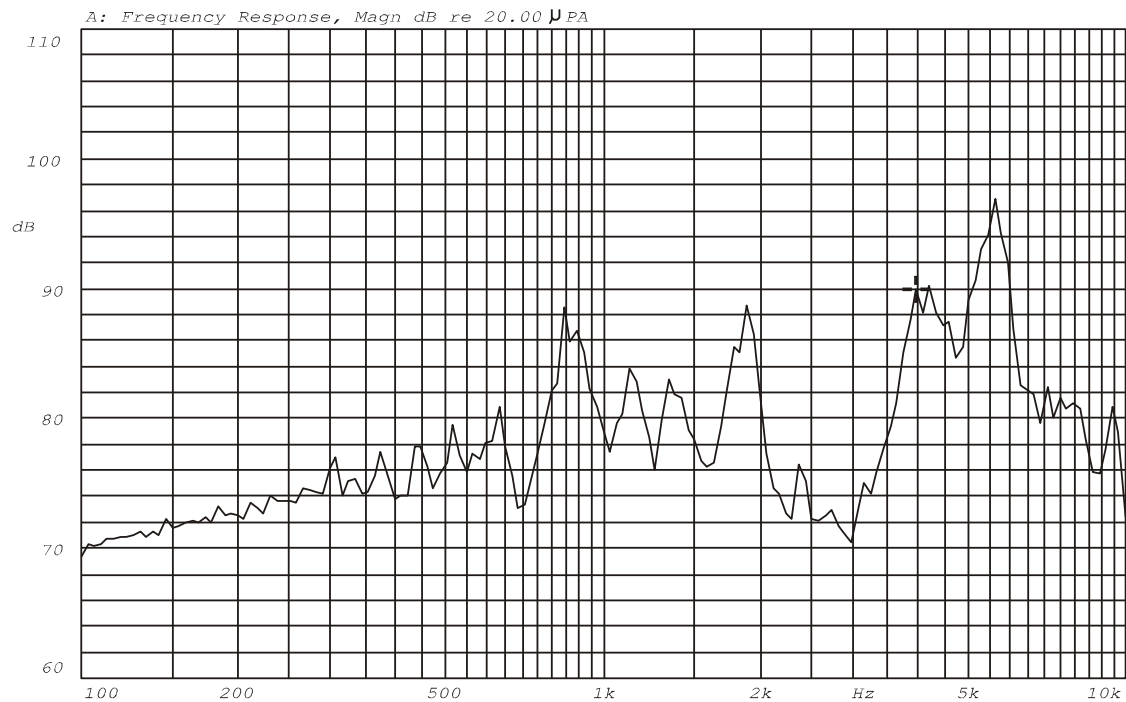
2-2. Standard Test Fixture

Standard test condition of piezo buzzer



2-3.Frequency Response Curve

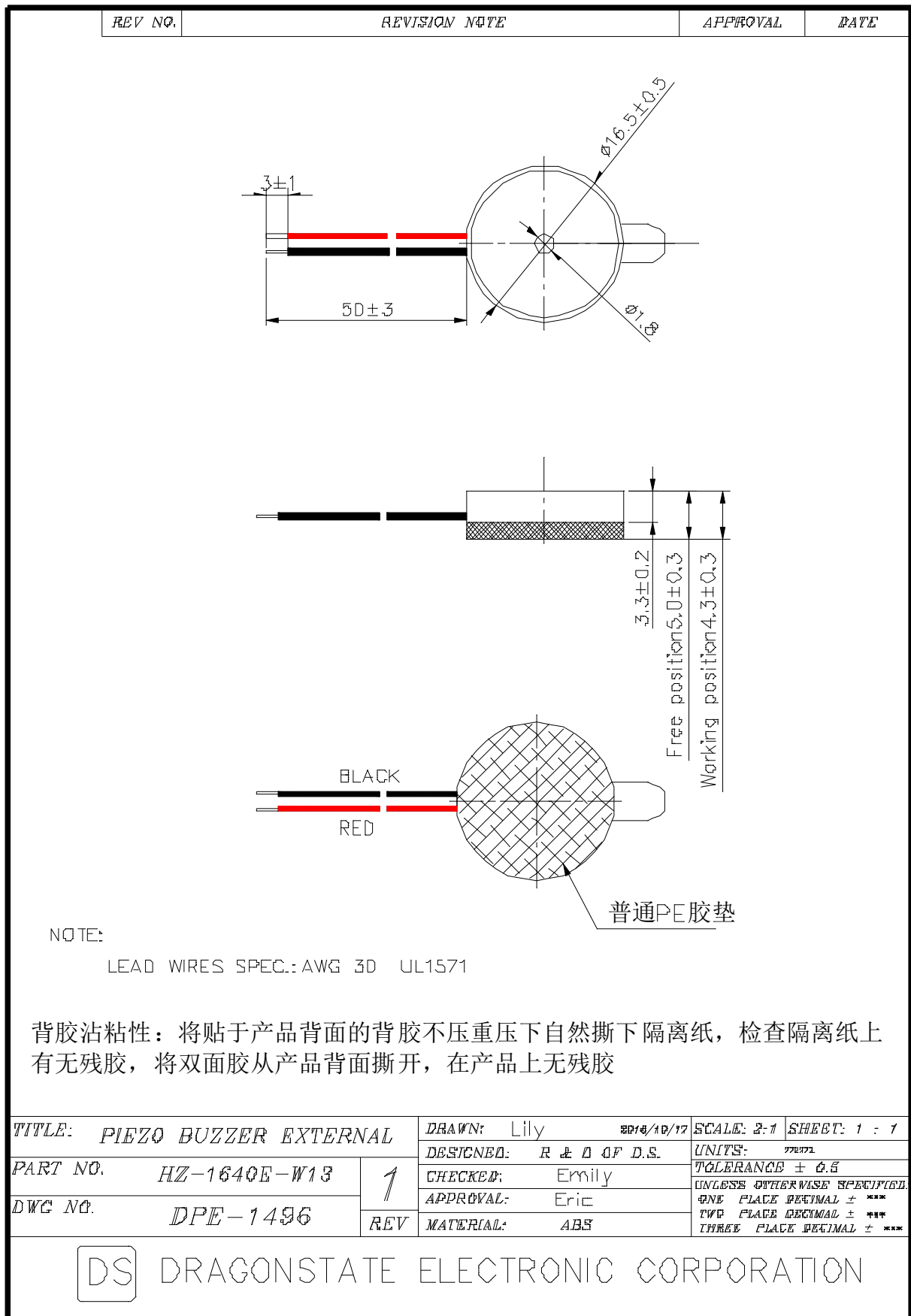
X:3.9811kHz Y:89.91dB ZA:Live Curve SSR T. RMS



Mode: SSR



3.Dimension



4. Reliability Test

Item		Conditions	Evaluation standard
01	Low Temp. Storage Test	A °C ±2 °C ,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 °C ±2 °C RH50% ,240Hr	
03	Temp./Humidity Storage Test	40 °C ±2 °C , RH90-95% 240Hr	
04	Thermal Shock Test	A °C ±2 °C (1Hr)→ ,20 °C ±2 °C (1Hr) B °C ±2 °C (1Hr)→ ,20 °C ±2 °C (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

