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# SPECIFICATION FOR APPROVAL

Product	PIEZO BUZZER
Part No.	AZ-2138E-WV
Customer Approval	

Approved By	Checked By	Made By



**A & B Components**

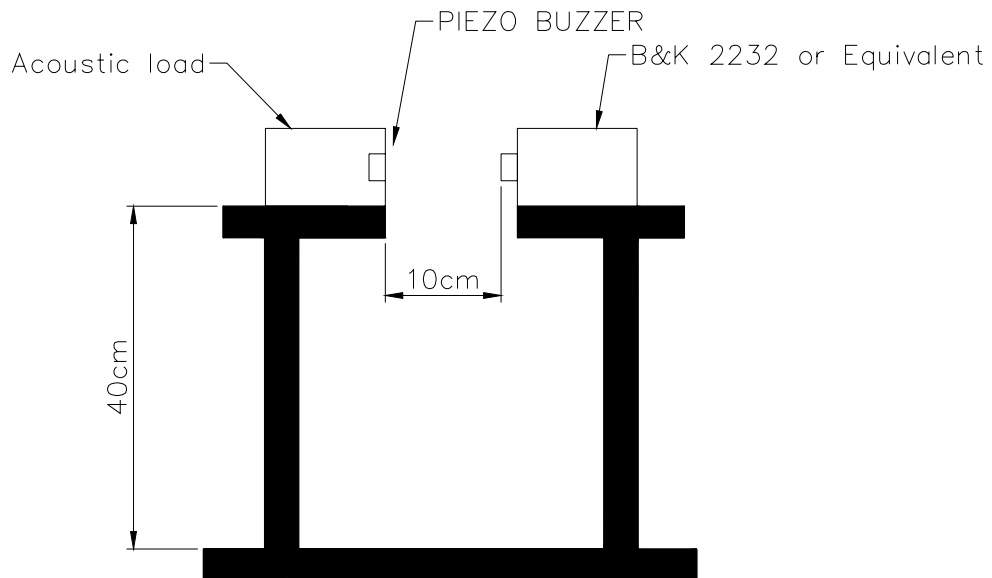
**<http://www.speaker-tw.com>**

# AZ-2138E-WV

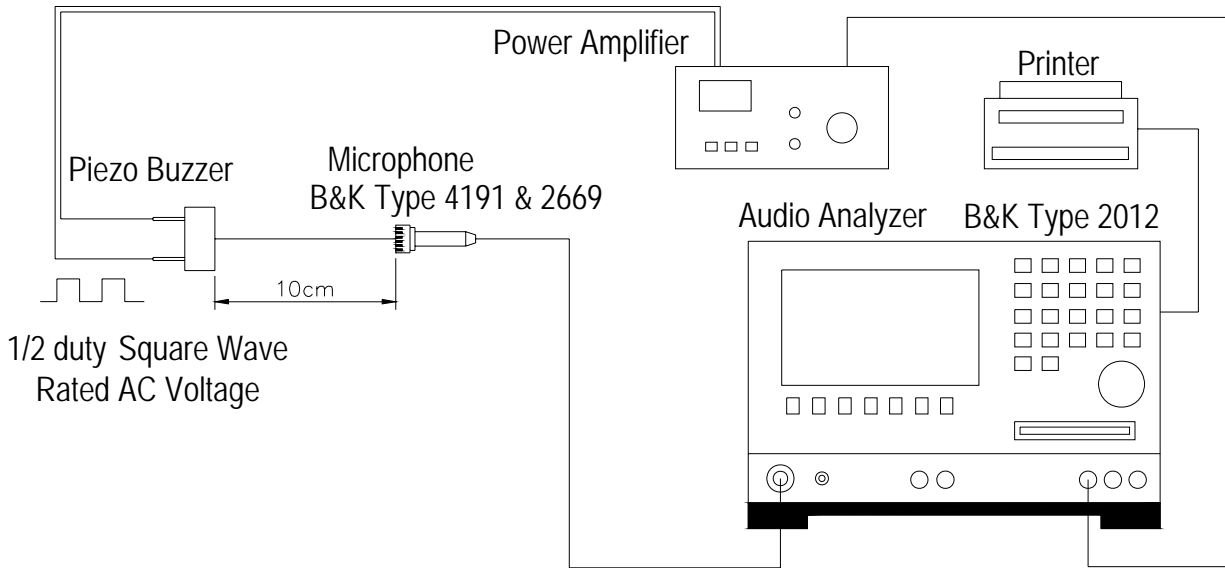
Items		Units	Specifications	Conditions
01	Rated Voltage	Vp-p	6	Square Wave
02	Operating Voltage	Vp-p	3~20	
03	Rated Current	Ma(Max)	9	6Vp-p / 3.8KHz
04	Sound Output At 10cm	dBA(Min)	75	At 6Vp-p / 3.8KHz
05	Resonant Frequency	Hz	3800±500	
06	Capacitance at 120Hz	Pf	26000±30%	
07	Operating Temp.	°C	-20 ~ +60	
08	Storage Temp.	°C	-30 ~ +70	
09	Weight	g	1	

Value Applying Rated Voltage

## STANDARD TEST FIXTURE

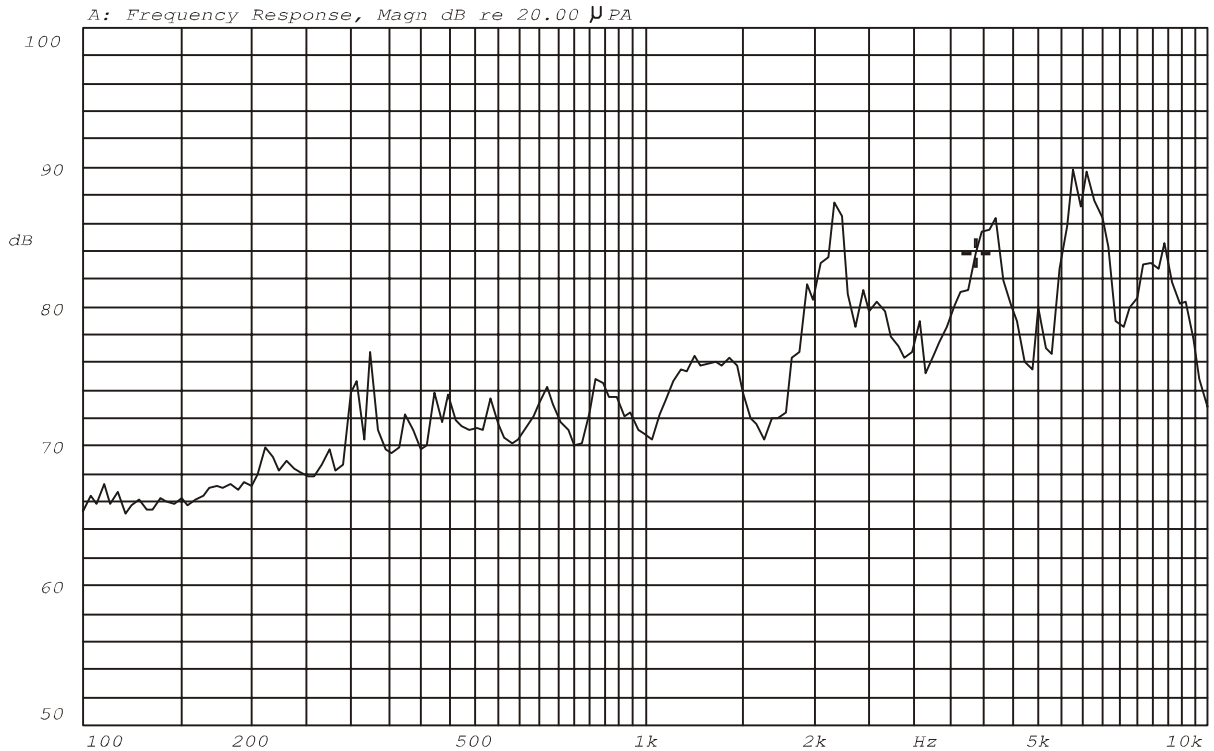


## Standard test condition of piezo buzzer



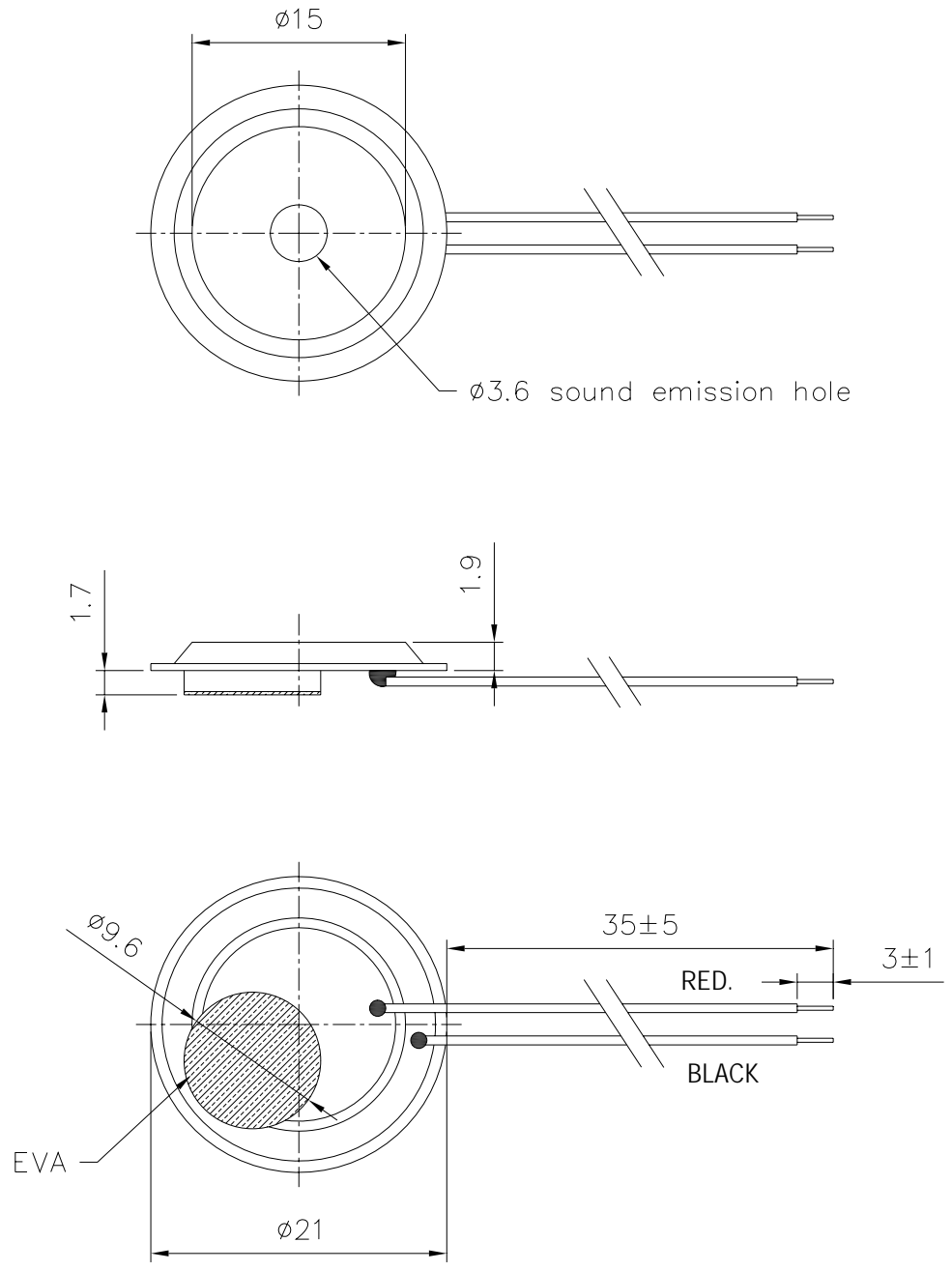
## Frequency Response Curve

X:3.8681kHz Y:83.80dB ZA:Live Curve SSR T. RMS



Mode: SSR





NOTE:  
LEAD WIRES SPEC. :UL1571 30AWG

TITLE: <i>PIEZO BUZZER</i>	DRAWN: <i>Richard</i> 05/09/2002	SCALE: 2:1	SHEET: 1 of 1
PART NO. <i>AZ-2138E-WV</i>	DESIGNED: R & D DEP.	UNITS: mm	
DWG NO. <i>DTP-1147</i>	CHECKED:	TOLERANCE $\pm 0.5$	
	APPROVAL:	UNLESS OTHERWISE SPECIFIED:	
	REV <i>1</i>	MATERIAL: ALUMINUM	ONE PLACE DECIMAL $\pm$ *** TWO PLACE DECIMAL $\pm$ *** THREE PLACE DECIMAL $\pm$ ***

*A & B Components*

# RELIABILITY TEST

## AZ-2138E-WV

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 1000 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