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## SPECIFICATION FOR APPROVAL

Product	PIEZO BUZZER
Part No.	1109 (RoHS)
Customer Approval	

Approved By	Checked By	Made By
ERIC WANG AUG-03-2006	DAVID LIU AUG-03-2006	JOHN HSU AUG-03-2006



# 1109 (RoHS)

Items		Units	Specifications	Conditions
01	Rated Voltage	Vp-p	10	Square Wave
02	Operating Voltage	Vp-p	3~30	
03	Rated Current	mA(Max)	10	10Vp-p / 2.5KHz
04	Sound Output At 10cm	dBA(Min)	80	At 10Vp-p / 2.5KHz
05	Resonant Frequency	Hz	2500	
06	Capacitance at 120Hz	pF	25000 ±30%	
07	Operating Temp.	°C	-20 ~ +60	
08	Storage Temp.	°C	-30 ~ +70	
09	Weight	g	2	

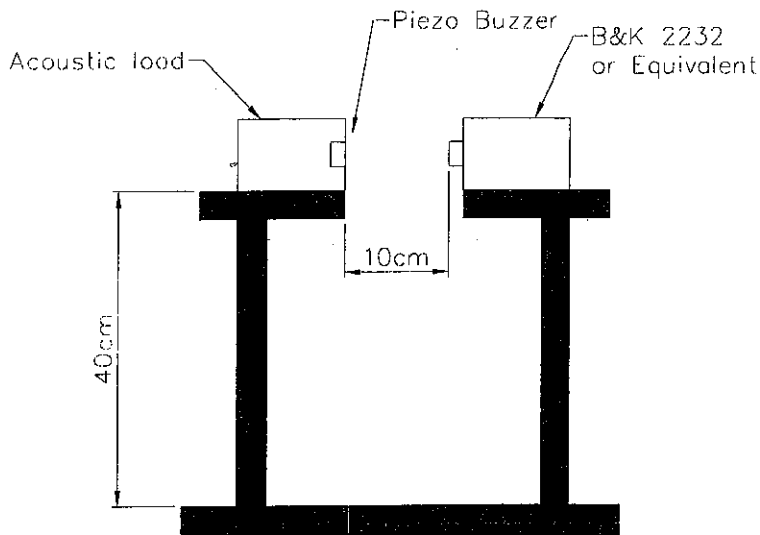
## Measurement Condition

Test and measurement will be carried out under normal condition of temperature within 5°C to 35°C, relative humidity within 45% to 85% and air pressure of 860mbar to 1060mbar.

Should uncertainty arise in data obtained from the above atmosphere, control of temperature At 20°C±2°C and relative humidity within 60% and 70%, with air pressure remaining unchanged, To be enforced.

## Value Applying Rated Voltage

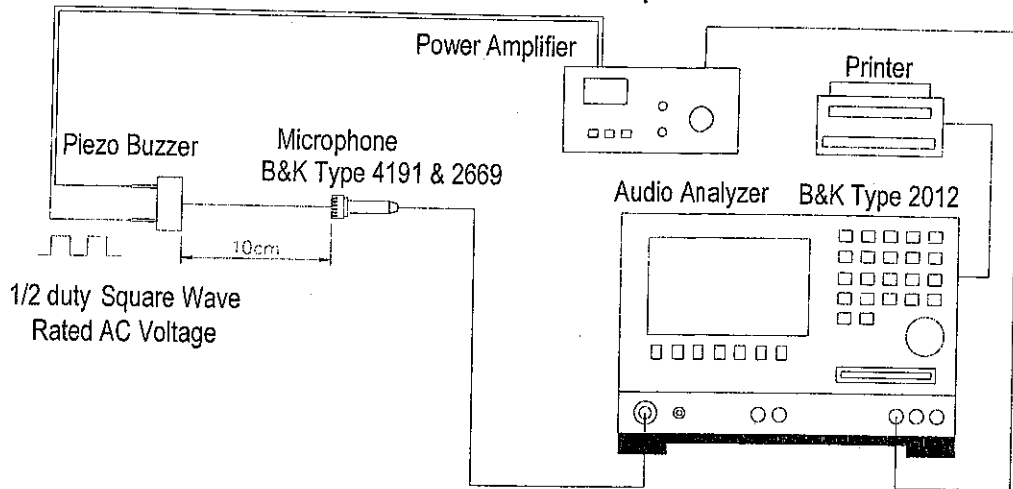
### STANDARD TEST FIXTURE



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 TEL: (516) 921-9111 FAX: (516) 921-3777  
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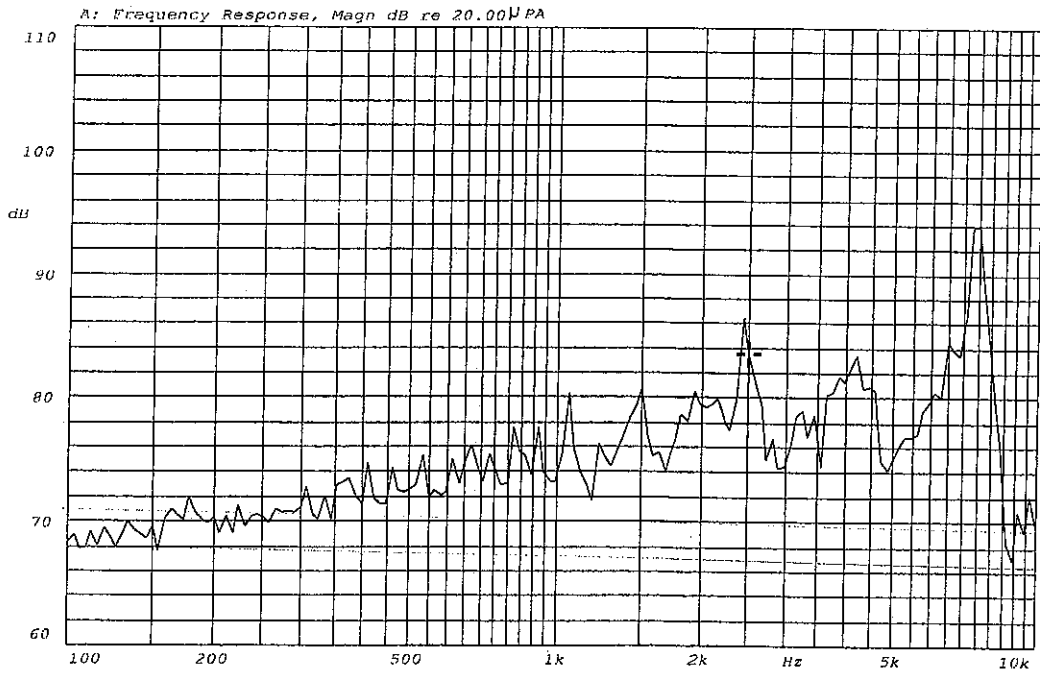
# 1109 (RoHS)

## Standard test condition of piezo buzzer



## Frequency Response Curve

X: 2.5119kHz Y: 83.49dB ZA: Live Curve SSR Y: RMS



Mode: SSR



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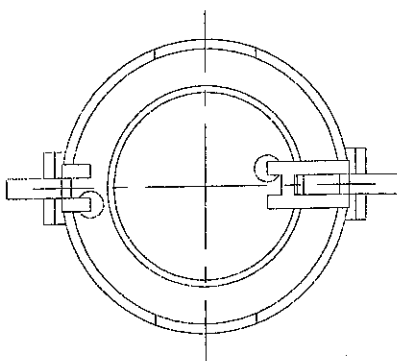
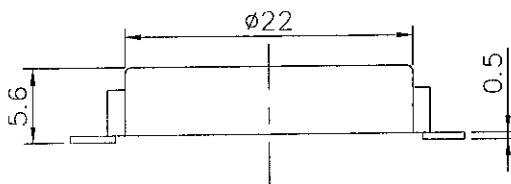
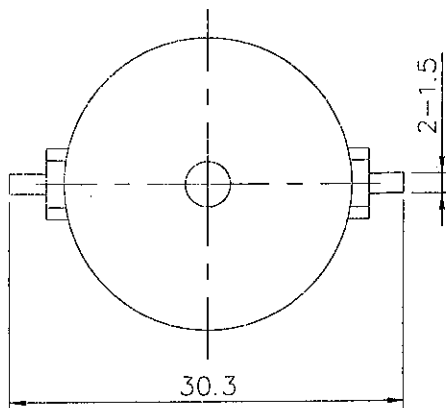
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REV NO.

REVISION NOTE

APPROVAL

DATE



RoHS

TITLE: PIEZO BUZZER		DRAWN: JOHN	12/04/2002	SCALE: 2:1	SHEET: 1 of 1
PART NO. 1109		DESIGNED: R & D		UNITS: mm	TOLERANCE $\pm 0.5$
1		CHECKED:		UNLESS OTHERWISE SPECIFIED:	
		APPROVAL:		ONE PLACE DECIMAL $\pm$ ***	
REV		MATERIAL: ABS		TWO PLACE DECIMAL $\pm$ ***	
				THREE PLACE DECIMAL $\pm$ ***	



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# RELIABILITY TEST

1109 (RoHS)

Item	Conditions	Evaluation standard
01 Low Temp. Storage Test	A°C±2°C ,240Hr	(S.P.L)Test before numerical ±10dB (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



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