
SPECIFICATION FOR APPROVAL

Product	PIEZO BUZZER
Part No.	2232A(RoHS)
Customer Approval	

Approved By	Checked By	Made By
ERIC WANG MAY-21-2006	DAVID LIU MAY-21-2006	JOHN HSU MAY-21-2006



SHOGYO INTERNATIONAL CORP.
6851 JERICHO TURNPIKE, SYOSSET, N.Y. 11791
TEL: (516) 921-9111 FAX: (516) 921-3777
www.shogyo.com

2232A(RoHS)

Items		Units	Specifications	Conditions
01	Rated Voltage	VDC	12	
02	Operating Voltage	VDC	3-20	
03	Rated Current	mA(Max)	9	At 12VDC
04	Sound Output At30cm	dBA(Min)	82	At 12VDC
05	Resonant Frequency	Hz	3200±500	
06	Tone Nature	Continuous		
07	Operating Temp.	°C	-20 ~ +60	
08	Storage Temp.	°C	-30 ~ +70	
09	Weight	g	3	

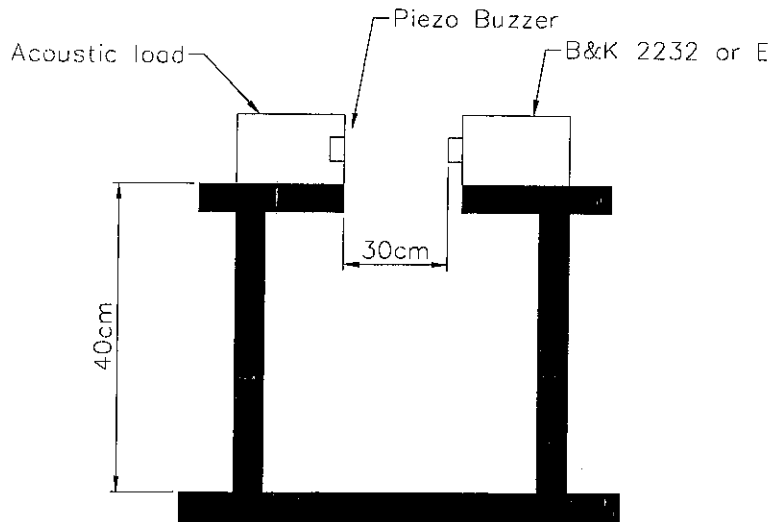
Measurement Condition

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 uncertainly 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.

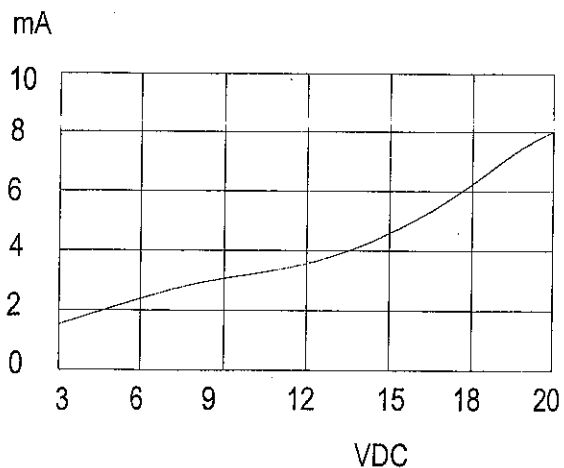
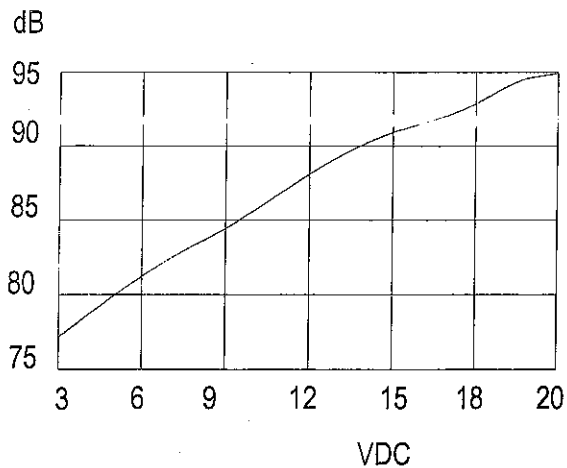


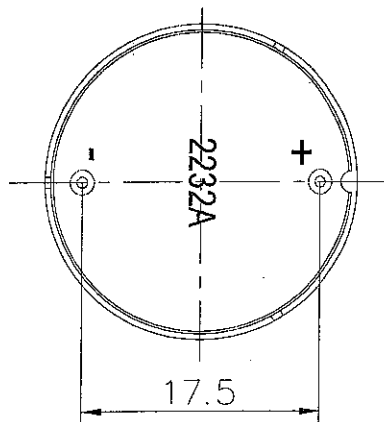
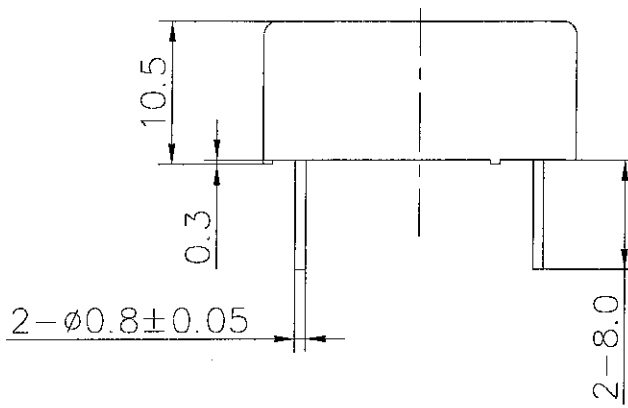
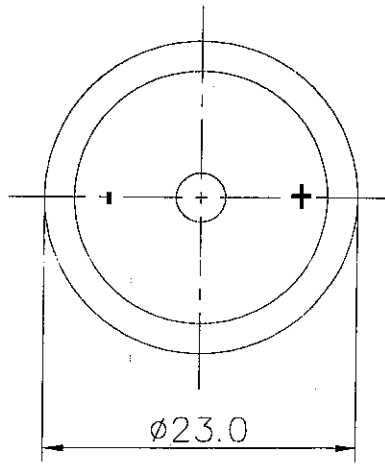
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STANDARD TEST FIXTURE



Characteristic





RoHS

TITLE: PIEZO BUZZER		DRAWN: <i>Kitty</i>	2004/05/29	SCALE: 2:1	SHEET: 1 of 1
PART NO. 2232A		DESIGNED: R&D		UNITS: mm	
1	REV	CHECKED:		TOLERANCE ± 0.5	
		APPROVAL:		UNLESS OTHERWISE SPECIFIED:	
		MATERIAL: ABS		ONE PLACE DECIMAL ± ***	
				TWO PLACE DECIMAL ± ***	
				THREE PLACE DECIMAL ± ***	



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RELIABILITY TEST

2232A(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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