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Datasheet

RS PRO Piezo Audio Transducer

EN RS Stock No: 181-2735



A. SCOPE

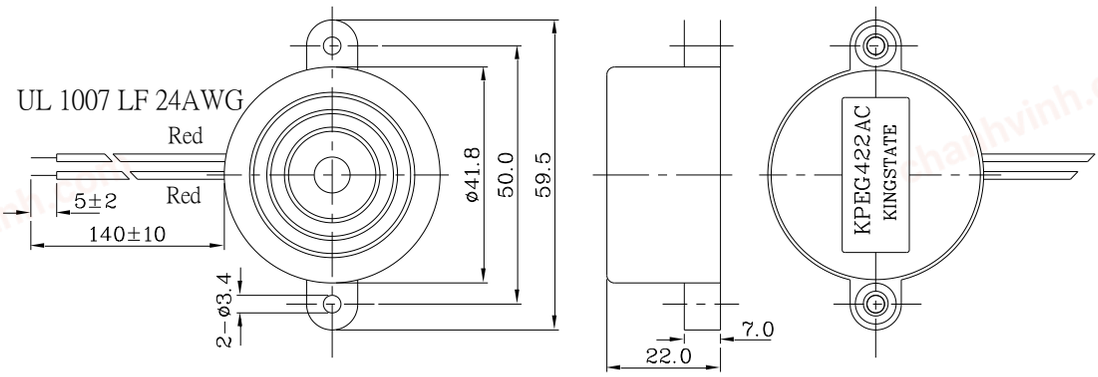
This specification applies piezo audio indicator, 1812675

B. SPECIFICATION

No.	Item	Unit	Specification	Condition
1	Operating Frequency	KHz	3.0 ± 0.5	
2	Operating Volt. range	VAC/VDC	60 ~ 250	AC/DC non-polar
3	Current consumption	mA	MAX 13	at 220VAC
4	Sound pressure level	dB	MIN 92	at 30 cm/220VAC
5	Rated Voltage	VAC	220	
6	Tone		Continuous	
7	Operating temp.	℃	-30 ~ + 85	
8	Storage temp.	℃	-40 ~ + 95	
9	Dimension	mm	φ41.8 x H22.0	See appearance drawing
10	Weight (MAX)	gram	22.5	
11	Material		ABS UL-94 1/16” HB（BLACK）	
12	Terminal		Wire type	See appearance drawing
13	Environmental Protection Regulation		RoHS	

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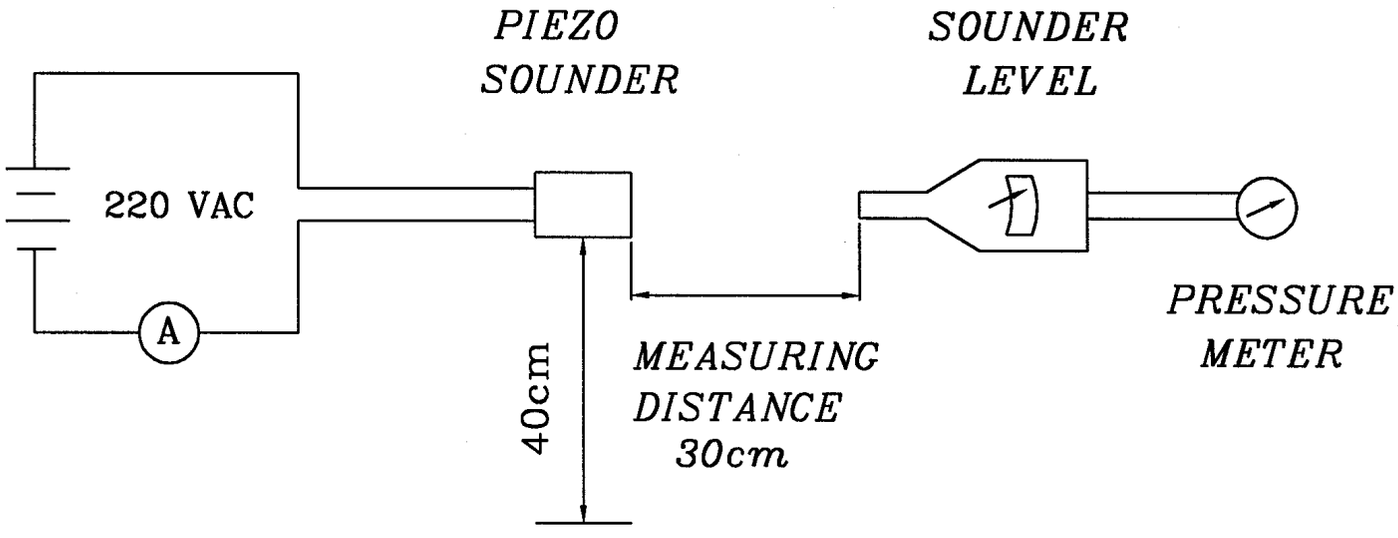
C. APPEARANCE DRAWING



Tol: ± 0.5
Unit: mm

D. MEASURING METHOD

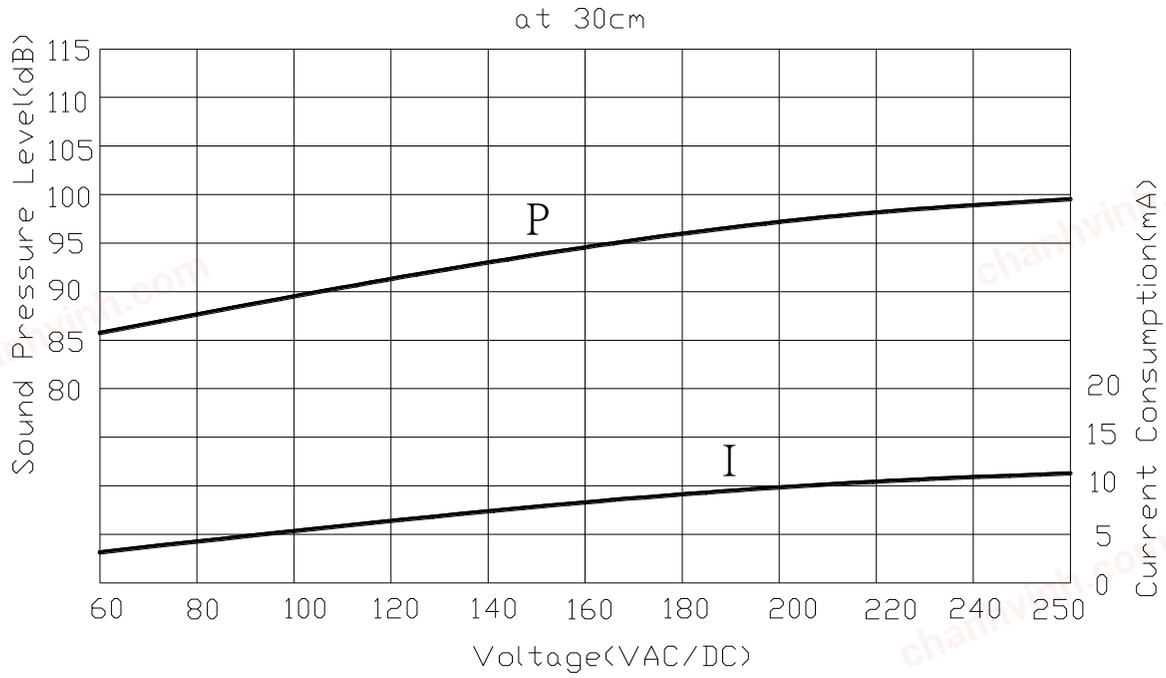
S.P.L. Measuring Circuit



Mic : RION S.P.L meter UC30 or equivalent
S.G：Hewlett Packard 33120A Function Generator or equivalent

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E. VOLTAGE:SOUND PRESSURE LEVEL / VOLTAGE:CURRENT CONSUMPTION CHARACTERISTICS

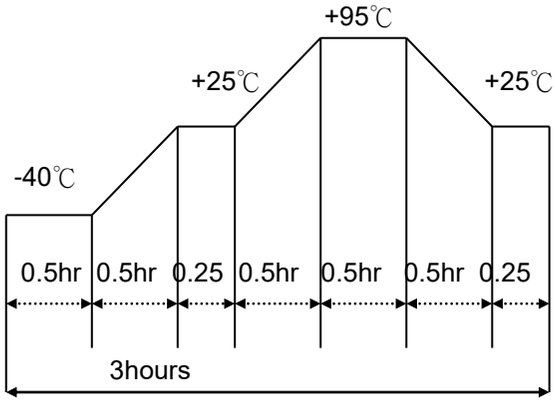


F. MECHANICAL CHARACTERISTICS

No.	Item	Test Condition	Evaluation standard
1	Solderability (Connector excepted)	Stripped wires of lead wires are immersed in rosin for 5 seconds and then immersed in solder bath of +270±5℃ for 3±0.5 seconds. .	90% min. stripped wires shall be wet with solder.(Except the edge of terminal)
2	Lead Wire Pull Strength	The pull force shall be applied to double lead wire： Horizontal 3.0N(0.306kg) for 30 seconds. Vertical 2.0N(0.204kg) for 30 seconds.	No damage and cutting off.
3	Vibration	Buzzer shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55hz band of vibration frequency to each of 3 per-pendicular directions for 2 hours. .	The value of oscillation frequency/ current consumption should be in ±10% compared with initial ones .The SPL should be in ±10dB compared with initial one.
4	Drop test	**The part only shall be dropped from a height of 75cm onto a 40mm thick wooden board 3 times in 3 axes (X.Y.Z). (a total of 9 times).**	

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G. ENVIRONMENT TEST

No.	Item	Test Condition	Evaluation standard
1	High temp. test	After being placed in a chamber at +95℃ for 240 hours	Being placed for 4 hours at +25℃, buzzer shall be measured. The value of oscillation frequency/ current consumption should be in±10% compared with initial ones .The SPL should be in±10dB compared with initial one.
2	Low temp. test	After being placed in a chamber with –40℃for 240 hours	
3	Humidity test	After being placed in a chamber at +40℃ and 90±5% relative humidity for 240 hours	
4	Temp. cycle test	The part shall be subjected to 5 cycles. One cycle shall be consist of：	

H. RELIABILITY TEST

No.	Item	Test condition	Evaluation
1	Operating life test	1.Continuous life test 48 hours continuous operation at +70℃ with rated voltage applied. . 2.Intermittent life test A duty cycle of 1 minute on,1 minutes off, a minimum of 5000 times at room temp.(+25±2℃)and rated voltage applied.	Being placed for 4 hours at +25℃, buzzer shall be measured. The value of oscillation frequency/ current consumption should be in ±10% compared with initial ones .The SPL should be in ±10dB compared with initial one.

TEST CONDITION.

Standard Test Condition :a) Temperature : +5 ~ +35℃ b) Humidity : 45-85% c) Pressure : 860-1060mbar

Judgment Test Condition :a) Temperature : +25 ± 2℃ b) Humidity : 60-70% c) Pressure : 860-1060mbar