

Features

- Electroacoustic parts
- Used to sound warning sounds
- Prompt sound or feedback sound
- Used in various electronic products

RS PRO Piezo Buzzer Components

RS Stock No.: 535-8304



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

SCOPE

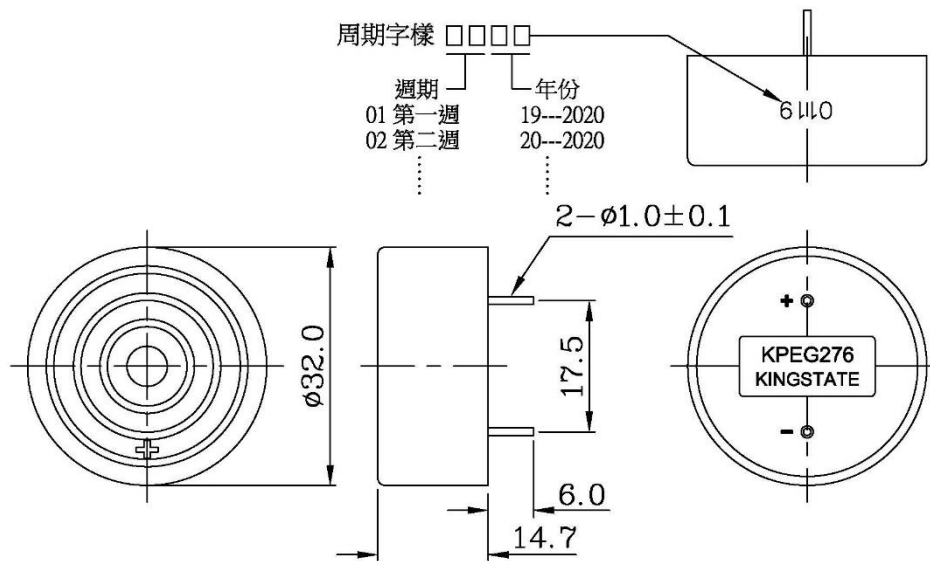
This specification applies piezo audio indicator, 535-8304

SPECIFICATION

No.	Item	Unit	Specification	Condition
1	Resonant frequency	KHz	2.7 ± 0.5	
2	Operating Volt. range	VDC	3 ~ 28	
3	Current consumption	mA	MAX 6	at 12VDC
4	Sound pressure level	dB	MIN 79	at 30cm/12VDC
5	Rated Voltage	VDC	12	
6	Tone		Continuous	
7	Operating temp.	°C	-30 ~ + 85	
8	Storage temp.	°C	-40 ~ + 95	
9	Dimension	mm	φ32.0 x H14.7	See appearance drawing
10	Weight (MAX)	gram	7.0	
11	Material		ABS UL-94 1/16" HB HIGH HEAT (BLACK)	
12	Terminal		Pin type (Plating Sn)	See appearance drawing

13	Environmental Protection Regulation		RoHS2.0	
14	Storage life	month	6	6 months preservation at room temp.(25±3°C), Humidity40%

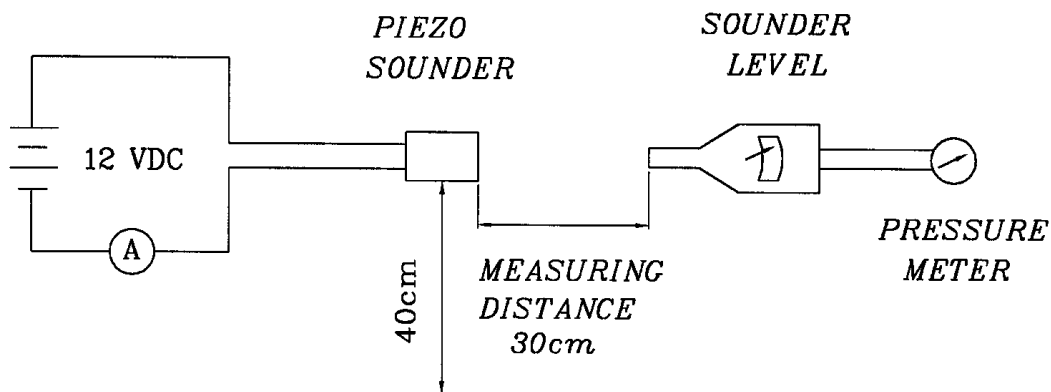
APPEARANCE DRAWING



Tol : ± 0.5 Unit : mm

MEASUREMENT METHOD

S.P.L. Measuring Circuit

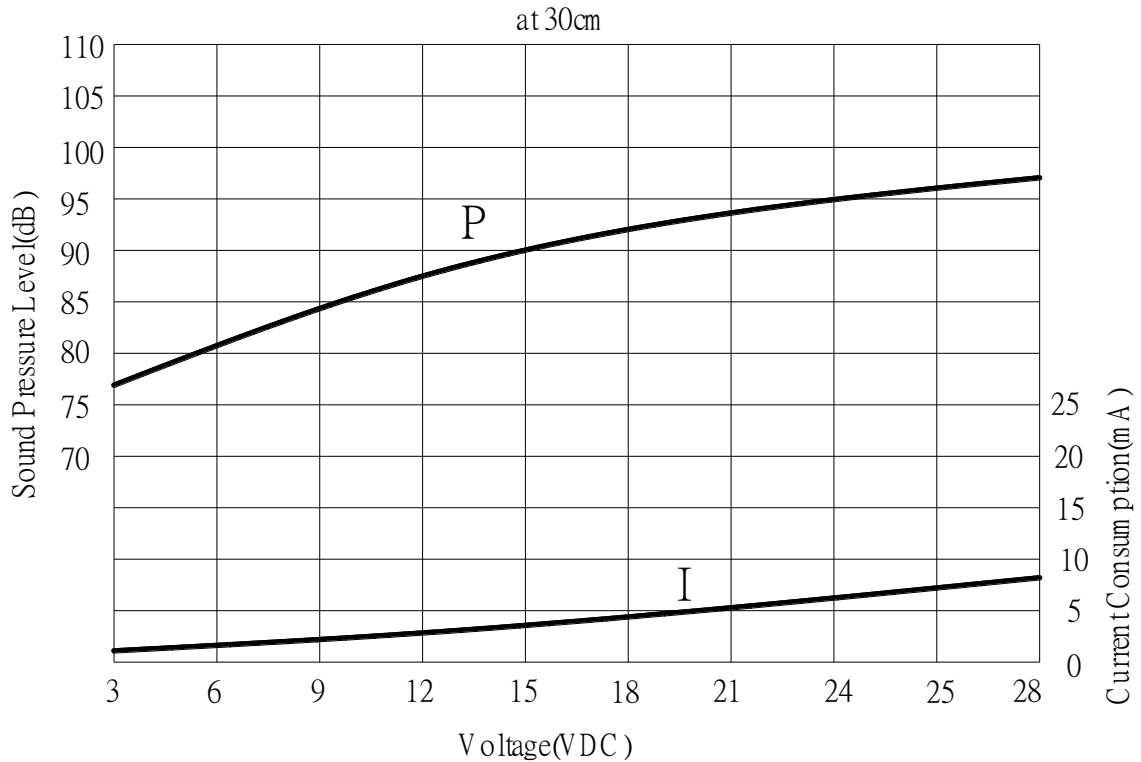


Mic : RION S.P.L meter UC30 or equivalent

Mic: RION

VOLTAGE

VOLTAGE: SOUND PRESSURE LEVEL / VOLTAGE: CURRENT CONSUMPTION CHARACTERISTICS



MECHANICAL CHARACTERISTICS

No.	Item	Test Condition	Evaluation standard
1	Solderability	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +270±5°C for 3±1 seconds.	90% min. lead terminals shall be wet with solder. (Except the edge of terminal)
2	Soldering Heat Resistance	Lead terminal are immersed up to 1.5mm from sounder's body in solder bath of +300±5°C for 3± 0.5 seconds or +260±5°C for 10±1 seconds.	No interference in operation
3	Terminal Mechanical Strength	The force 10 seconds of 9.8N (1.0kg) is applied to each terminal in axial direction.	No damage and cutting off

4	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 ± 10 dB compared with initial one.
5	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).	

ENVIRONMENT TEST

No.	Item	Test Condition	Evaluation standard
1	High temp. test	After being placed in a chamber at +125°C for 240 hours	Being placed for 4 hours at +25°C, buzzer shall be measured. The value of oscillation frequency/ current consumption should be in $\pm 10\%$ compared with initial ones .The SPL should be in ± 10 dB compared with initial one.
2	Low temp. test	After being placed in a chamber at -40°C for 240 hours	
3	Humidity test	After being placed in a chamber at +40°C and 90 \pm 5% relative humidity for 240 hours	
4	Temp. cycle test	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of:</p> <p style="text-align: center;">3hours</p>	

No.	Item	Test condition	Evaluation
1	Operating life test	<p>1.Continuous life test 2 hours continuous operation at +105°C with 15V applied.</p> <p>2.Intermittent life test A duty cycle of 1 minute on, 5 minutes off, a minimum of 10000 times at room temp.(+25 ±2°C)and maximum rated voltage applied.</p>	<p>Being placed for 4 hours at +25°C, 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.</p>

RELIABILITY TEST

TEST CONDITION.

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

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