

FEATURES

- Piezo buzzer with a slow-pulsed tone
- Screw mounting
- Minimum supply voltage of 6 V DC
- Maximum supply voltage of 28 V DC
- 80 dB sound level
- Internal drive
- Diameter of 42.5 mm
- Height of 33 mm
- Operating temperature range of -30°C to +85°C
- Supply current of 12 mA
- Minimum frequency of 2300 kHz
- Maximum frequency of 3.3 kHz

RS PRO 80dB, Panel Mount Fast Pulse Internal Piezo Buzzer

RS Stock No.: 535-8360



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

Product Description

These versatile internal buzzers are part of our stringently tested RS PRO series. Compact in size, they operate at a wide voltage range and produce a clear sound. These buzzers can function between 6 V DC to 28 V DC, and draw a 12 mA current, making them more reliable than lower current buzzers. They're used in a range of applications, including in most consumer appliances such as computers and microwaves. The buzzers emit a slow-pulsing 80 dB tone that's clearly audible, even from a considerable distance. What's more, they have a lower impact on surrounding circuitry compared to magnetic buzzers. Installing them is quick and simple thanks to their handy screw mounting.

General Specifications

Mounting Type	Panel Mount
Sound Level	80dB
Drive Type	Internal
Tone Type	Fast Pulse
Colour	Black
Application	Alarms or warning systems, communications equipment and electronic cash registers.

Electrical Specifications

Minimum Supply Voltage	6Vdc
Maximum Supply Voltage	28Vdc
Maximum Frequency	3.3kHz
Minimum Frequency	2300Hz
Supply Current	12mA

Mechanical Specifications

Diameter	42.5mm
Height	33mm
Dimensions	42.5 (Dia.) x 33mm
Sound Level Distance	30cm

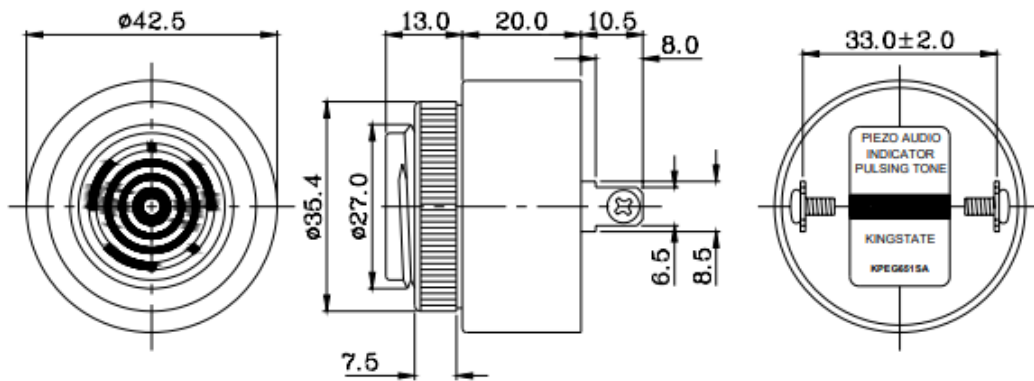
Operation Environment Specifications

Minimum Operating Temperature	-30°C
Maximum Operating Temperature	85°C

Approvals

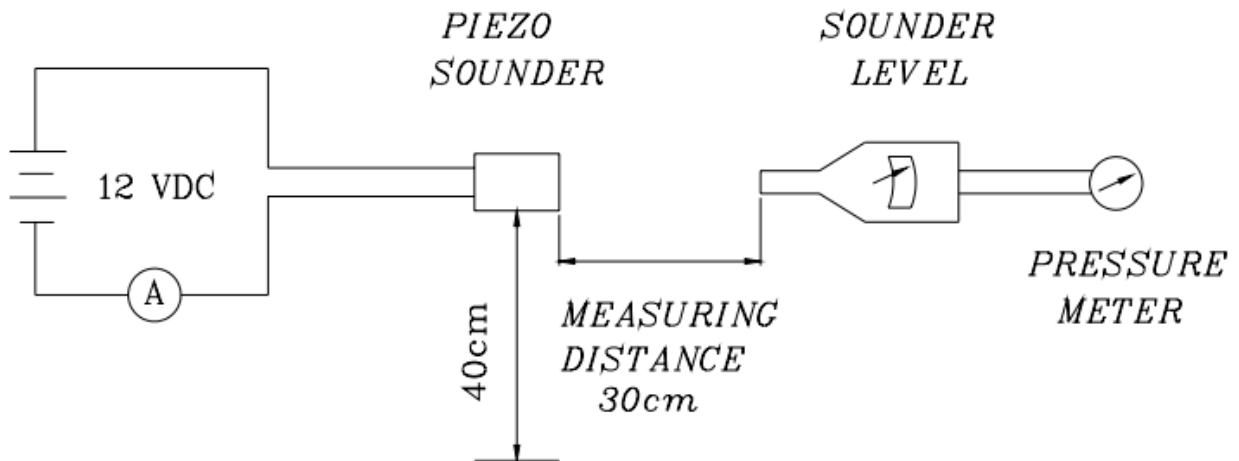
Compliance/Certifications	ANSI/ESD S20.20:2014, BS EN 61340-5-1:2007
---------------------------	--





Tol : ± 0.5
Unit:mm

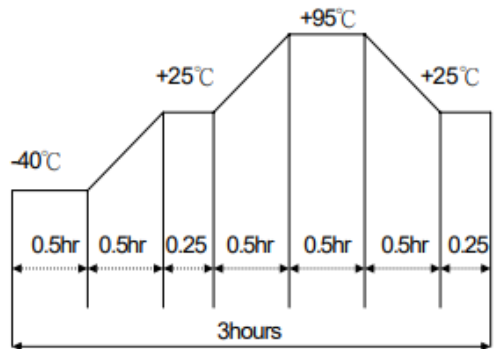
S.P.L. Measuring Circuit 音壓測試接線圖



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

Mic : RION 噪音計 UC30 或同等品

No.	Item	Test Condition	Evaluation standard
1	Solderability 焊錫附著性	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of $+270\pm 5^{\circ}\text{C}$ for 3 ± 1 seconds. 端子部份浸入松香溶液 5 秒後,再浸入 $+270\pm 5^{\circ}\text{C}$ 溶融焊錫槽中 3 ± 1 秒.	90% min. lead terminals shall be wet with solder. (Except the edge of terminal) 浸入端子部份附著焊錫 90% 以上.(末端斷面不算)
2	Soldering Heat Resistance 焊錫耐熱性	Lead terminal are immersed up to 1.5mm from sounder's body in solder bath of $+300\pm 5^{\circ}\text{C}$ for 3 ± 0.5 seconds or $+260\pm 5^{\circ}\text{C}$ for 10 ± 1 seconds. 距離端子根部 1.5mm 的位置,浸入 $+300\pm 5^{\circ}\text{C}$ 的焊錫槽 3 ± 0.5 秒,或 $+260\pm 5^{\circ}\text{C}$ 的焊錫槽 10 ± 1 秒.	No interference in operation 操作無任何不良.
3	Terminal Mechanical Strength 端子強度	The force 10 seconds of 9.8N (1.0kg) is applied to each terminal in axial direction. 各端子的軸方向施以 9.8N (1.0kg) 的力量 10 秒.	No damage and cutting off 端子不鬆動, 不脫落.
4	Vibration 振動試驗	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. 振動週波數 10 55HZ、全振幅 1.5mm 於 X.Y.Z 3 個方向,各 2 小時.	The value of oscillation frequency/ current consumption should be in 10% compared with initial ones. The SPL should be in $\pm 10\text{dB}$ compared with initial one.
5	Drop test 落下測試	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). 單體從 75 公分高處, X.Y.Z 3 個方向,各 3 回,落於 40mm 厚木板上.	譜展頻率與消耗電流變化量須在 $\pm 10\%$ 內. 輸出音壓變化量須在 $\pm 10\text{dB}$ 內.

No.	Item	Test Condition	Evaluation standard
1	High temp. test 高溫測試	After being placed in a chamber at $+95^{\circ}\text{C}$ for 240 hours 置於 $+95^{\circ}\text{C}$ 環境中 240 小時	Being placed for 4 hours at $+25^{\circ}\text{C}$, 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 $\pm 10\text{dB}$ compared with initial one. 經測試後, 靜置於 $+25^{\circ}\text{C}$ (室溫) 環境中 4 小時後, 譜展頻率與消耗電流變化量須在 $\pm 10\%$ 內. 輸出音壓變化量須在 $\pm 10\text{dB}$ 內.
2	Low temp. test 低溫測試	After being placed in a chamber with -40°C for 240 hours 置於 -40°C 環境中 240 小時	
3	Humidity test 相對濕度測試	After being placed in a chamber at $+40^{\circ}\text{C}$ and $90\pm 5\%$ relative humidity for 240 hours 置於 $+40^{\circ}\text{C}$, 相對濕度 $90\pm 5\%$ 環境中 240 小時	
4	Temp. cycle test 溫度循環試驗	The part shall be subjected to 5 cycles. One cycle shall be consist of : 單體承受溫度循環試驗 5 次,其循環內容如圖示:  The diagram shows a temperature cycle starting at -40°C for 0.5hr, ramping up to $+25^{\circ}\text{C}$ (0.5hr dwell), ramping up to $+95^{\circ}\text{C}$ (0.25hr dwell), ramping down to $+25^{\circ}\text{C}$ (0.5hr dwell), and ramping down to -40°C (0.5hr dwell). This cycle repeats 5 times, with a total duration of 3 hours.	

No.	Item	Test condition	Evaluation standard
1	Operating life test 壽命測試	<p>1. Continuous life test 高溫壽命測試(連續) 48 hours continuous operation at +70°C with rated voltage applied. 在+70°C環境下,以額定電壓連續操作 48 小時.</p> <p>2. Intermittent life test 室溫壽命測試(間歇) A duty cycle of 1 minute on, 1 minutes off, a minimum of 5000 times at room temp. (+25±2°C) and rated voltage applied. 在室溫下(+25±2°C), 以額定電壓操作, 通電 1 分鐘斷電 1 分鐘, 測試 5000 次循環.</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> <p>經測試後, 靜置於+25°C (室溫) 環境中 4 小時後, 諧振頻率與消耗電流變化量須在±10%內. 輸出音壓變化量須在±10dB 內.</p>

TEST CONDITION.

Standard Test Condition 一般測試條件	:	a) Temperature : +5 ~ +35°C	b) Humidity : 45-85%	c) Pressure : 860-1060mbar
Judgement Test Condition 爭議時測試條件	:	a) Temperature : +25 ± 2°C	b) Humidity : 60-70%	c) Pressure : 860-1060mbar