FEATURES

- Continuous piezo buzzer
- Sound level of 76 dB
- Resonant frequency of 2.8 kHz
- Internal drive
- Panel mounting
- Supply current of 4 mA
- Diameter of 32 mm
- Length of 44 mm
- Height of 13.5 mm
- Minimum operating temperature of -30°C
- Maximum operating temperature of +85°C
- Minimum supply voltage of 3 V (DC)
- Maximum supply voltage of 12 V (DC)
- Minimum frequency of 3 kHz
- Maximum frequency of 4 kHz

RS PRO 85dB, Panel Mount Continuous Internal Piezo Buzzer

RS Stock No.: 535-8275

RS PRO 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

Wire up this piezo buzzer from RS PRO to generate sounds from your electronic equipment. Safe and simple to install, it emits a continuous tone of up to 85 dB, with a resonant frequency of 2.8 kHz. In comparison to magnetic buzzers, this piezo buzzer releases sound with a much greater pressure level. It features internal circuitry and you can mount it directly onto a printed circuit board. It includes flying leads, allowing for quick connections, and its ABS (acrylonitrile butadiene styrene) outer construction makes it very resistant to shock and chemicals. Finally, you can use it with a very low current of 4 mA.

General Specifications

Mounting Type	Panel Mount
Sound Level	85dB
Drive Type	Internal
Tone Type	Continuous
Colour	Black
Housing Material	ABS
Application	Alarms or warning systems, communications equipment and electronic cash registers.

Electrical Specifications

Minimum Supply Voltage	3Vdc
Maximum Supply Voltage	12Vdc
Maximum Frequency	4kHz
Minimum Frequency	3000Hz
Supply Current	4mA

Mechanical Specifications

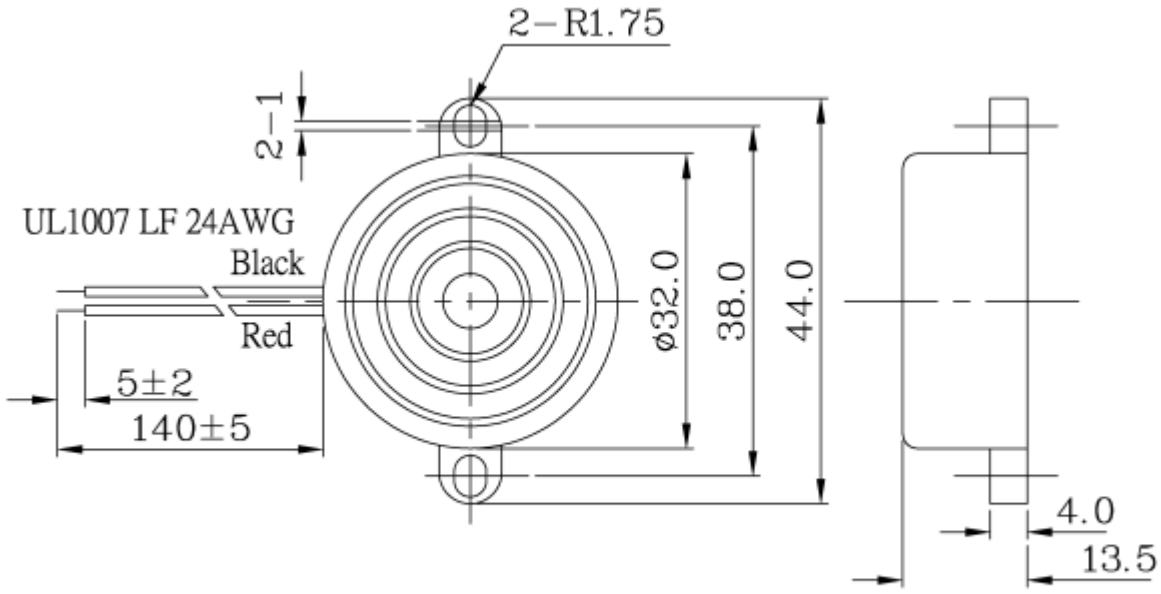
Diameter	32mm
Length	44mm
Depth	13.5mm
Height	13.5mm
Dimensions	32 (Dia.) x 13.5mm
Weight	8g
Lead Wire	UL1007 LF 24AWG
Sound Level Distance	30cm

Operation Environment Specifications

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

Approvals

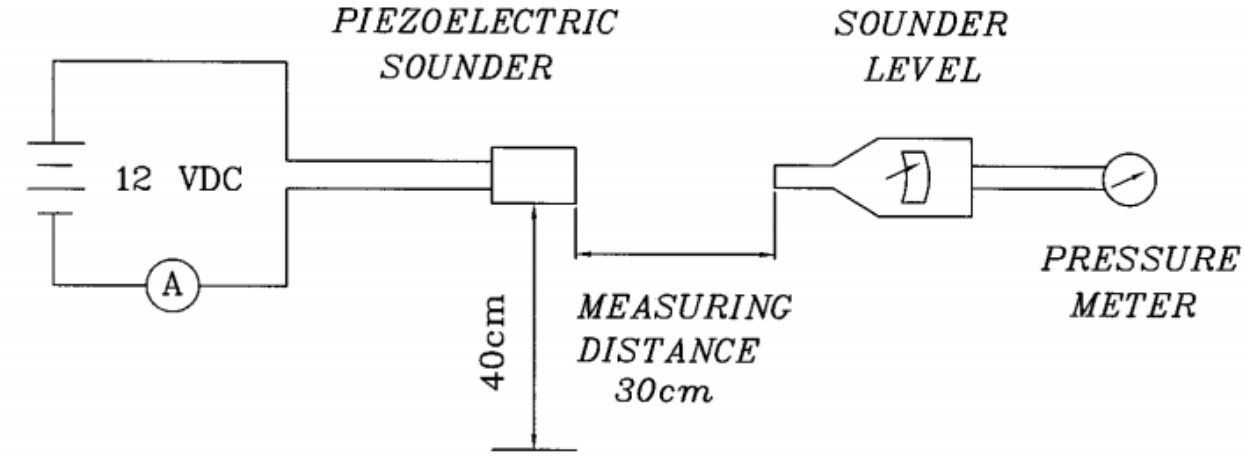
Compliance/Certifications	RoHS



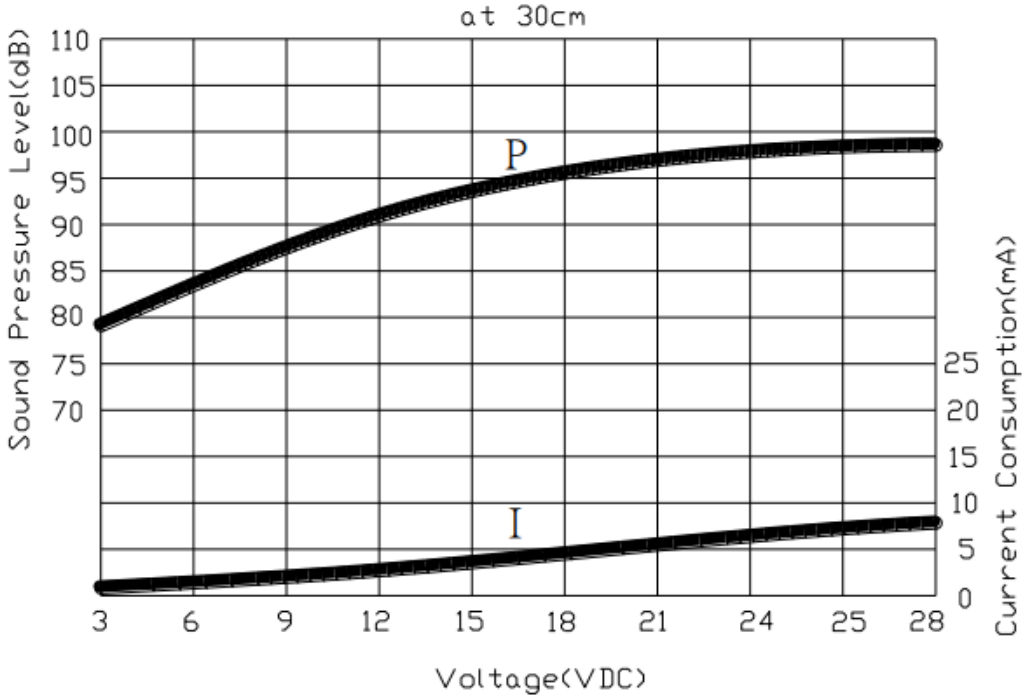
Tol : ± 0.5
Unit : mm

D. MEASURING METHOD 測量方法

S.P.L. Measuring Circuit 音壓測試接線圖



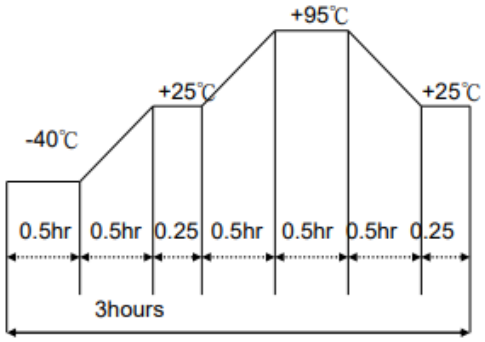
E.VOLTAGE:SOUND PRESSURE LEVEL / VOLTAGE: CURRENT CONSUMPTION CHARACTERISTICS 電壓與音壓/電壓與耗電流之特性



F. MECHANICAL CHARACTERISTICS 機械特性

No.	Item	Test Condition	Evaluation standard
1	Solderability 焊錫附著性 (Connector excepted) (端子類不適用此項)	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. 裸線部份浸入松香溶液 5 秒後,再浸入+270±5℃溶融焊錫槽 3±0.5 秒.	90% min. stripped wires shall be wet with solder.(Except the edge of terminal) 浸入裸線部份附著焊錫 90%以上.(末端斷面不算)
2	Lead Wire Pull Strength 線材拉力	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. 雙線材水平方向施以3.0N(0.306kg)的力量, 垂直方向施以 2.0N(0.204kg) 的力量,各30秒.	No damage and cutting off. 線材不鬆動,不脫落.
3	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 ±10dB compared with initial one. 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.
4	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.**	

G. ENVIRONMENT TEST 環境測試

No	Item	Test Condition	Evaluation standard
1	High temp. test 高溫測試	After being placed in a chamber at +95℃ for 240 hours 置於+95℃環境中 240 小時	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. 經測試後, 靜置於+25℃（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.
2	Low temp. test 低溫測試	After being placed in a chamber with –40℃for 240 hours 置於-40℃ 環境中 240 小時	
3	Humidity test 相對濕度測試	After being placed in a chamber at +40℃ and 90±5% relative humidity for 240 hours 置於+40℃, 相對濕度 90±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： ： 單體承受溫度循環測試 5 次,其循環內容如圖示： 	

H. RELIABILITY TEST 信賴性測試

No.	Item	Test condition	Evaluation standard
1	Operating life test 壽命測試	1.Continuous life test高溫壽命測試(連續) 48 hours continuous operation at +70℃ with rated voltage applied. 在+70℃境下,以額定電壓連續操作48小時. 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℃)and rated voltage applied 在室溫下(+25±2℃), 以額定電壓操作, 通電1分鐘/斷電1分鐘,測試5000次循環.	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. 經測試後, 靜置於+25℃（室溫）環境中4小時後,諧振頻率與消耗電流變化量須在±

TEST CONDITION.

Standard Test Condition： a) Temperature：+5 ~ +35℃ b) Humidity：45-85% c) Pressure：860-1060mpa
一般測試條件： a) 溫度：+5 ~ +35℃ b) 濕度：45-85% c) 氣壓：860-1060mpa
Judgement Test Condition： a) Temperature：+25 ± 2℃ b) Humidity：60-70% c) Pressure：860-1060mpa.
爭議時測試條件： a) 溫度：+25 ± 2℃ b) 濕度：60-70% c) 氣壓：860-1060mpa