

**A: Scope**

This specification applies to Piezo audio indicator **TRIP-2812L**

**B: SPECIFICATION**

No.	Item	Unit	Specification	Condition
1	Resonant frequency	KHz	4.6+/-0.5	
2	Operating Volt range	VDC	3~28	
3	Current Consumption	mA	MAX 4	at 12VDC
4	Sound Pressure Level	dB	MIN82	at 30cm/12VDC
5	Rated Voltage	VDC	12	
6	Tone		Continuous	at 12VDC
7	Operating Temp	C	-20~+60	
8	Storage Temp	C	-40~+60	
9	Dimension	mm	20.0xH10.0	See appearance drawing
10	Weight ( MAX)	gram	3.5	
11	Material		ABS UL-94 1/16" HB (Black)	
12	Terminal		Wire Type	See appearance drawing
13	Environmental Protection Regulation		RoHS	
14	Storage Life	Months	6	6 mo preservation at room temperature (25+/- 3 C)

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All dimensions are in MM unless otherwise specified

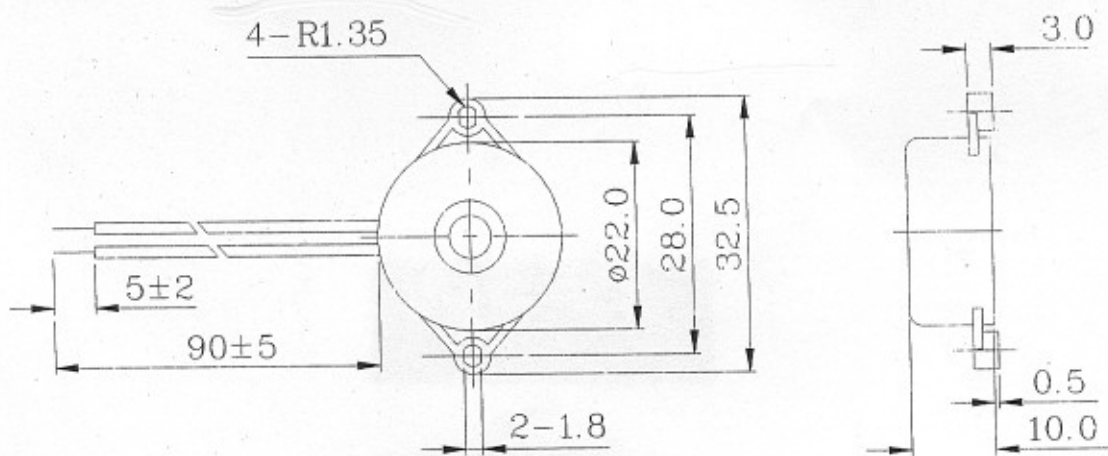
Drawing Number:  
**TRIP-2812L**

Title:  
**Piezo Audio Indicator**  
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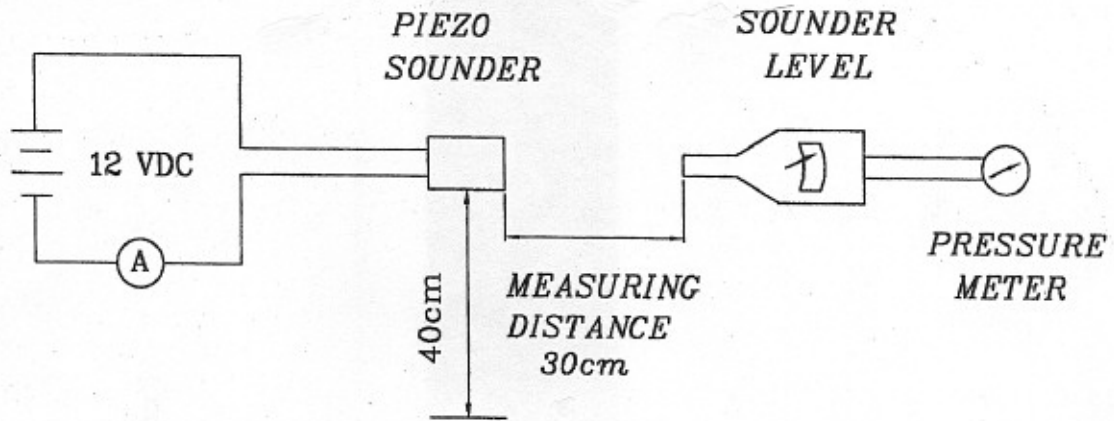
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### C: APPEARANCE DRAWING



### D: MEASURING METHOD



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

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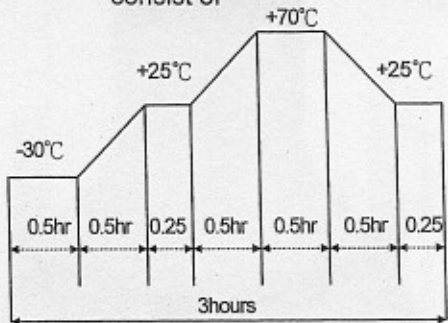
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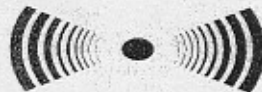
## E: MECHANICAL CHARACTERISTICS

No.	Item	Test Conditions	Evaluation Standards
1	Solderability	Stripped Wires of Lead wires are immersed in rosin for 5 seconds and then immersed in solder bath of $+230 \pm 5$ C for $3 \pm 1$ Seconds	90% min stripped wires shall be wet with solder (Except the edge of the terminal)
2	Soldering Heat Resistance	Stripped wires are immersed up to 1.5mm from sounder's body in solder bath of $300 \pm 5$ C for $3 \pm 1$ Seconds or $260 \pm 5$ C for $10 \pm 1$ seconds	No interference in operation
3	Lead Wire Pull Strength	The pull force shall be: Horizontal 3.0N Vertical 2.0N	No damage and cutting off
4	Vibration	Buzzer shall be measured after being applied vibration of amplitude of 1.5mm with 10 to 55 Hz of band vibration frequency to each of 3 perpendicular directions for 2 hrs	The value of oscillation frequency / current consumption should be in 10% compared with the initial ones. The SPL should be $\pm 10$ dB compared with the initial one.
5	Drop Test	The part only shall be dropped from a height of 75cm on to a 40mm thick wooden board 3 times in 3 axes (X.Y.Z) (a total of 9 times)	

## F: ENVIRONMENT TEST

No	Item	Test Condition	Evaluation Standard
1	High Temp Test	After being placed in a chamber at $+70$ 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 $\pm 10$ dB compared with initial one.
2	Low Temp test	After being placed in a chamber at $-30$ 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	<p>The part shall be subjected to 5 cycles. One cycle shall consist of</p> 	

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## G: RELIABILITY

No	Item	Test Condition	Evaluation Standard
1	Operating Test Life	1. Continuous Life test 250 hours continuous at +85 C with rated voltage applied. 2. Intermittent Life test. A duty cycle of 1 minute on , 5 minutes off , a minimum of 1000 times at room temp ( +25+/-2 C) and related voltage applied.	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.

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