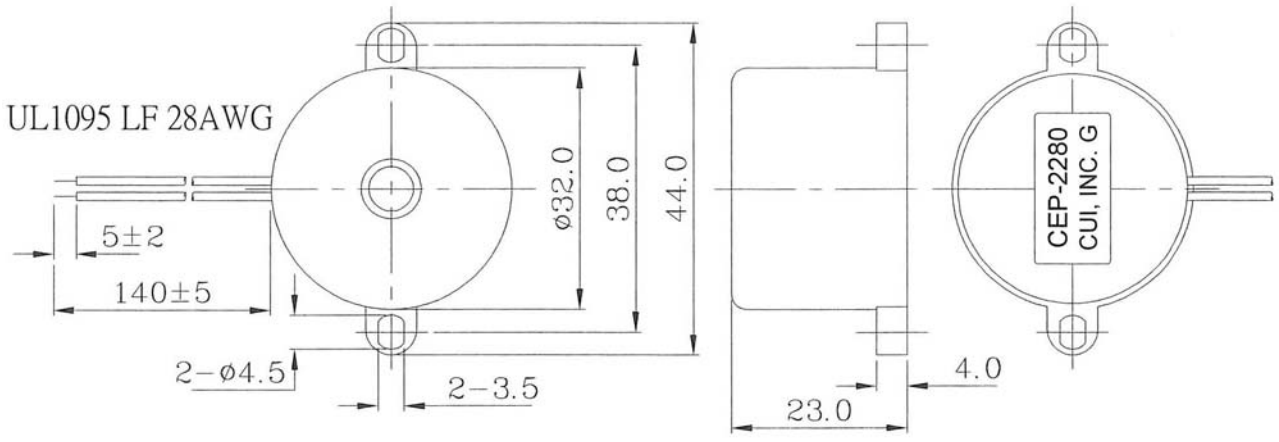
RoHS

Specifications

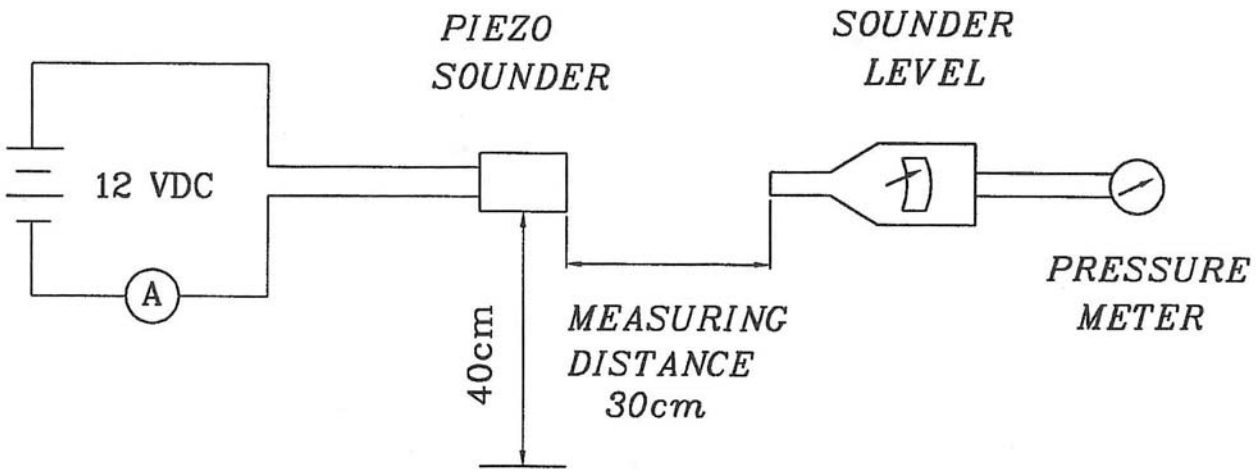
Resonant frequency	2.5 ~ 3.8 KHz	
Operating voltage	6.0 ~ 18.0 V dc	
Current consumption	17 mA max.	at 12 V dc
Sound pressure level	88 db min.	at 30 cm / 12 V dc
Rated Voltage	12 V dc	
Tone	High/Low	
Operating tempurature	-20 ~ +60° C	
Storage tempurature	-30 ~ +70° C	
Dimensions	ø32.0 x H23.0 mm	See attached drawing
Weight	13.20 g max.	
Material	ABS UL-94 1/16” HB (Black)	
Terminal	Wire type	See attached drawing
RoHS	yes	

Appearance Drawing

Tolerance: ±0.5



Measurement Method

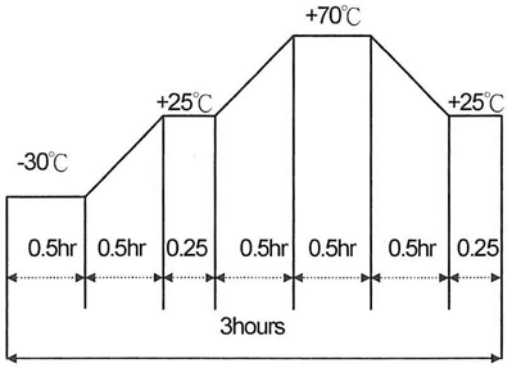


S.P.L. Measuring Circuit
Mic: RION S.P.L. meter UC 30 or equivalent
S.G.: Hewlett Packard 33120A Function Generator or equivalent

Mechanical Characteristics

Item	Test Condition	Evaluation Standard
Solderability (Connector excepted)	Stripped wires of lead wires are immersed in rosin for 5 seconds and then immersed in a solder bath of +270 ±5°C for 3 ±0.5 seconds.	90% min. of the stripped wires will be wet with solder. (Except the edge of the terminal)
Terminal Mechanical Strength	The pull force should be applied to the double lead wire: Horizontal 3.0N (0.306kg) for 30 seconds Vertical 2.0N (0.204kg) for 30 seconds	No damage or cutting off.
Vibration	The buzzer will be measured after applying a vibration amplitude of 1.5 mm with 10 to 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours.	The value of oscillation frequency/current consumption should be ±10% of the initial measurements. The SPL should be within ±10dB compared with the initial measurement.
Drop Test	The part will be dropped from a height of 75 cm onto a 40 mm thick wooden board 3 times in 3 axis (X, Y, Z) for a total of 9 drops.	

Environment Test

Item	Test Condition	Evaluation Standard
High temp. test	After being placed in a chamber at +70°C for 240 hours.	The buzzer will be measured after being placed at +25°C for 4 hours. The value of the oscillation frequency/current consumption should be within ±10% compared to the initial measurements. The SPL should be within ±10dB compared to the initial measurements.
Low temp. test	After being placed in a chamber at -30°C for 240 hours.	
Humidity test	After being placed in a chamber at +40°C and 90±5% relative humidity for 240 hours.	
Temp. cycle test	The part shall be subjected to 5 cycles. One cycle will consist of: 	

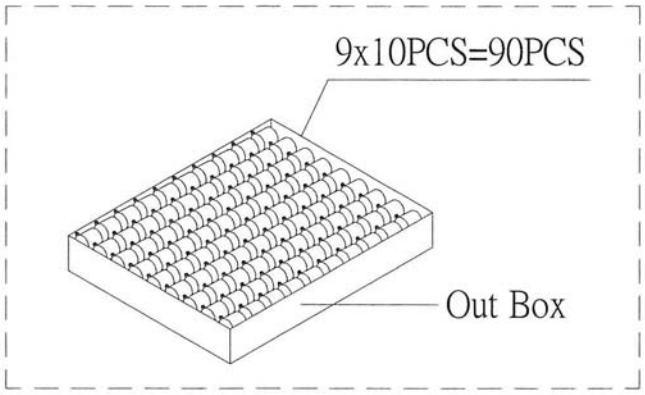
Reliability Test

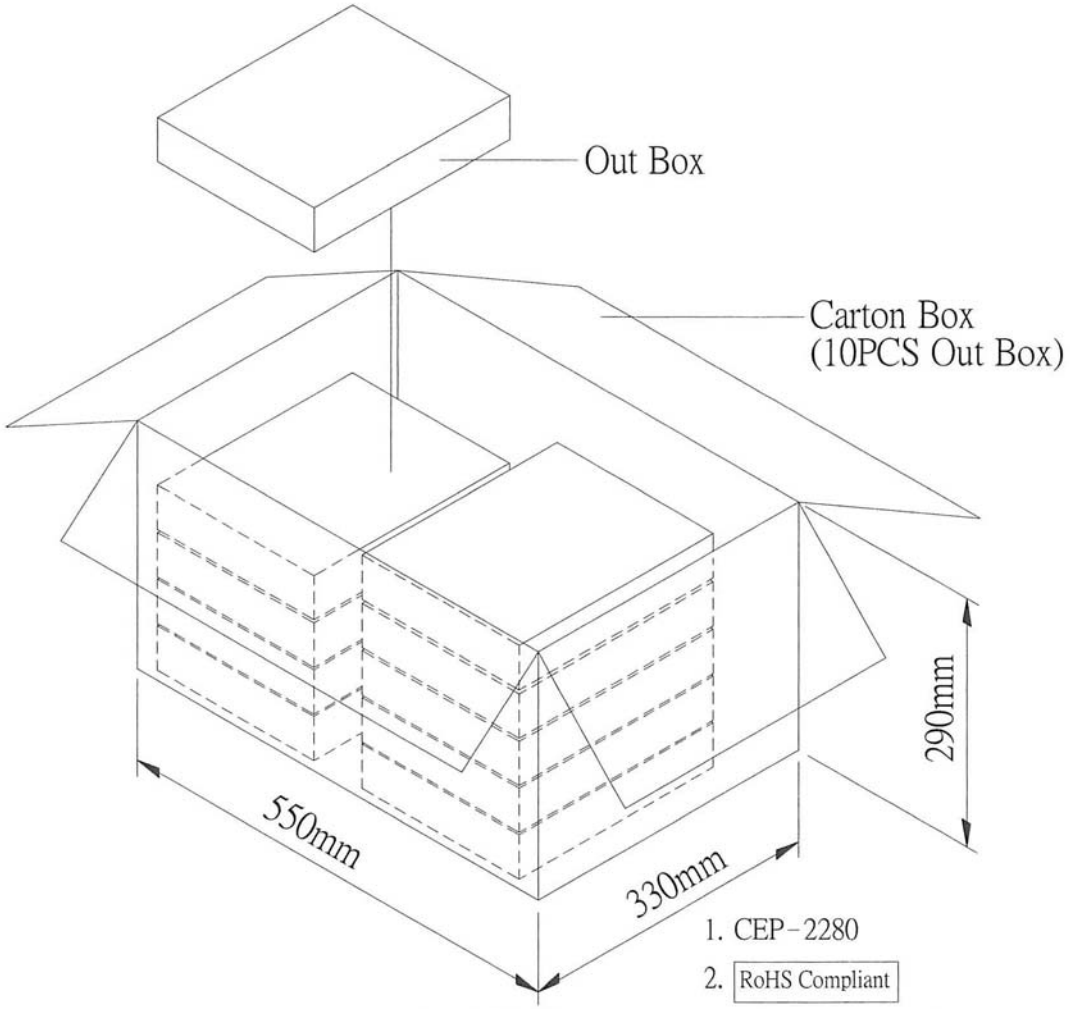
Item	Test Condition	Evaluation Standard
Operating (Life Test)	1. Continuous life test: The part will be subjected to 48 hours of continuous operation at +45°C with rated voltage applied. 2. Intermittent life test: A duty cycle of 1 minute on, 1 minute off, a minimum of 5,000 times at room temp (+25±2°C) with rated voltage applied.	The buzzer will be measured after being placed at +25°C for 4 hours. The value of the oscillation frequency/current consumption should be ±10% compared to the initial measurements. The SPL should be ±10dB compared to the initial measurements.

Test Conditions

Standard Test Condition	a) Tempurature: +5 ~ +35°C	b) Humidity: 45 - 85%	c) Pressure: 860 - 1060 mbar
Judgement Test Condition	a) Tempurature: +25 ±2°C	b) Humidity: 60 - 70%	c) Pressure: 860 - 1060 mbar

Packaging





Out Box	310mmx248mmx49mm	1x90PCS=90PCS
Carton Box	550mmx330mmx290mm	90PCSx10=900PCS