Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

CUI INC

Part No: CEP-1130

Description: piezo audio transducer

Date: 9/18/2006
Unit: mm
Page No: 1 of 5

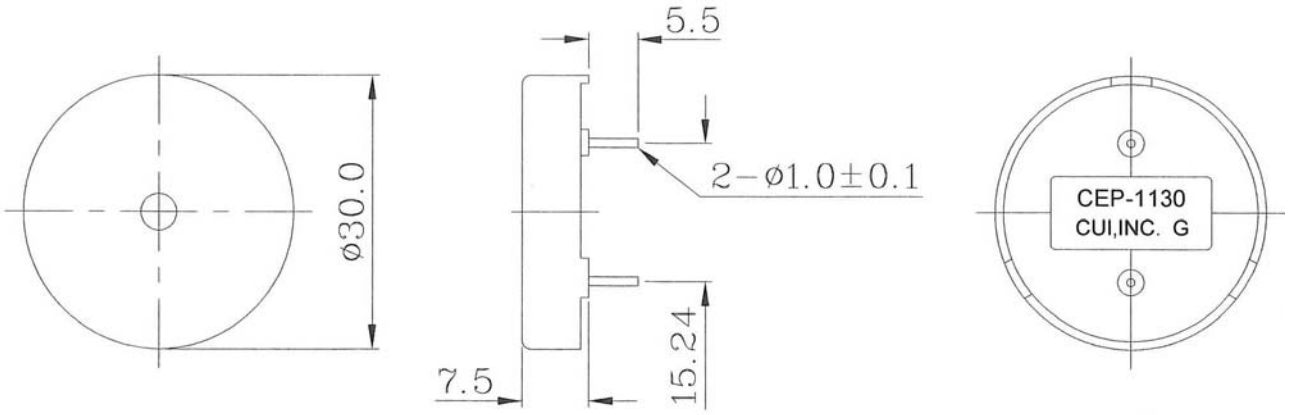
RoHS

Specifications

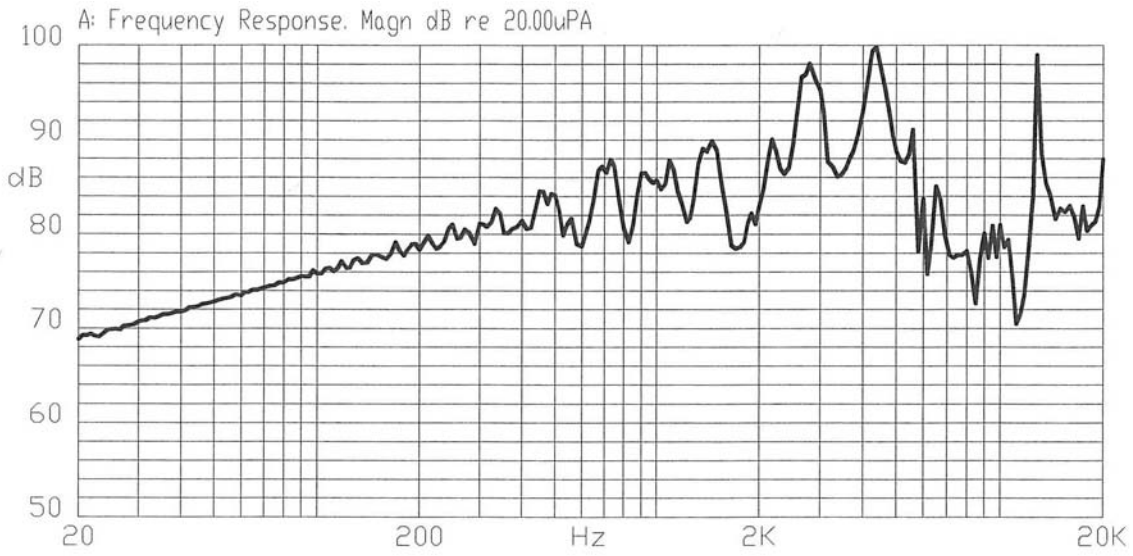
Operating voltage	30 Vp-p max.	
Current consumption	10 mA max.	at 10 Vp-p, square wave, 3.0 KHz
Sound pressure level	90 db min.	at 10 cm / 10 Vp-p, square wave, 3.0 KHz
Electrostatic capacitance	18,000 pF ±30%	at 1 KHz / 1 V
Operating temperature	-30 ~ +80° C	
Storage temperature	-40 ~ +80° C	
Dimensions	ø30.0 x H7.5 mm	
Weight	4.4 g max.	
Material	ABS UL-94 1/16" HB High Heat (Black)	
Terminal	Pin type (Sn Plating)	
RoHS	yes	

Appearance Drawing

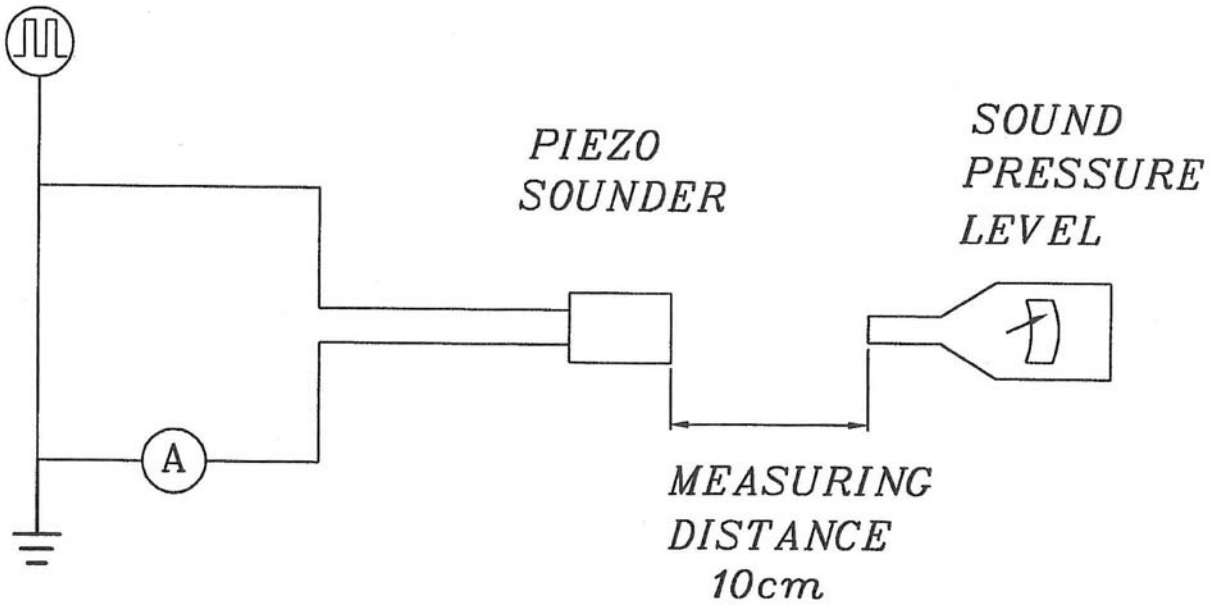
Tolerance: ±0.5



Typical Frequency Response Curve



Measurement Method



S.P.L. Measuring Circuit
Input Signal: 10 V p-p, 3.0 KHz, Square Wave
Mic: RION UC 30
S.G.: Hewlett Packard 33120A Function Generator or equivalent

Mechanical Characteristics

Item	Test Condition	Evaluation Standard
Solderability[1]	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. of the lead terminals will be wet with solder. (Except the edge of the terminal)
Soldering Heat Resistance	Lead terminals are immersed up to 1.5mm from buzzer's body in solder bath of 300 ±5°C for 3 ±0.5 or 260 ±5°C for 10 ±1 seconds.	No interference in operation.
Terminal Mechanical Strength	For 10 seconds, the force of 9.8N (1.0kg) is applied to each terminal in axial direction.	No damage or cutting off.
Vibration	The buzzer should 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 axes (X, Y, Z) for a total of 9 drops.	

Notes: 1. Not recommended for wave soldering

Environment Test

Item	Test Condition	Evaluation Standard
High temp. test	After being placed in a chamber at +80°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 ±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 -40°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:	

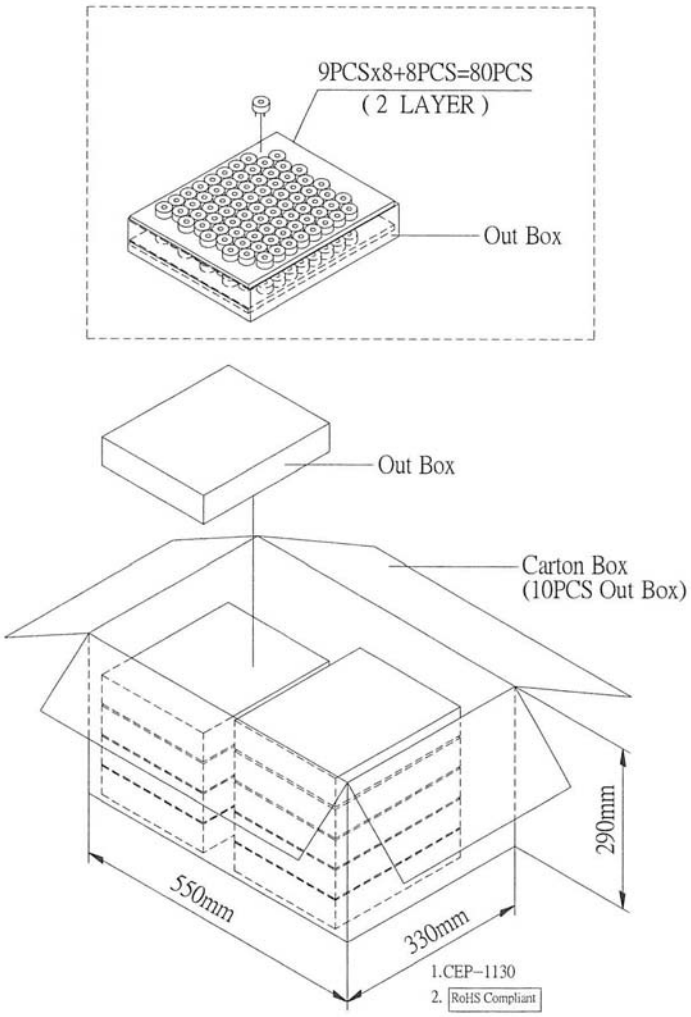
Reliability Test

Item	Test Condition	Evaluation Standard
Operating (Life Test)	1. Continuous life test: The part will be subjected to 250 hours of continuous operation at +80°C with rated voltage applied. 2. Intermittent life test: A duty cycle of 1 minute on, 5 minutes off, a minimum of 10,000 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 within ±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	2x80PCS=160PCS
Carton Box	550mmx330mmx290mm	160PCSx10=1,600PCS