

Description: piezo audio transducer

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

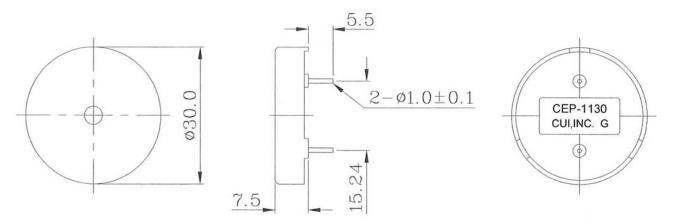


Specifications

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 I	High Heat (Black)
Terminal	Pin type (Sn Plating)	
RoHS	yes	

Appearance Drawing

Tolerance: ±0.5

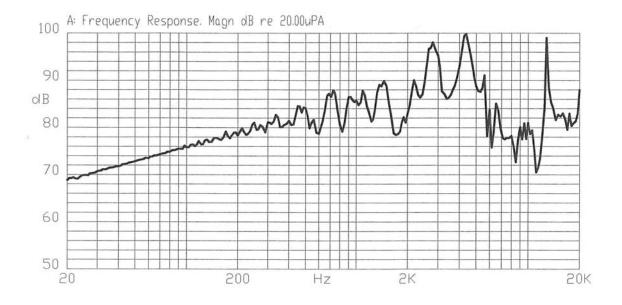




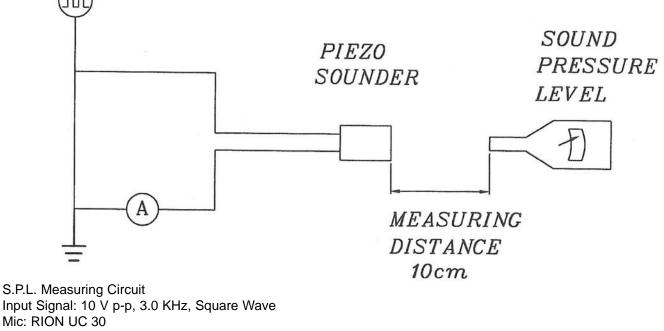
Date: 9/18/2006 Unit: mm Page No: 2 of 5

Description: piezo audio transducer

Typical Frequency Response Curve



Measurement Method



S.G.: Hewlett Packard 33120A Function Generator or equivalent



Description: piezo audio transducer

Date: 9/18/2006 Unit: mm Page No: 3 of 5

Mechanical Characteristics

Item	Test Condition	Evaluation Standard
Solderability	Lead terminals are immersed in rosin for	90% min. of the lead terminals
	5 seconds and then immersed in solder bath	will be wet with solder. (Except
	of 270 \pm 5°C for 3 \pm 1 seconds.	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	No interference in operation.
	3 ±0.5 or 260 ±5°C for 10 ±1 seconds.	
Terminal Mechanical Strength	For 10 seconds, the force of 9.8N (1.0kg) is	No damage or cutting off.
_	applied to each terminal in axial direction.	
Vibration	The buzzer should be measured after applying	The value of oscillation
	a vibration amplitude of 1.5 mm with 10 to	frequency/current consumption
	55 Hz band of vibration frequency to each of	should be ±10% of the initial
	the 3 perpendicular directions for 2 hours.	measurements. The SPL should
Drop Test	The part will be dropped from a height of	be within ±10dB compared with
	75 cm onto a 40 mm thick wooden board 3	the initial measurement.
	times in 3 axes (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 +80°C for 240 hours.		
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.	The buzzer will be measured after	
Temp. cycle test	The part shall be subjected to 5 cycles. One cycle will consist of:	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.	



Description: piezo audio transducer

Date: 9/18/2006 Unit: mm Page No: 4 of 5

Reliability Test

Item	Test Condition	Evaluation Standard
Operating (Life Test)	1. Continuous life test:	The buzzer will be measured afte
	The part will be subjected to 250 hours of	being placed at +25°C for 4
	continuous operation at +80°C with rated	hours. The value of the
	voltage applied.	oscillation frequency/current
		consumption should be ±10%
	2. Intermittent life test:	compared to the initial
	A duty cycle of 1 minute on, 5 minutes off, a	measurements. The SPL should
	minimum of 10,000 times at room temp	be within ±10dB compared to
	$(+25 \pm 2^{\circ}C)$ with rated voltage applied.	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



Description: piezo audio transducer

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

Packaging

