

Description: piezo audio transducer

Date: 9/25/2006 Unit: mm

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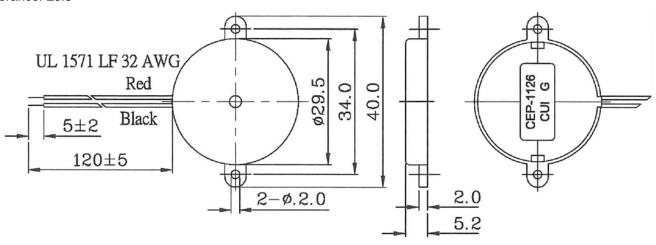


Specifications

Operating voltage	30 Vp-p max.	
Current consumption	10 mA max.	at 10 Vp-p, square wave, 2.8 KHz
Sound pressure level	92 db min.	at 10 cm / 10 Vp-p, square wave, 2.8 KHz
Electrostatic capacitance	18,000 pF ±30%	at 1 KHz / 1 V
Operating temperature	-30 ~ +85° C	
Storage temperature	-40 ~ +95° C	
Dimensions	ø29.5 x H5.2 mm	
Weight	5.6 g max.	
Material	ABS UL-94 1/16" HB High	Heat (Black)
Terminal	Wire type	
RoHS	yes	

Appearance Drawing

Tolerance: ±0.5

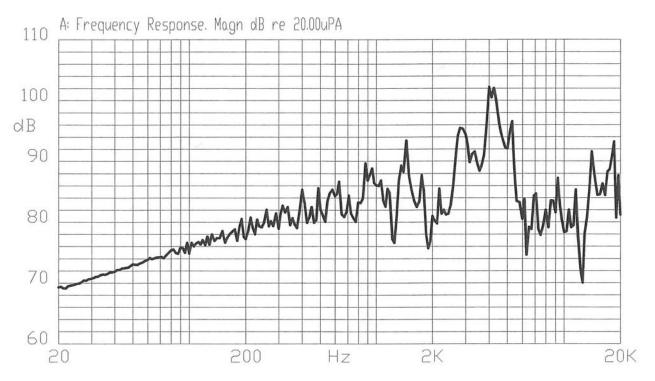


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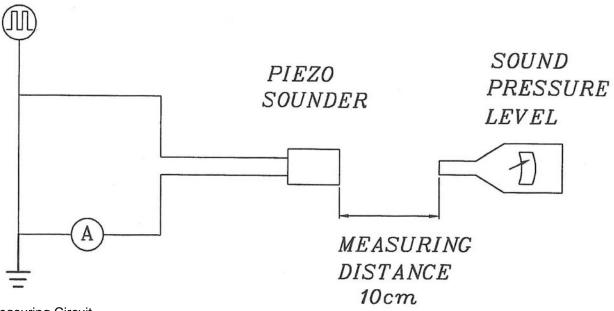
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Typical Frequency Response Curve



Measurement Method



S.P.L. Measuring Circuit

Input Signal: 10 V p-p, 2.8 KHz, Square Wave

Mic: RION UC 30

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



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Mechanical Characteristics

Item	Test Condition	
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.
	of 270 ±5°C for 3 ±0.5 seconds.	(Except the edge of the terminal)
Terminal Mechanical Strength	The pull force should be applied to the double	
	lead wire:	No damage or cutting off.
	Horizontal 3.0N (0.306kg) for 30 seconds	
	Vertical 2.0N (0.204kg) for 30 seconds	
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 +95°C for 240 hours.	
Low temp. test	After being placed in a chamber at -40°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.
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: +95°C -40°C 0.5hr 0.5hr 0.5hr 0.5hr 0.5hr 0.5hr 0.5hr 0.5hr	



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Reliability Test

Item	Test Condition	Evaluation Standard
Operating (Life Test)	Continuous life test:	The buzzer will be measured after
	The part will be subjected to 48 hours of	being placed at +25°C for 4
	continuous operation at +70°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, 1 minute off, a	measurements. The SPL should
	minimum of 5,000 times at room temp	be within ±10dB compared to
	(+25 ±2°C) with rated voltage applied.	the initial measurements.

Test Conditions

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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

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Packaging

