

PART NUMBER: CEP-1123

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DESCRIPTION: piezo audio transducer

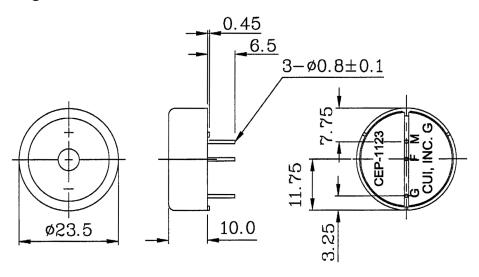


Specifications

Resonant frequency	3.2 ±0.5 KHz	
Operating voltage	3~28 V dc max.	
Current consumption	7 mA max.	at 12 V dc
Sound pressure level	74 db min.	at 30 cm / 12 V dc
Rated voltage	12 V dc	
Operating temperature	-30 ~ +85° C	
Storage temperature	-40 ~ +95° C	
Dimensions	ø23.5 x H10.0 mm	
Weight	3.0 g max.	
Material	ABS UL-94 1/16" HB High Heat (Black)	
Terminal	Pin type (Sn Plating)	
RoHS	yes	

Appearance Drawing

Tolerance: ±0.5



red wire ---M blue wire ---F

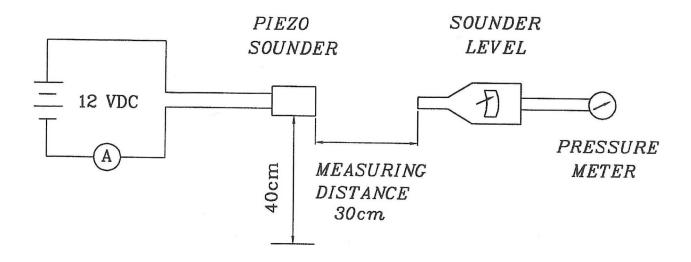
black wire ---G



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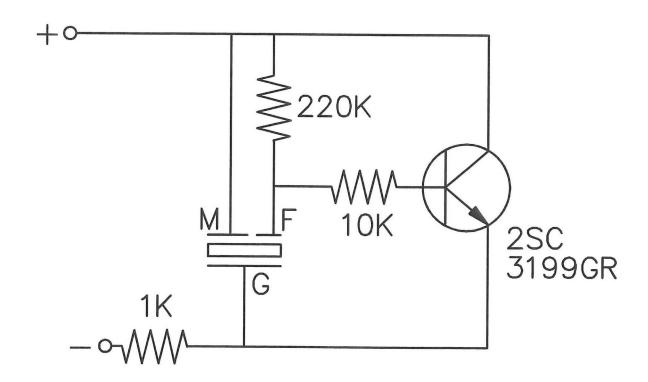
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Measurement Method1) S.P.L. Measuring Circuit



Mic: RION UC 30 or equivalent

2) The current consumption and the S.P.L. are measured by using the recommended driving circuit as shown below.





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Mechanical Characteristics

Item	Test Condition	Evaluation Standard
Solderability ¹	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 ±5°C for 3 ±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.	

Notes: 1. Not recommended for wave soldering

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.	
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 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.
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 3hours	



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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

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

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