Description: piezo audio transducer

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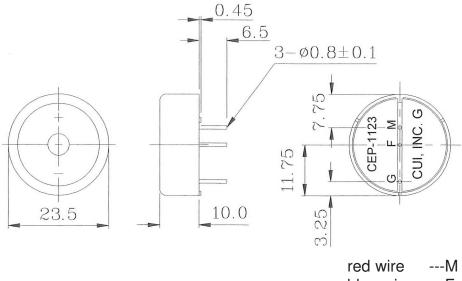


### **Specifications**

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



blue wire ---F
black wire ---G

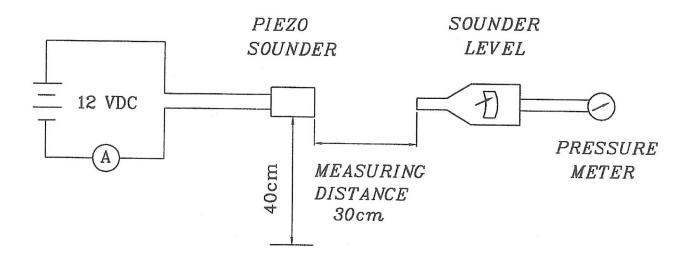
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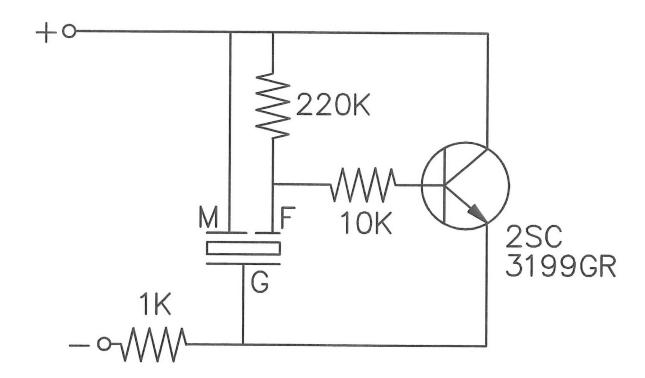
#### **Measurement Method**

1) 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	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.	

#### **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
Temp. cycle test	The part shall be subjected to 5 cycles. One cycle will consist of:  +95°C  +25°C  -40°C  0.5hr  0.5hr  0.5hr  0.5hr  3hours	The buzzer will be measured afte 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.



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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**

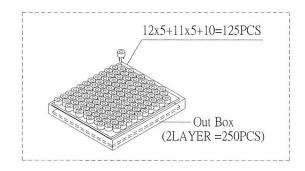
ical conditions			
Standard Test Condition	a) Tempurature: +5 ~ +35°C	b) Humidity: 45 - 85%	c) Pressure: 860-1060 mbar
Judgement Test Condition	a) Tempurature: +25 ±2°C	b) Humidity: 60 - 70%	c) Pressure: 860-1060 mbar

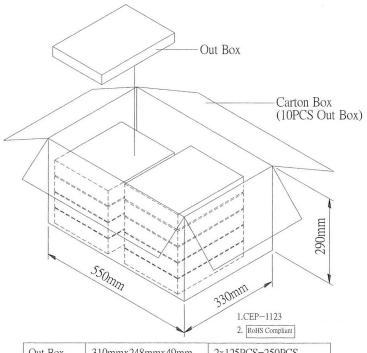
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# **Packaging**





 Out Box
 310mmx248mmx49mm
 2x125PCS=250PCS

 Carton Box
 550mmx330mmx290mm
 250PCSx10=2,500PCS