

Description: piezo audio indicator

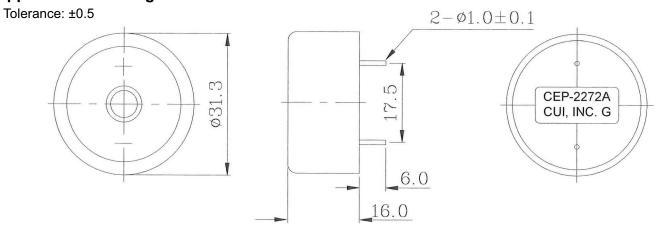
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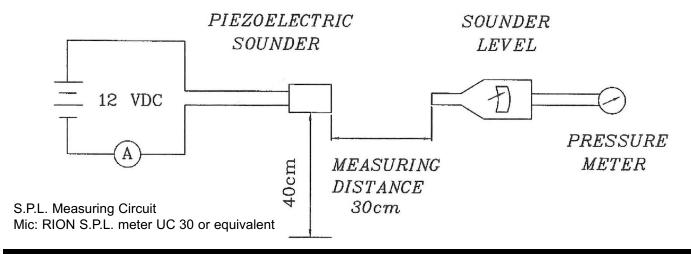
## **Specifications**

Resonant frequency	3.5 ± 0.5 KHz		
Operating voltage	3.0 ~ 20.0 V dc		
Current consumption	10 mA max.	at 12 V dc	
Sound pressure level	93 db min.	at 30 cm / 12 V dc	
Rated Voltage	12 V dc		
Tone	Continuous		
Operating tempurature	-30 ~ +85° C		
Storage tempurature	-40 ~ +95° C		
Dimensions	ø31.3 x H16.0 mm	See attached drawing	
Weight	7.0 g max.		
Material	ABS UL-94 1/16" HB (Black)		
Terminal	Pin type (Sn Plating)	See attached drawing	
RoHS	yes		

# **Appearance Drawing**



#### **Measurement Method**





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## **Mechanical Characteristics**

Item	Test Condition	Evaluation Standard
Solderability <sup>1</sup>	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 seconds 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 will 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 75 cm	be within ±10dB compared with
	onto a 40 mm thick wooden board 3 times in	the initial measurement.
	3 axis (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.	The buzzer will be measured after being placed at +25°C for 4 hours. The value of the oscillation frequency/current consumption should be within ±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:  +95°C  -40°C  0.5hr 0.5hr 0.25  3hours	

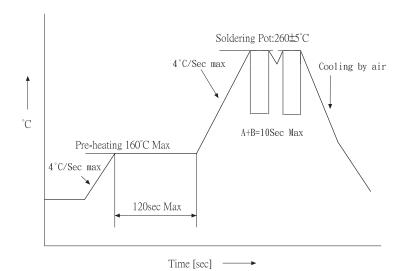


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## **Wave Solder Profile**



**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 ±10dB compared to the initial
	(+25±2°C) with rated voltage applied.	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

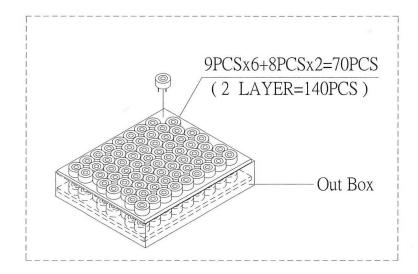


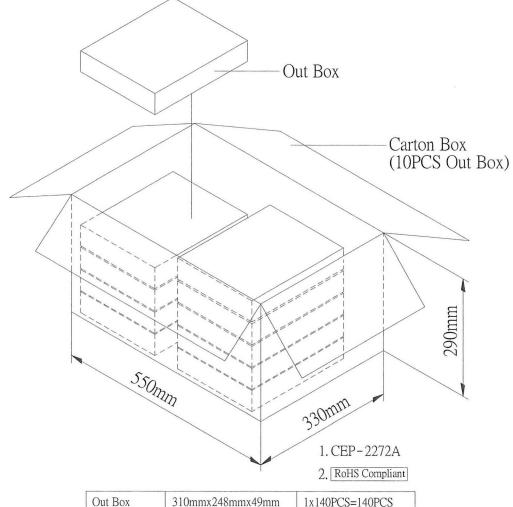
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## **Packaging**





 Out Box
 310mmx248mmx49mm
 1x140PCS=140PCS

 Carton Box
 550mmx330mmx290mm
 140PCSx10=1,400PCS