

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



# Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









# PB PIEZO AUDIO BUZZER

**Acoustic Product Specification** 

**Product Number: PB-4739NL** 



## Release | Revision: B/2018

#### **CONTENTS**

This document contains the technical specifications for the piezo audio buzzer.

#### Page 1

Specifications

Mechanical Characteristics

#### Page 2

**Environment Test** 

Reliability Test

#### Page 3

Measuring Method (Speaker Mode)

#### Page 4

Dimensions

### Page 5

Packing

Specifications					
Item	Unit	Specification	Condition		
Rated Voltage	VDC	12.0			
Operating Volt	VDC	9.0 ~ 15.0			
Mean Current	mA	120 Max.	At 12.0 VDC		
Sound Output	dBA	105	At 30cm/12.0VDC		
Resonant Frequency	Hz	2500 ±1000			
Operating Temp	°C	-20 ~ +60			
Storage Temp	°C	-20 ~ +70			
Dimension	mm	47 x 39 x 23.5	See DIMENSION		
Housing Material	gram	40			
Material		ABS (black)			
Terminal		Wire type	Wire (140mm) UL1007/AWG26#		
Environmental Protection Regulation		RoHS			

#### **Test condition:**

**Temperature:** +25±2 °C **Related humidity:** 65±5%

	Mechanical Characteristics		
Item	Test condition	<b>Evaluation standard</b>	
Lead Wire Pull Strength	The pull force will be applied to double lead wire: Horizontal: 3.0N(0.306kg) for 30 seconds. Vertical: 2.0N(0.204kg) for 30 seconds.	No damage and cutting off	
Vibration	Buzzer will be measured after being applied vibration of amplitude of 1.5mm with 10Hz to 55Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours.	The value of oscillation frequency/current consumption would be in ±10% compared with initial ones.	
Drop test	The part only will be dropped from a height of 70cm onto a 40mm thick wooden board 3 times in 3 axes(X,Y,Z). A total of 9 times.	The SPL would be in ±10dB compared with initial one.	



# PB PIEZO AUDIO BUZZER

**Acoustic Product Specification** 

**Product Number: PB-4739NL** 



Release | Revision: B/2018

#### **CONTENTS**

This document contains the technical specifications for the piezo audio buzzer.

#### Page 1

**Specifications** 

Mechanical Characteristics

#### Page 2

**Environment Test** 

Reliability Test

#### Page 3

Measuring Method (Speaker Mode)

#### Page 4

Dimensions

## Page 5

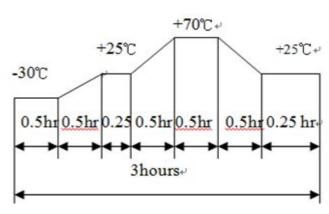
Packing

Environment Test					
Item	Test condition	Evaluation standard			
High temp. test	After being placed in a chamber at +70°C for 96 hours	Being placed for 4 hours at +25°C, buzzer will be measured.  The value of oscillation, frequency / current consumption would be in ±10% compared with initial ones.  The SPL would be in ±10dB compared with initial one.			
Low temp. test	After being placed in a chamber at -30°C for 96 hours				
Humidity test	After being placed in a chamber at +70°C and 90±5% relative humidity for 96 hours				

Temp cycle test

The part will be subjected to 5 cycles.

One cycle shall consist of:



Reliability Test					
Item	Test condition	Evaluation standard			
Operating life test	1. Continuous life test 48 hours continuous operation at +55°C with maximum rated voltage applied 2. Intermittent life test A duty cycle of 1 minute on, 1 minutes off, a minimum of 1000 times at +25±2°C and maximum rated voltage	After test, the part will meet specifications without any degradation in appearance and performance except SPL, after 4 hours at +25°C.			
	applied	The SPL would be in±10dBA compared with initial one.			

#### **Standard test condition:**

a) Temperature: +5~+35°C

**b) Humidity:** 45~85%

c) Pressure: 860~1060mbar



# PB PIEZO AUDIO BUZZER

**Acoustic Product Specification** 

**Product Number: PB-4739NL** 



Release | Revision: B/2018

#### **CONTENTS**

This document contains the technical specifications for the piezo audio buzzer.

#### Page 1

**Specifications** 

Mechanical Characteristics

#### Page 2

**Environment Test** 

Reliability Test

#### Page 3

Measuring Method (Speaker Mode)

#### Page 4

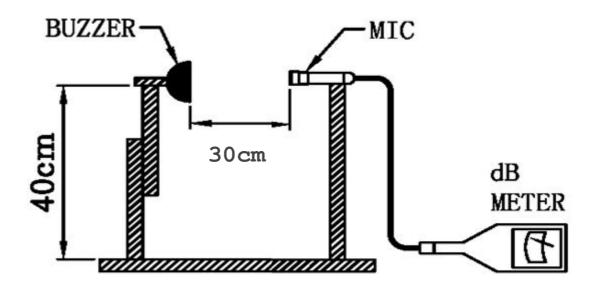
Dimensions

## Page 5

Packing

#### **S.P.L Measuring Circuit**

Input Signal: 12.0 VDC



MIC: RION S.P.L meter UC30 or equivalent



# PB PIEZO AUDIO BUZZER

**Acoustic Product Specification** 

**Product Number: PB-4739NL** 



## Release | Revision: B/2018

#### **CONTENTS**

This document contains the technical specifications for the piezo audio buzzer.

#### Page 1

Specifications

Mechanical Characteristics

#### Page 2

**Environment Test** 

Reliability Test

#### Page 3

Measuring Method (Speaker Mode)

#### Page 4

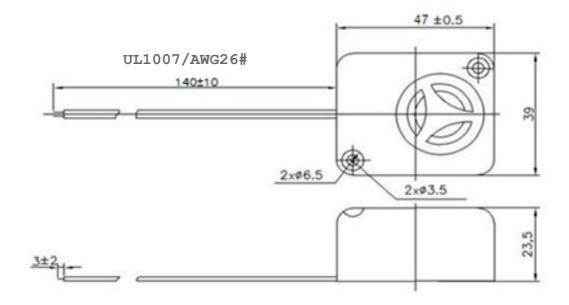
Dimensions

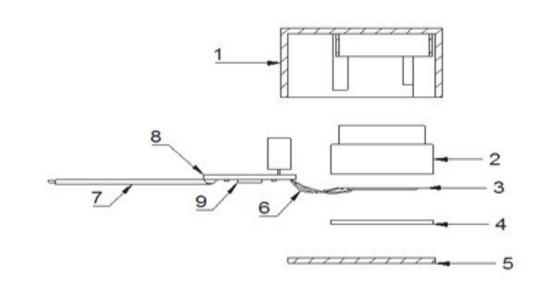
## Page 5

Packing

### **Dimensions**

Tolerance: ±0.5 (unit: mm)





No.	Part Name	Material	Quantity
1	Case	ABS	1
2	Case	ABS	1
3	Piezo	Brass + ceramics	1
4	Cover	ABS	1
5	Cover	ABS	1
6	Wire	PVC + copper	1
7	Wire	UL1007/AWG26#	2
8	PCB	Ероху	2
9	Transistor	Epoxy + copper	1





# PB PIEZO AUDIO BUZZER

**Acoustic Product Specification** 

**Product Number: PB-4739NL** 



## Release | Revision: B/2018

#### **CONTENTS**

This document contains the technical specifications for the piezo audio buzzer.

#### Page 1

Specifications

Mechanical Characteristics

#### Page 2

**Environment Test** 

Reliability Test

#### Page 3

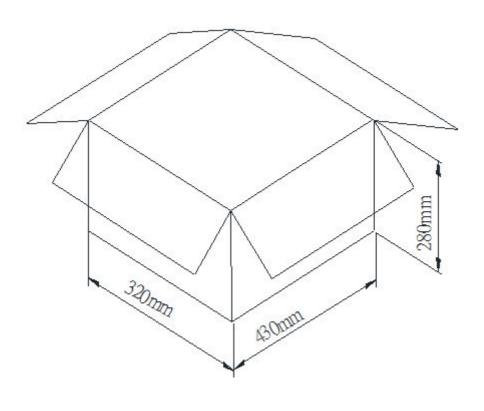
Measuring Method (Speaker Mode)

#### Page 4

Dimensions

## Page 5

Packing



#### **Details**

800

Size (mm) Quantity (pcs)

430 x 320 x 280

Carton