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

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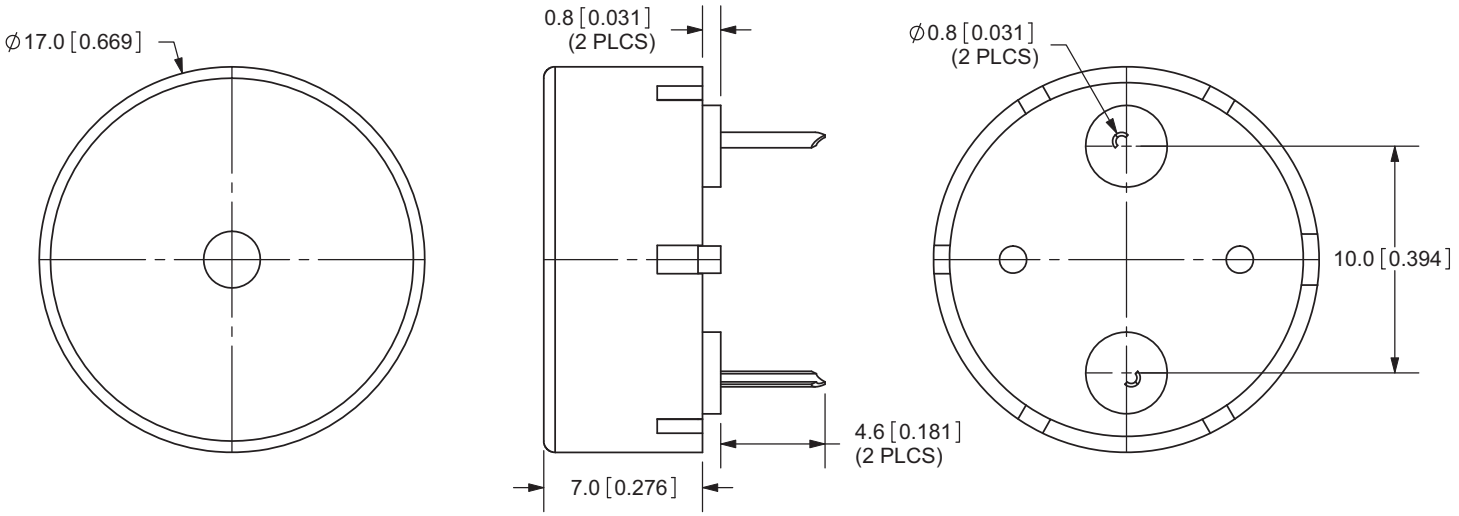
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

PART NUMBER: CPE-1785 **DESCRIPTION: PIEZO AUDIO TRANSDUCER**

SPECIFICATIONS

parameter	conditions/description	min	nom	max	units
operating voltage				20	V p-p
current consumption	at 10 V p-p, square wave, 4.0 K Hz			8	mA
sound pressure level	at 10 cm / 10 V p-p, square wave, 4.0 K Hz	85			dB
electrstatic capacity	at 1 K Hz / 1 V	9,800	14,000	18,200	pF
operating temperature		-30		80	˚C
storage temperature		-30		80	˚C
dimenstions	ø17 x H7 mm				
weight				1.25	g
material	noryl (black)				
terminal	pin type (Sn plating)				
RoHS	yes				

APPEARANCE DRAWING



TOLERANCE:
±0.5mm UNLESS OTHERWISE SPECIFIED

CUI INC

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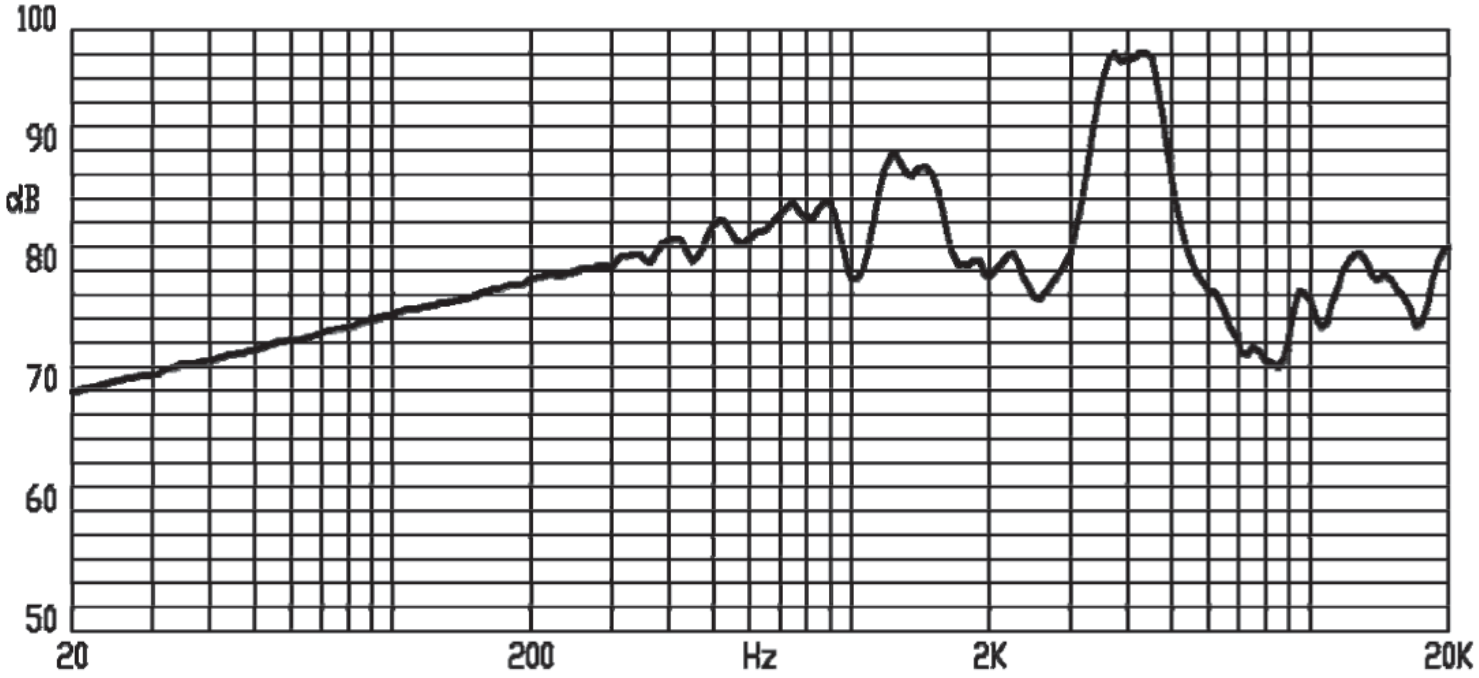
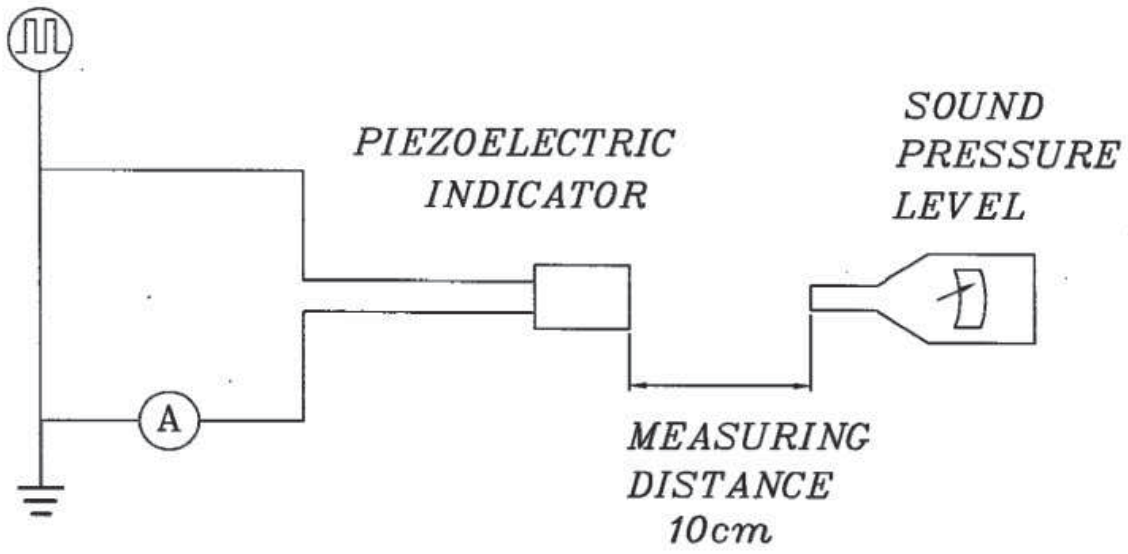
FREQUENCY RESPONSE CURVE



MEASUREMENT METHOD



S.P.L. Measuring Circuit
Input signal: 10 V p-p, square wave, 4,000 Hz
Mic: RION S.P.L. meter UC30 or equivalent
S.G.: Hewlett Packard 33120A function generator or equivalent

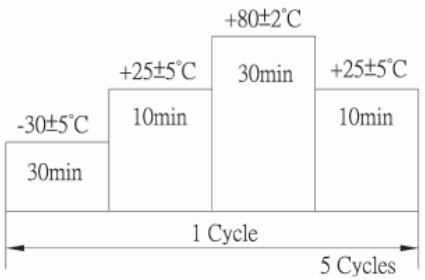
PART NUMBER: CPE-1785 **DESCRIPTION: PIEZO AUDIO TRANSDUCER**

MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard
solderability[1]	Lead terminals are immersed in rosin for 5 seconds and then immersed in a solder bath of +270 ±5˚C for 3 ±1 seconds.	90% min. of the lead terminals will be wet with solder. (except the edge of the terminal)
soldering heat resistance	Lead terminals are immersed up to 1.5 mm from the buzzer's body in a solder bath of 300 ±5˚C for 3 ±0.5 seconds or 260 ±5˚C for 10 ±1 second.	No interference in operation.
terminal mechanical strength	The force of 9.8 N is applied for 10 sec. to each terminal in axial direction.	No damage or cutting off.
vibration test	The buzzer should be measured after a vibration amplitude of 0.75 mm with 10 ~ 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 0.5 hours.	The value of oscillation frequency / current consumption should be ±10% of the initial measurements. The SPL should be within ±10dB compared with the initial measurement.
drop test	The buzzer without packaging is subjected to 3 drops on each axis from the height of 70 cm onto a 10 mm thick wooden board.	

Notes: 1. Not recommended for wave soldering

ENVIRONMENT TEST

item	test condition	evaluation standard
high temperature test	After being placed in a chamber at +80˚C for 96 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.
low temperature test	After being placed in a chamber at -30˚C for 96 hours.	
humidity test	After being placed in a chamber at +40˚C and 90 ±5% RH for 96 hours.	
temperature cycle test	The part will be subjected to 5 cycles. One cycle will consist of: 	

RELIABILITY TEST

item	test condition	evaluation standard
operating (life test)	1. Continuous life test: The part will be subjected to 48 hours of continuous operation at 55˚C with rated voltage applied. 2. Intermittent life test: A duty cycle of 1 minute on, 1 minute off, a minimum of 5,000 times at room temp (+25 ±2˚C) with rated voltage applied.	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.

TEST CONDITIONS

standard test conditions	a) Temperature: +5 ~ +35˚C	b) Humidity: 45 ~ 85%	c) Pressure: 860 ~ 1060 mbar
judgement test conditions	a) Temperature: +25 ±2˚C	b) Humidity: 60 ~ 70%	c) Pressure: 860 ~ 1060 mbar

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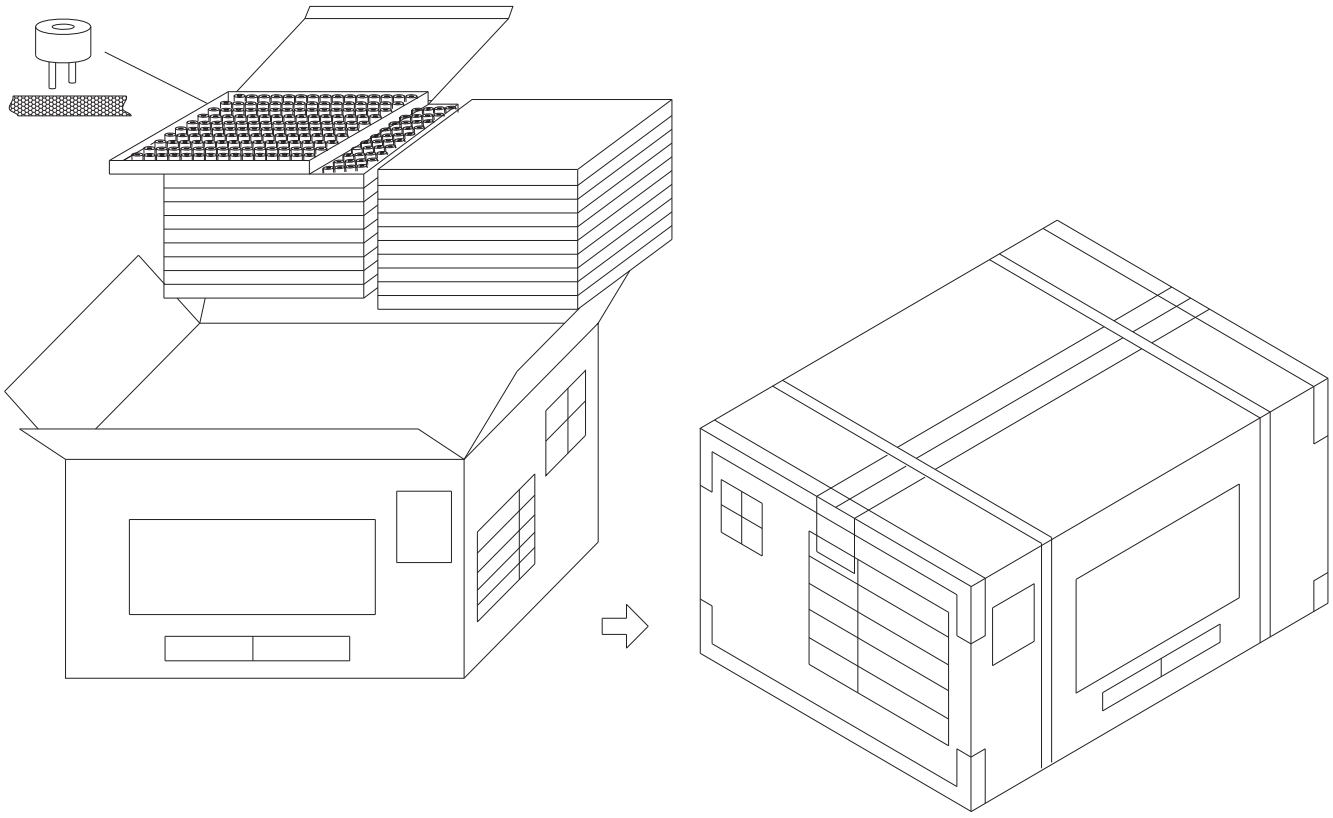
PACKAGING



Tray		1x150PCS=150PCS
Out Box		10LAYERx150PCS=1500PCS
Carton Box	510mmx255mmx260mm	1500PCSx2=3,000PCS

1. CUI Inv#. 037-4226R
   CUI Part#. CPE-1785
2. RoHS Compliant