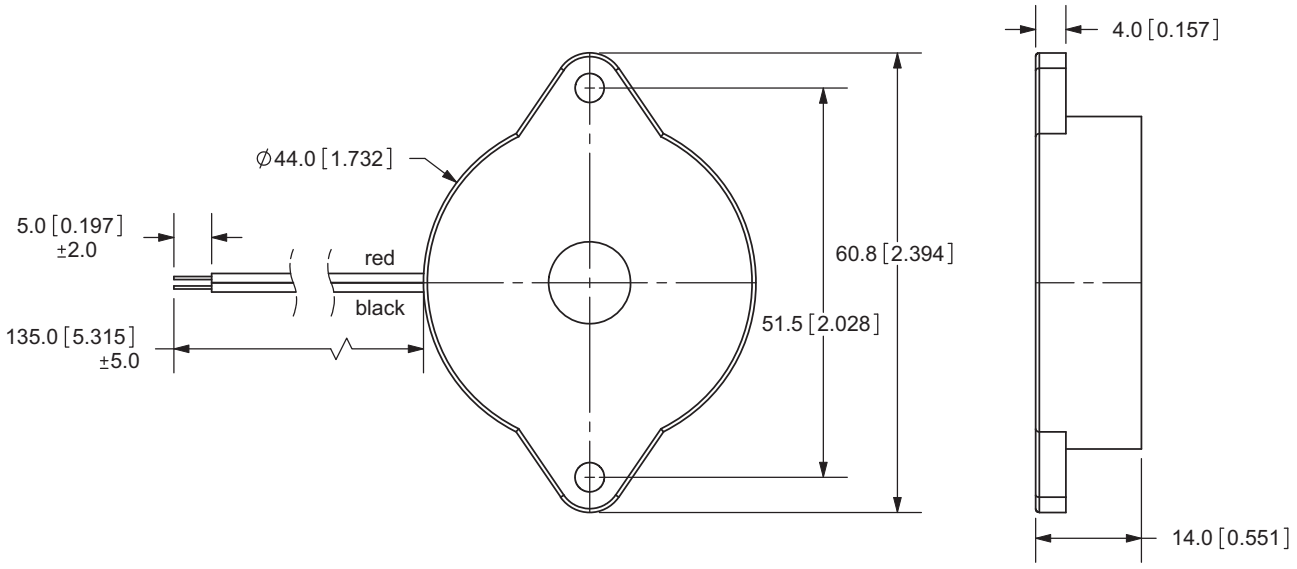
CUI INC

PART NUMBER: CPE-6080 **DESCRIPTION: PIEZO AUDIO TRANSDUCER**

SPECIFICATIONS

parameter	conditions/description	min	nom	max	units
operating voltage				50	V p-p
current consumption	at 10 V p-p, square wave, 800 Hz			10	mA
sound pressure level	at 10 cm / 10 V p-p, square wave, 800 Hz	80			dB
electrostatic capacity	at 120 Hz, 1 V	49,000	70,000	91,000	pF
operating temperature		-30		80	˚C
storage temperature		-40		80	˚C
dimenstions	ø60.8 x H14.0 mm				
weight				12	g
material	PA-777D (black)				
terminal	wire type				
RoHS	yes				

APPEARANCE DRAWING



TOLERANCE:
±0.5mm UNLESS OTHERWISE
SPECIFIED

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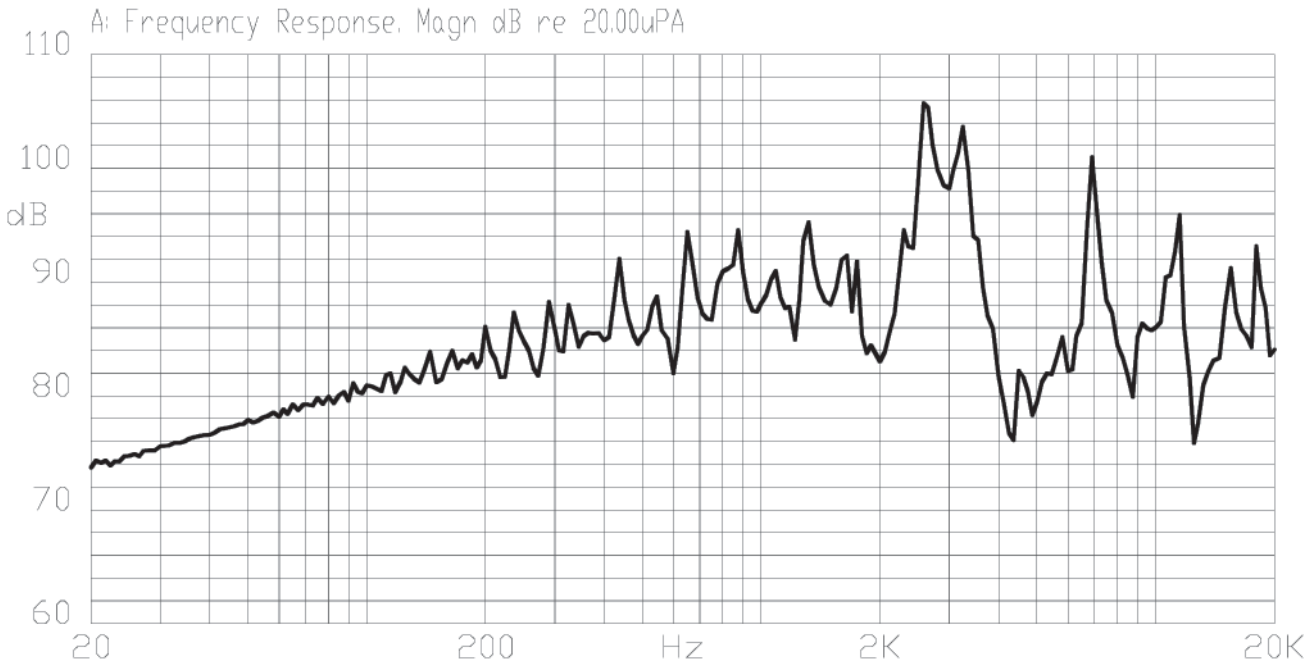
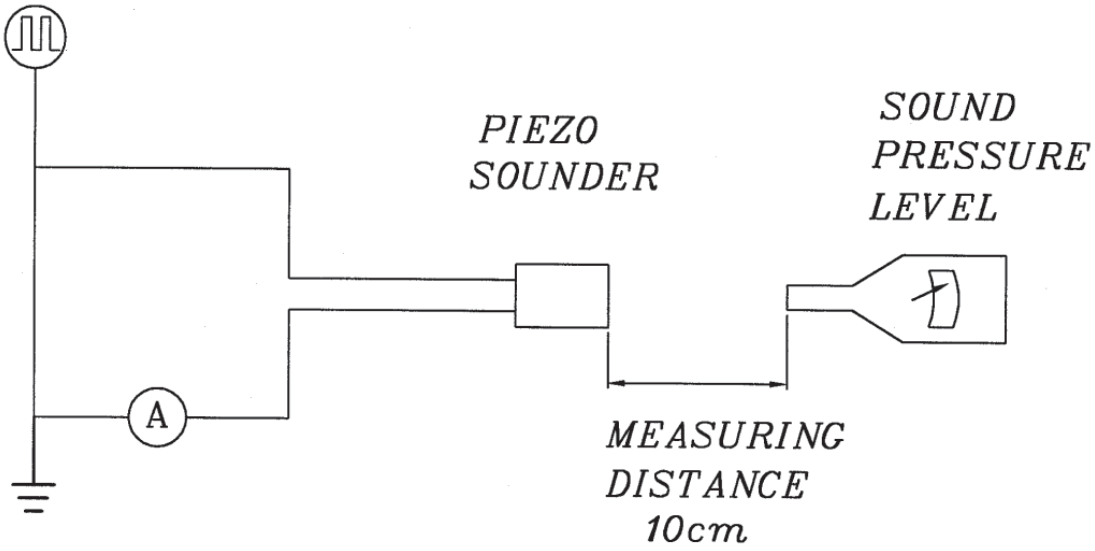
FREQUENCY RESPONSE



MEASUREMENT METHOD



S.P.L. Measuring Circuit
Input signal: 10 V p-p, square wave, 800 Hz
Mic: RION S.P.L. meter UC30 or equivalent
S.G.: Hewlett Packard 33120A function generator or equivalent

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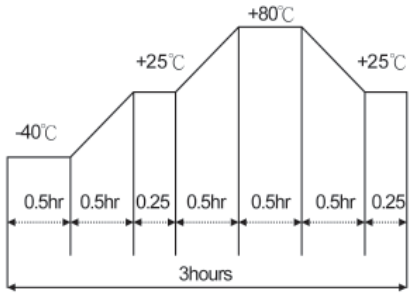
MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard
solderability	Lead terminals are immersed in rosin for 5 seconds and then immersed in a solder bath of +270 ±5˚C for 3 ±0.5 seconds.	90% min. of the lead terminals will be wet with solder. (except the edge of the terminal)
lead wire pull strength	The pull force will be applied to double lead wire: horizontal 3.0 N (0.306 kg) for 30 seconds vertical 2.0 N (0.204 kg) for 30 seconds	No damage or cutting off.
vibration test	The buzzer should be measured after a vibration amplitude of 1.5 mm with 10 ~ 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 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 75 cm onto a 40 mm thick wooden board.	

ENVIRONMENT TEST

item	test condition	evaluation standard
high temperature test	After being placed in a chamber at +80˚C for 240 hours.	After any tests, the buzzer will meet specifications without any damage in appearance except SPL. After 4 hours, SPL should be within ±10% of the initial measurements.
low temperature 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% RH for 240 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 65˚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.	After any tests, the buzzer will meet specifications without any damage in appearance except SPL. After 4 hours, SPL should be within ±10% of 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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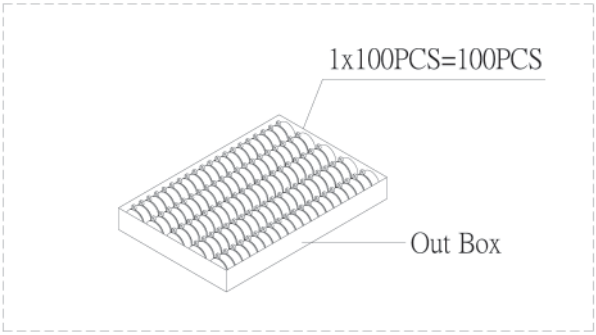
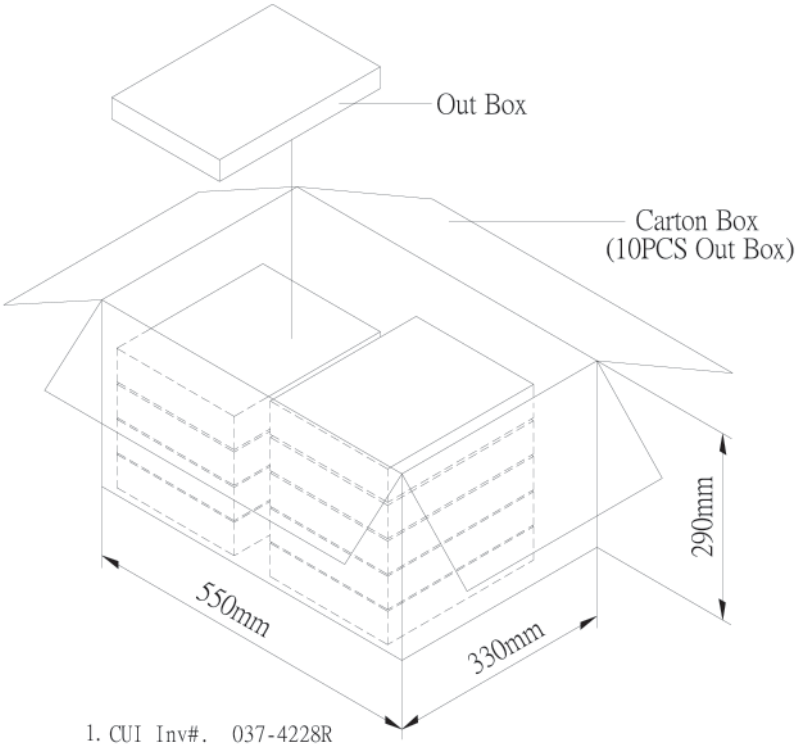
PACKAGING





1. CUI Inv#. 037-4228R
   CUI Part#. CPE-6080
2. RoHS Compliant

Out Box	310mmx248mmx49mm	1x100PCS=100PCS
Carton Box	550mmx330mmx290mm	100PCSx10=1,000PCS