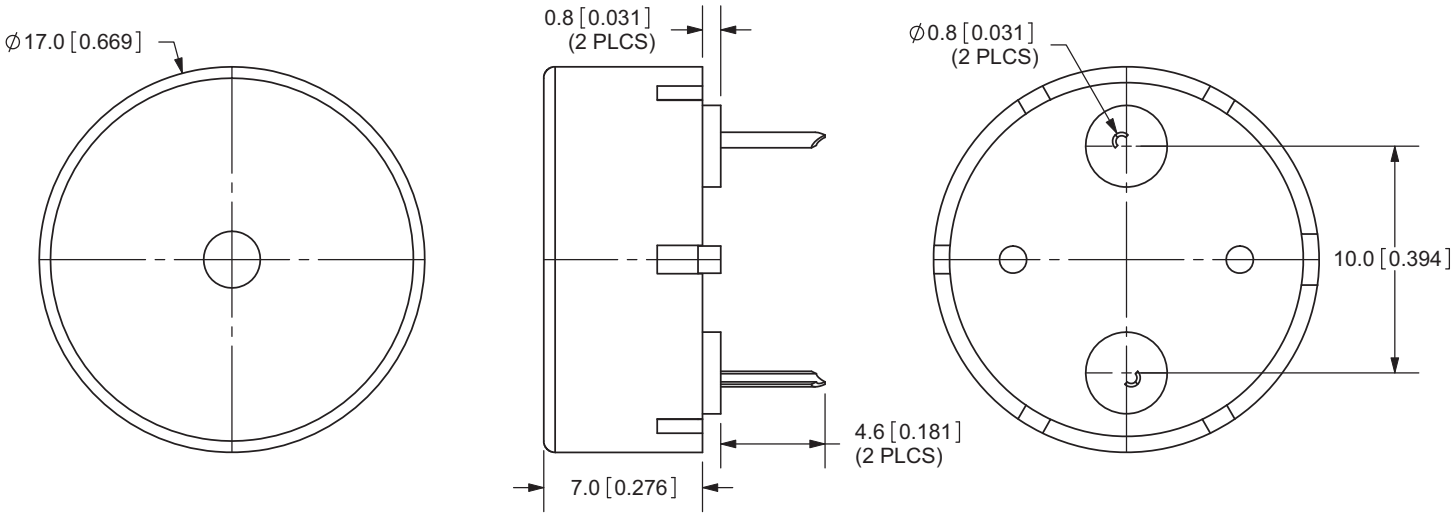
CUI INC

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

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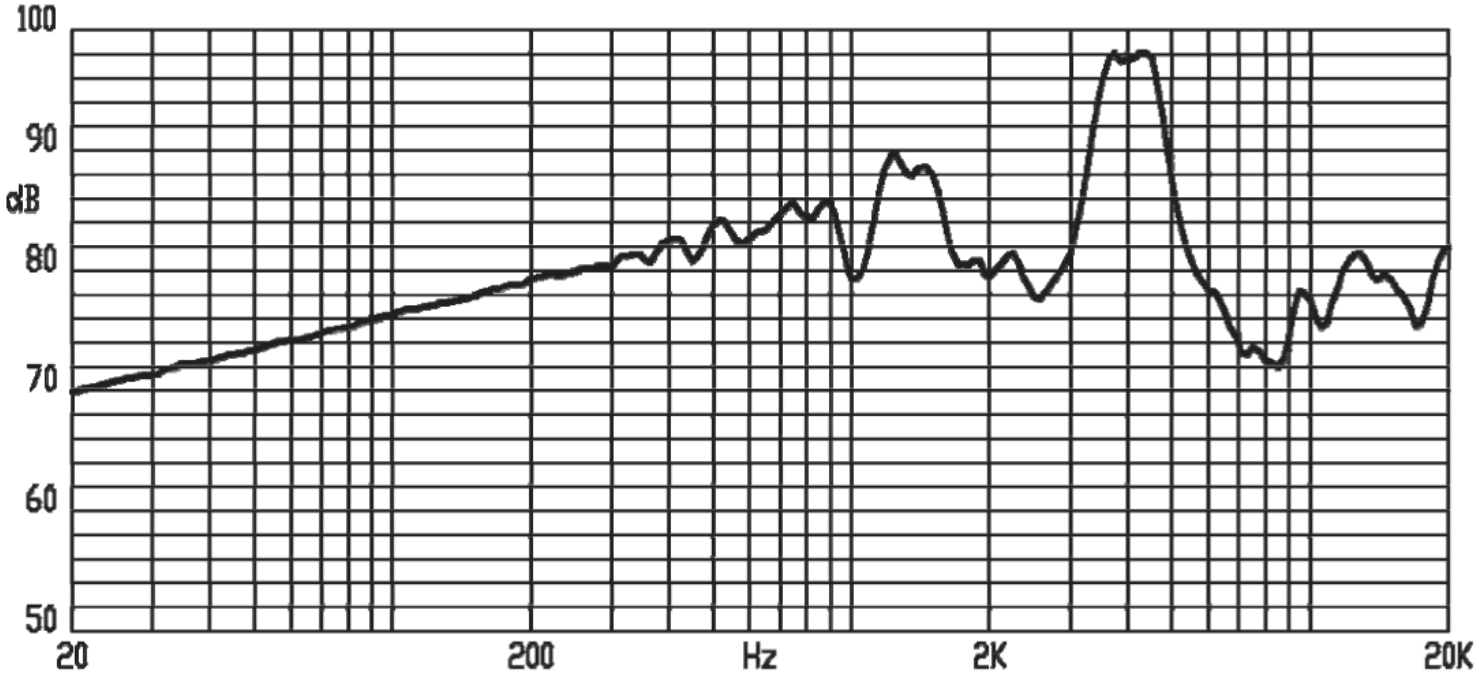
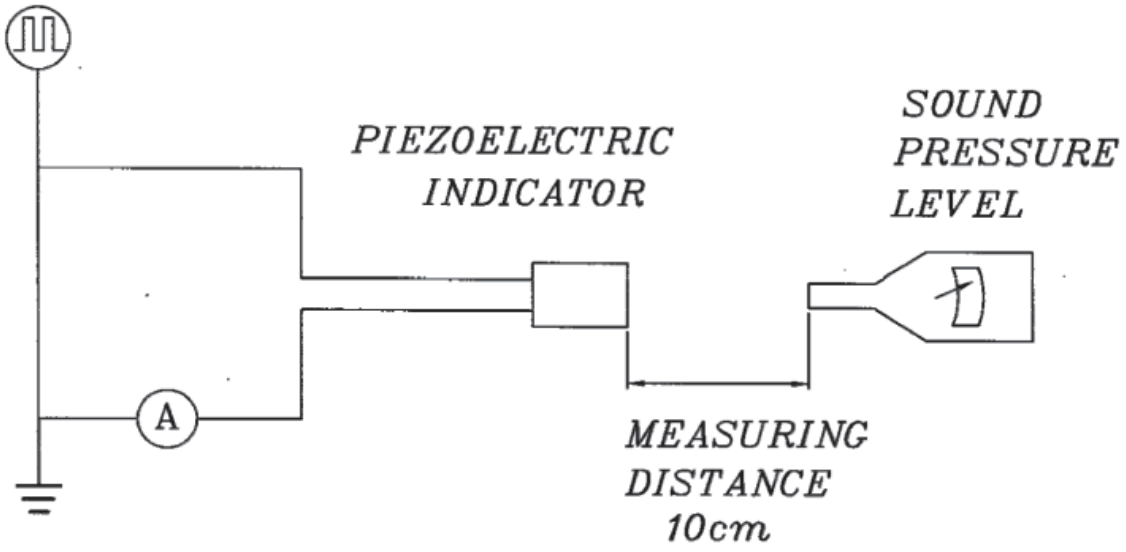
FREQUENCY RESPONSE CURVE



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

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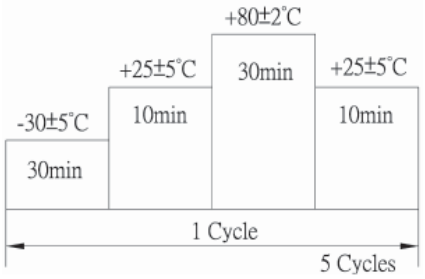
MECHANICAL CHARACTERISTICS

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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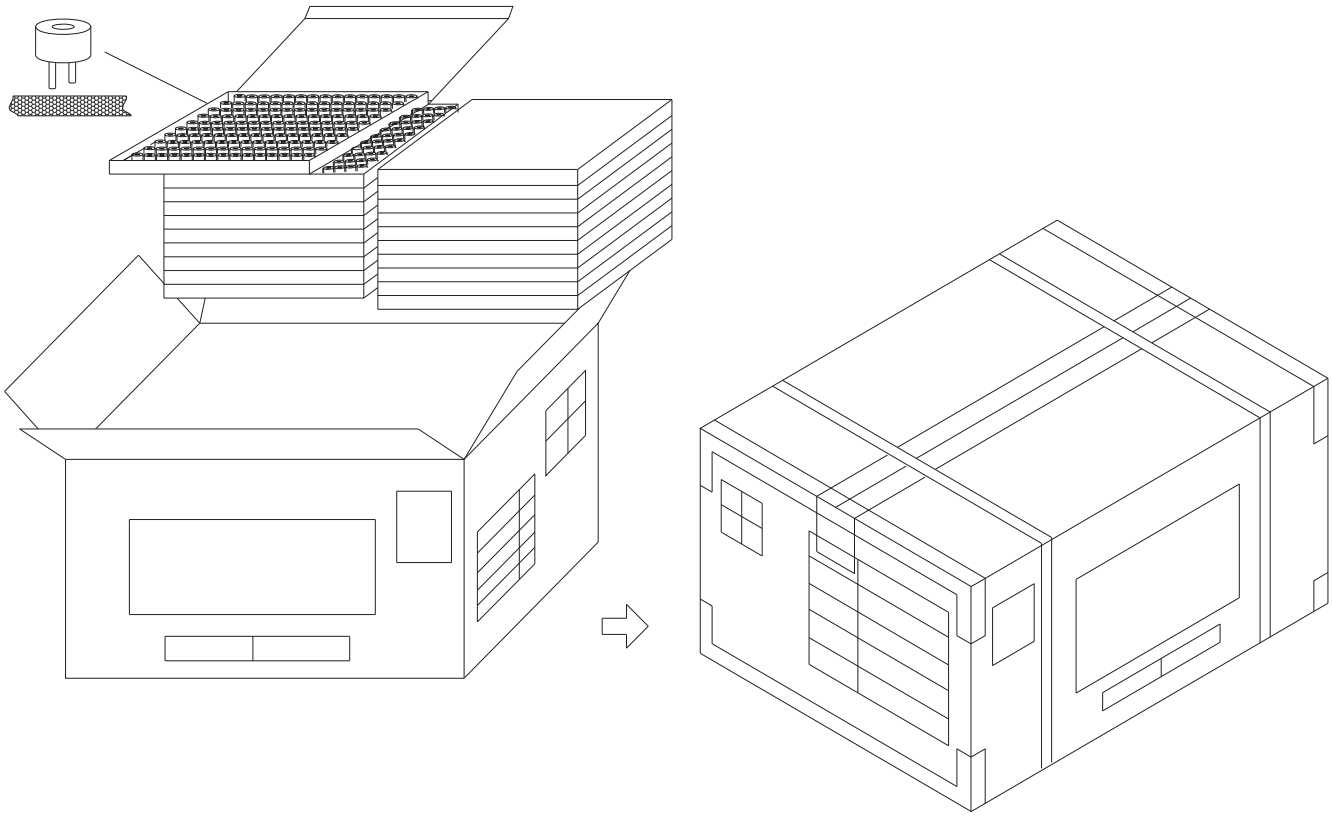
PACKAGING



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

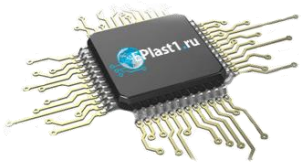
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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