

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!



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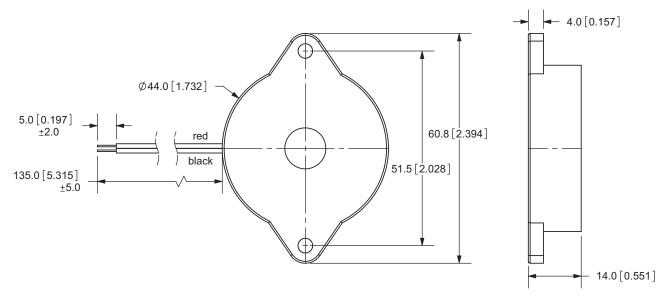
PART NUMBER: CPE-6080

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

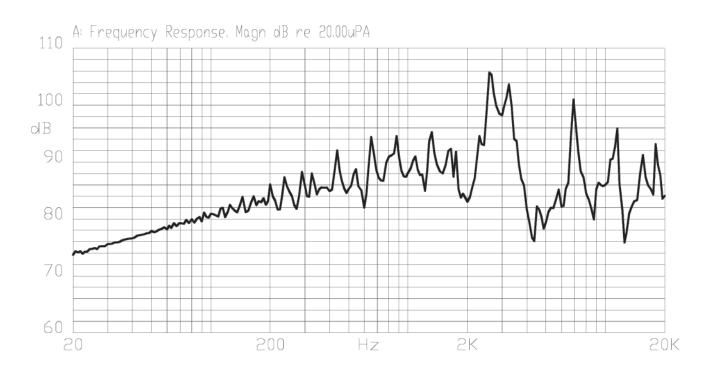


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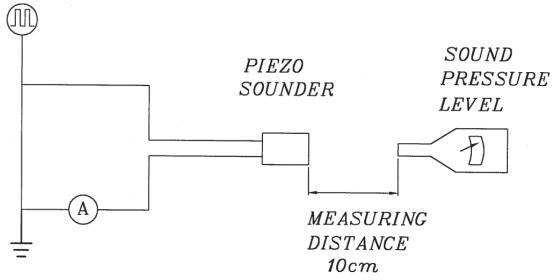
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FREQUENCY RESPONSE



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 90% min. of the lead terminals will be wet with solder. (except the edge of the terminal)	
solderability	Lead terminals are immersed in rosin for 5 seconds and then immersed in a solder bath of $+270 \pm 5^{\circ}\text{C}$ for 3 ± 0.5 seconds.		
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 $10\sim55$ 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.		
low temperature test	After being placed in a chamber at -40°C for 240 hours.		
humidity test	After being placed in a chamber at $+40^{\circ}\text{C}$ and 90 $\pm5\%$ RH for 240 hours.		
temperature cycle test	The part will be subjected to 5 cycles. One cycle will consist of: +80°C +25°C -40°C 0.5hr 0.5hr 0.5hr 0.5hr 0.5hr 0.25 3hours	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.	

RELIABILITY TEST

item	test condition	evaluation standard
operating (life test)	 Continuous life test: The part will be subjected to 48 hours of continuous operation at 65°C with rated voltage applied. 	After any tests, the buzzer will meet specifications without any damage in appearance except SPL. After
	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.	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

