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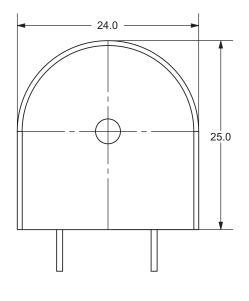
PART NUMBER: CPE-522 DESCRIPTION: piezo audio indicators

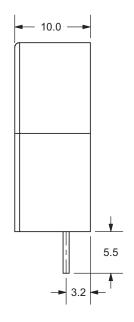
SPECIFICATIONS

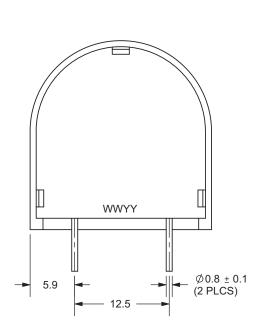
operating frequency	3.2 ± 0.5 KHz	
operating voltage range	3 ~ 20 V DC	
current consumption	10 mA max.	at 12 V DC
sound pressure level	75 db min.	at 30 cm/12 V DC
rated voltage	12 V DC	
tone	continuous	
operating tempurature	-30 ~ +115° C	
storage tempurature	-40 ~ +125° C	
dimensions	L25.0 x W24.0 x H10.0 mm	1
weight	3.7 g max.	
material	PC+10% glass (black)	
terminal	pin type (Au plating)	
RoHS	yes	

APPEARANCE DRAWING

tolerance: ±0.5 units: mm







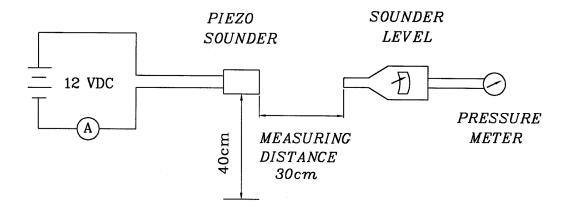


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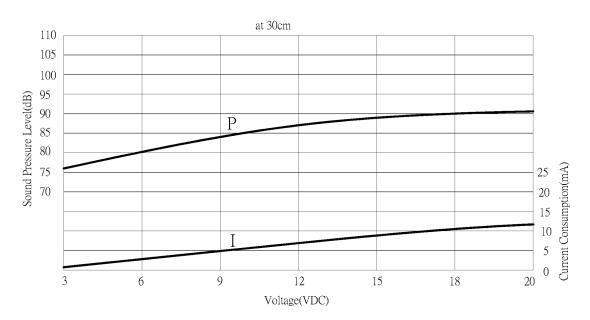
MEASUREMENT METHOD



S.P.L. Measuring Circuit

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

CURRENT CONSUMPTION/SOUND PRESSURE LEVEL





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MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard
solderability ¹	Lead terminals are immersed in rosin for	90% min. of the lead terminals
	5 seconds and then immersed in solder bath	will be wet with solder
	of 270 ±5°C for 3 ±1 seconds.	(except the edge of the terminal).
soldering heat resistance	Lead terminals are immersed up to 1.5mm from	
	buzzer's body in solder bath of 300 ±5°C for	No interference in operation.
	3 ±0.5 seconds or 260 ±5°C for 10 ±1 seconds.	1
terminal strength pulling	For 10 seconds, the force of 300g is	No damage or cutting off.
0 . 0	applied to each terminal in axial direction.	
vibration	The buzzer shall be measured after applying	The value of oscillation
	a vibration amplitude of 1.5 mm with 10 to	frequency/current consumption
	55 Hz band of vibration frequency to each of	should be ±10% of the initial
	the 3 perpendicular directions for 2 hours.	measurements. The SPL should
drop test	The part will be dropped from a height of	be within ±10dB compared with
	75 cm onto a 40 mm thick wooden board 3	the initial measurement.
	times in 3 axes (X, Y, Z) for a total of 9 drops.	
inside lead wire pull test	For 10 seconds, the force of 400g is applied to	No damage or cutting off.
	each terminal in axial direction.	
strength pulling	For 1 minute, the force of 5 kg at room	
	temperature (+25 ± 5°C) is applied to case	No damage or cutting off.
	A and B.	

Notes: 1. Not recommended for wave soldering

ENVIRONMENT TEST

item	test condition	evaluation standard
high temp. test	After being placed in a chamber at +125°C for 240 hours.	
low temp. test	After being placed in a chamber at -40°C for 240 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.
humidity test	After being placed in a chamber at +40°C and 90±5% relative humidity for 240 hours.	
temp. cycle test	The part shall be subjected to 5 cycles. One cycle will consist of: +125°C +25°C -40°C 0.5hr 0.5hr 0.5hr 0.5hr 0.5hr 3hours	



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RELIABILITY TEST

item	test condition	evaluation standard
operating (life test)	Continuous life test:	The buzzer will be measured after
	The part will be subjected to 2 hours of	being placed at +25°C for 4
	continuous operation at +105°C with	hours. The value of the
	15 V applied.	oscillation frequency/current
		consumption should be ±10%
	2. Intermittent life test:	compared to the initial
	A duty cycle of 1 minute on, 5 minutes off, a	measurements. The SPL should
	minimum of 10,000 times at room temp	be within ±10dB compared to
	(+25 ±2°C) with rated voltage applied.	the initial measurements.

TEST CONDITIONS

standard test condition	a) tempurature: +5 ~ +35°C	b) humidity: 45 - 85%	c) pressure: 860-1060 mbar
judgement test condition	a) tempurature: +25 ±2°C	b) humidity: 60 - 70%	c) pressure: 860-1060 mbar



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PACKAGING

