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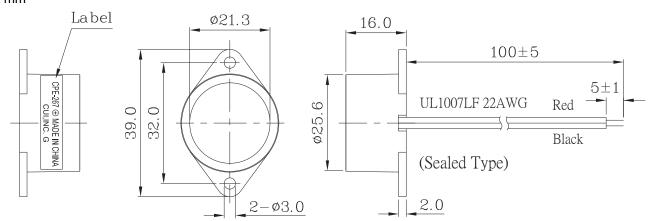
PART NUMBER: CPE-267 DESCRIPTION: piezo audio transducer

## **SPECIFICATIONS**

operating frequency	2.8 ± 0.5 kHz		
rated voltage	12 V dc		
operating voltage range	6 ~ 14 V dc		
current consumption	35 mA max.	at 12 V dc	
sound pressure level	85 dB min.	at 30 cm/12 V dc	
tone	continuous	at 12 V dc	
operating tempurature	-30 ~ +85° C		
storage tempurature	-40 ~ +95° C		
dimensions	ø25 x H16 mm		
weight	41 g max.		
material	ABS UL-94 1/16" HB	high heat (black)	
terminal	wire type		
RoHS	yes		
dustproof/waterproof level	IP67	IEC standard 529 edition 2.0(1989)	

## **APPEARANCE DRAWING**

tolerance: ±0.5 units: mm

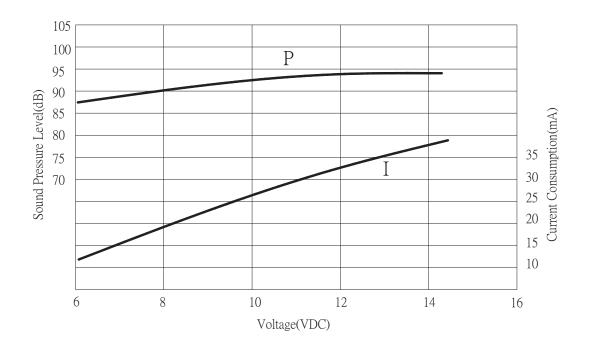




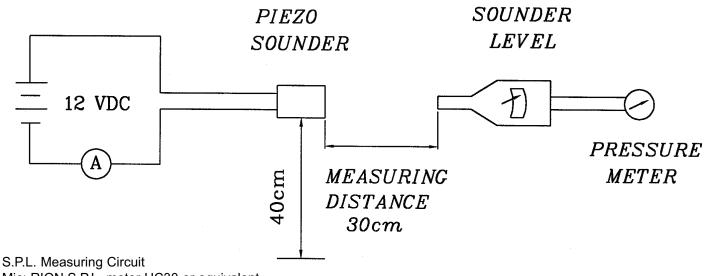
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### **VOLTAGE: SOUND PRESSURE LEVEL / CURRENT CONSUMPTION CHARACTERISTICS**



#### **MEASUREMENT METHOD**



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	90% min. of the lead terminals	
(connector excepted)	5 seconds and then immersed in solder bath	will be wet with solder	
	of 270 ±5°C for 3 ±0.5 seconds.	(except the edge of the terminal).	
lead wire pull strength	The pull force shall be applied to double lead		
, -	wire:	No damage or cutting off.	
	Horizontal 3.0N (0.306 kg) for 30 seconds		
	Vertical 2.0N (0.204 kg) for 30 seconds		
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.		

### **ENVIRONMENT TEST**

item	test condition	evaluation standard
high temp. test	After being placed in a chamber at +95°C for 240 hours.	
low temp. 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% relative humidity for 240 hours.	
temp. cycle test	The part shall be subjected to 5 cycles. One cycle will consist of:  +95°C  +25°C  +25°C  -40°C  0.5hr  0.5hr  0.5hr  0.5hr  0.5hr  0.5hr  3hours	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.



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## **RELIABILITY TEST**

item	test condition	evaluation standard
operating (life test)	1. Continuous life test:	The buzzer will be measured after
	The part will be subjected to 48 hours of	being placed at +25°C for 4
	continuous operation at +70°C with rated	hours. The value of the
	voltage applied.	oscillation frequency/current consumption should be ±10%
	2. Intermittent life test:	compared to the initial
	A duty cycle of 1 minute on, 1 minute off, a	measurements. The SPL should
	minimum of 5,000 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**

