

**Description: magnetic buzzer** 

Date: 8/11/2006

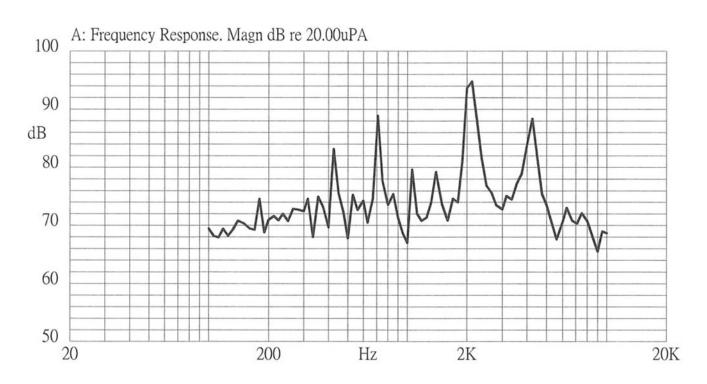
Unit: mm Page No: 1 of 5



# **Specifications**

Rated voltage	3.5 Vo-p	Vo-p
Operating voltage	3.0 - 5.0 Vo-p	ov
Mean current	35 mA max.	Applying rated voltage, 2048 Hz square wave, ½ duty
Coil resistance	42 ±6.3 Ω	
Sound output	Min. 85 (Typical 95) dBA	Distance at 10cm (A-weight free air). Applying rated voltage of 2048 Hz, square wave, 1/2 duty.
Rated frequency	2,048 Hz	
Operating temperature	-20 ~ +60° C	
Storage temperature	-30 ~ +70° C	
Dimensions	ø12.0 x H8.5 mm	See attached drawing
Weight	1.4 g	
Material	PPO (Black)	
Terminal	Pin type (AU Plating)	See attached drawing
RoHS	yes	

# **Frequency Response Curve**



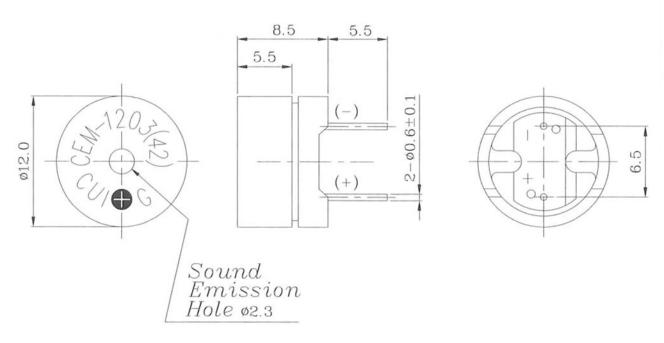
**Description:** magnetic buzzer

Date: 8/11/2006

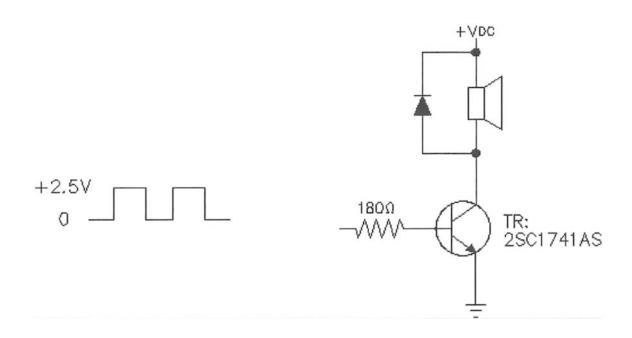
Unit: mm Page No: 2 of 5

### **Appearance Drawing**

Tolerance: ±0.5



#### **Measurement Method**





**Description: magnetic buzzer** 

Date: 8/11/2006

Unit: mm Page No: 3 of 5

#### **Mechanical Characteristics**

Item	Test Condition	Evaluation Standard
Solderability	Lead terminals are immersed in rosin for 5	90% min. of lead terminals
	seconds and then immersed in solder bath	should 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	
	the buzzer's body in solder bath of 260 ±5°C	No in interference in operation.
	for 3 ±1 seconds.	
Terminal Mechanical Strength	Apply force of 9.8 N (1.0 kg) to each terminal in	No damage or cutting off.
	each axial direction for 10 seconds.	
Vibration	The buzzer will be measured after applying	After the test, the part shall meet
	a vibration amplitude of 1.5 mm with 10 to 55	specifications without any
	Hz band of vibration frequency to each of the 3	damage to the appearance. After
	perpendicular directions for 2 hours.	4 hours at +25°C, the SPL
Drop Test	The part is to be dropped from a height of	should be within ±10 dBA of the
	75 cm onto a 40 mm thick wooden board 3	initial SPL.
	times in 3 axis (X, Y, Z) for a total of 9 drops.	

#### **Environment Test**

Item	Test Condition	Evaluation Standard	
High temp. test	The part will be subjected to +70°C for 96 hours.		
Low temp. test	The part will be subjected to -30°C for 96 hours	After the test, the part shall meet specifications without any damage to the appearance. After 4 hours at +25°C, the SPL should be within ±10 dBA of the initial SPL.	
Thermal shock	The part will be subjected to 10 cycles. One cycle will consist of:		
	+70°C -30°C 30 min. 30 min. 60 min.		
Temp./Humidity cycle	The part shall be subjected to 10 cycles. One cycle will consist of:  +70°C  a,b:90~98%RH		
	+25°C		



**Description: magnetic buzzer** 

Date: 8/11/2006

Unit: mm

Page No: 4 of 5

# **Reliability Tests**

Item	Test Condition	Evaluation Standard
Operating (Life Test)	Continous life test:	
	The part will be subjected to 72 hours at 45°C	
	with 3.5 V, 2048 Hz applied.	After the test, the part shall meet specifications without any
	2. Intermittent life test:	damage to the appearance. After
	A duty cycle of 1 minute on, 1 mintue off, a	4 hours at +25°C, the SPL
	minimum of 10,000 times at room temp.	should be within ±10 dBA of the
	(25±10°C) with 3.5 V, 2048 Hz applied.	initial SPL.

# **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

**Description:** magnetic buzzer

Date: 8/11/2006

Unit: mm Page No: 5 of 5

#### **Packaging**

