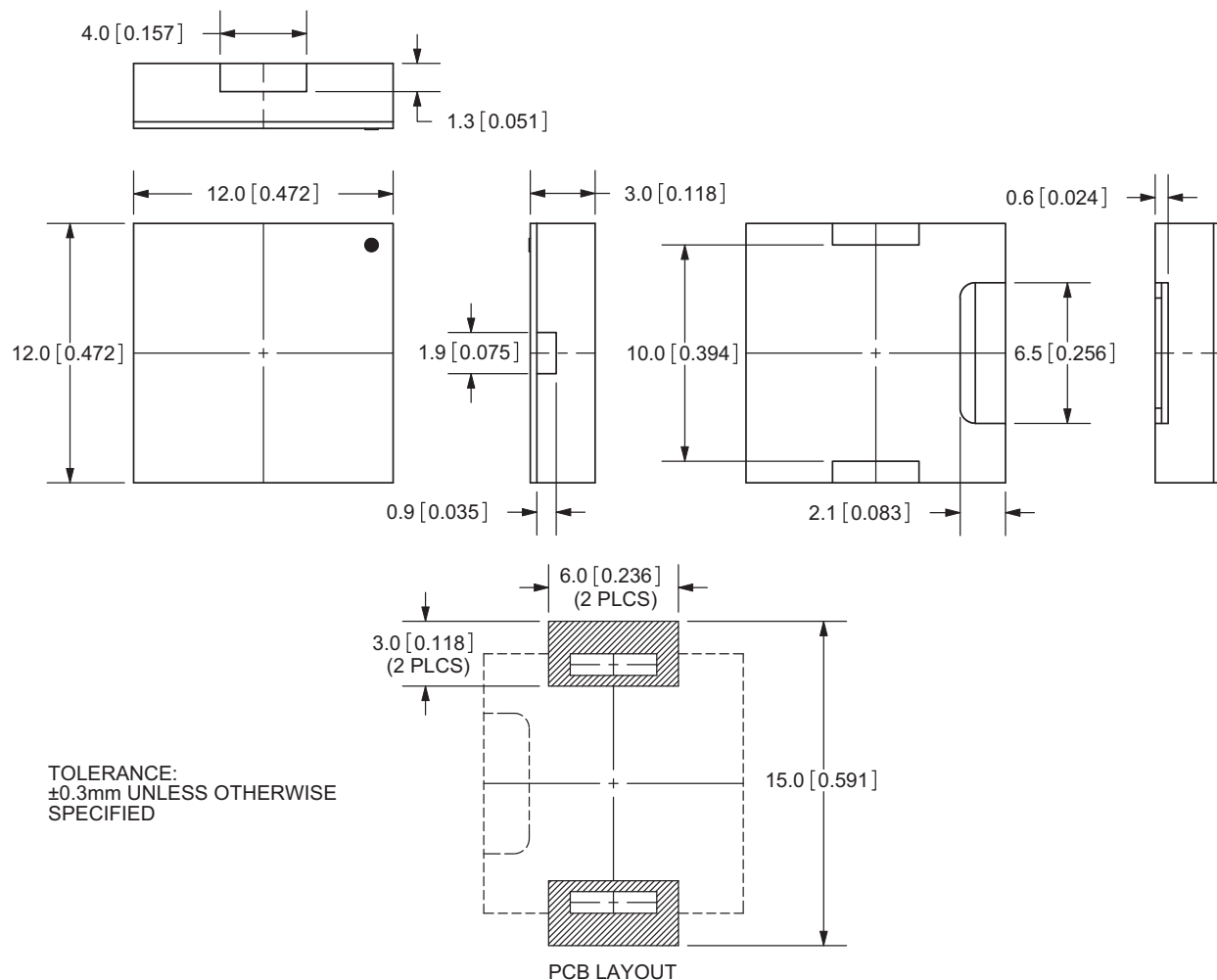


**PART NUMBER: CMT-1203**
**DESCRIPTION: PIEZO AUDIO TRANSDUCER**

## SPECIFICATIONS

parameter	conditions/description	min	nom	max	units
operating voltage				25	V p-p
current consumption	at 5 V p-p, 4,000 Hz square wave			5	mA
sound pressure level	at 10 cm, 5 V p-p, 4,000 Hz square wave	81			dB
electrostatic capacity	at 120 Hz, 1 V	11,200	16,000	20,800	pF
operating temperature		-40		120	°C
storage temperature		-40		120	°C
dimenstions	12 x 12 x 3 mm (L x W x H)				
weight				0.5	g
material	L.C.P. (black)				
terminal	SMD type (Sn plating)				
RoHS	yes				

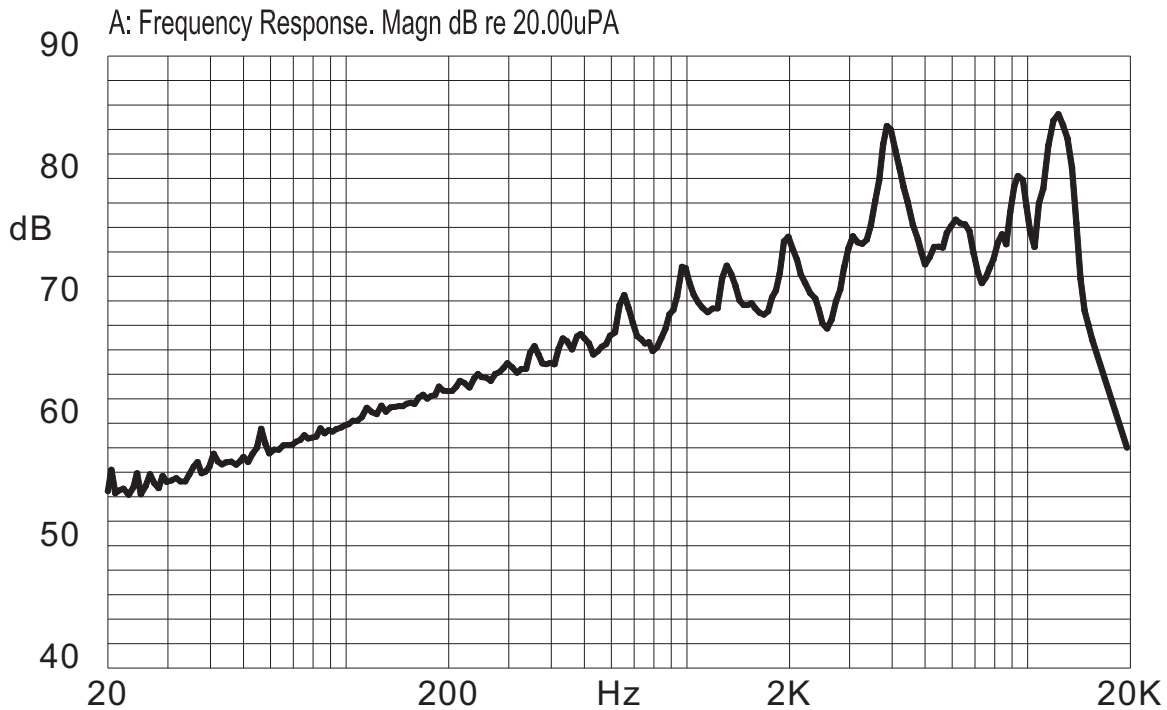
## APPEARANCE DRAWING



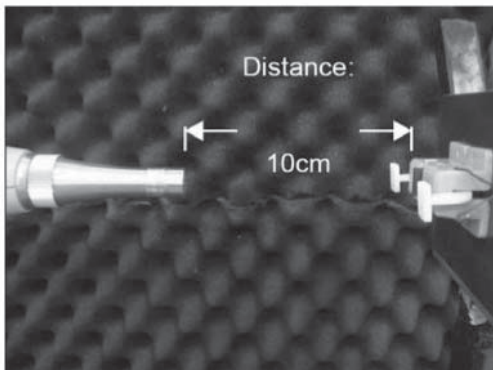
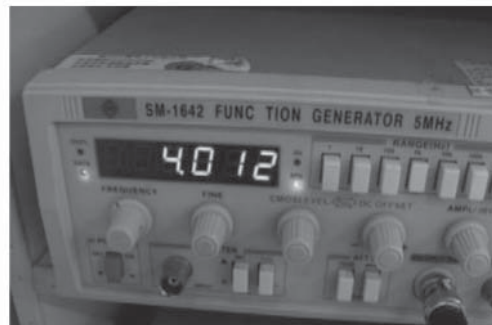
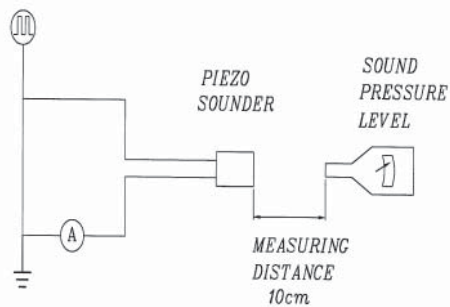
PART NUMBER: CMT-1203

DESCRIPTION: PIEZO AUDIO TRANSDUCER

## FREQUENCY RESPONSE CURVE



## MEASUREMENT METHOD

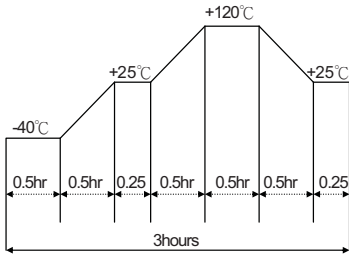


**PART NUMBER: CMT-1203**
**DESCRIPTION: PIEZO AUDIO TRANSDUCER**

## MECHANICAL CHARACTERISTICS

item	test condition	evaluation standard
soldering	Lead terminals are immersed in a solder bath of $+350 \pm 5^{\circ}\text{C}$ for $3 \pm 1$ seconds.	95% min. of the surface of the lead pads will be covered with solder.
soldering heat resistance	Refer to the Recommended Temperature Profile for Reflow Oven.	No interference in operation.
terminal mechanical strength	For 10 seconds, the force of 9.8 N (1.0 kg) is applied from behind the part which is soldered onto the PC Board.	No damage or cutting off
vibration test	The buzzer should be measured after a vibration amplitude of 1.5 mm with 10 ~ 55 Hz band of vibration frequency to each of the 3 perpendicular directions for 2 hours.	The value of the oscillation frequency / current consumption should be $\pm 10\%$ compared to the initial measurements. The SPL should be within $\pm 10\text{dB}$ compared to the initial measurements.
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 $+120^{\circ}\text{C}$ for 240 hours.	The buzzer will be measured after being placed at $+25^{\circ}\text{C}$ for 4 hours. The value of the oscillation frequency / current consumption should be $\pm 10\%$ compared to the initial measurements. The SPL should be within $\pm 10\text{dB}$ compared to the initial measurements.
low temperature test	After being placed in a chamber at $-40^{\circ}\text{C}$ for 240 hours.	
humidity test	After being placed in a chamber at $+40^{\circ}\text{C}$ and $90 \pm 5\%$ RH for 240 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 $55^{\circ}\text{C}$ 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 ( $+25 \pm 2^{\circ}\text{C}$ ) with rated voltage applied.	The buzzer will be measured after being placed at $+25^{\circ}\text{C}$ for 4 hours. The value of the oscillation frequency / current consumption should be $\pm 10\%$ compared to the initial measurements. The SPL should be within $\pm 10\text{dB}$ compared to the initial measurements.

## TEST CONDITIONS

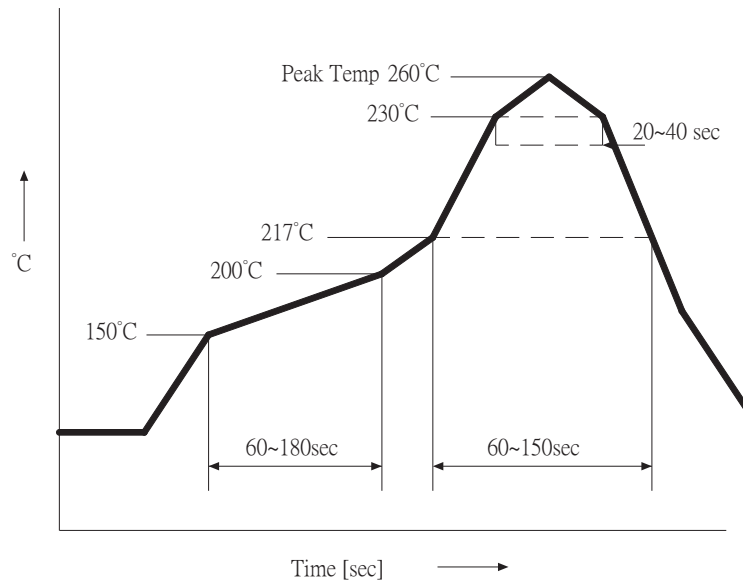
standard test conditions	a) Temperature: $+5 \sim +35^{\circ}\text{C}$	b) Humidity: 45 ~ 85%	c) Pressure: 860 ~ 1060 mbar
judgement test conditions	a) Temperature: $+25 \pm 2^{\circ}\text{C}$	b) Humidity: 60 ~ 70%	c) Pressure: 860 ~ 1060 mbar

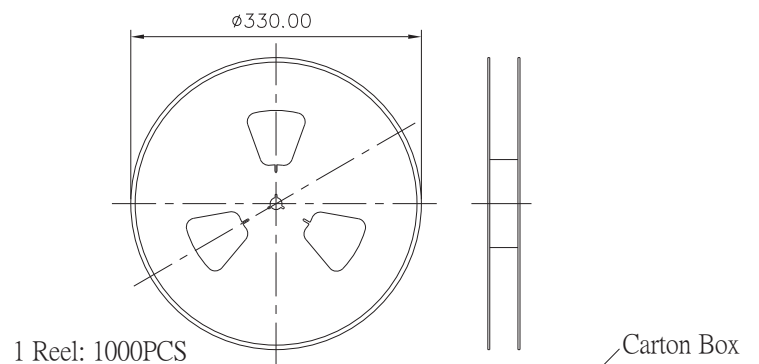
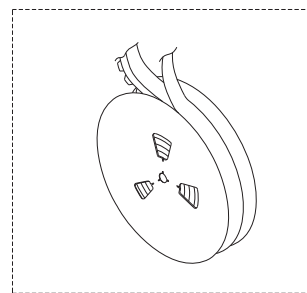
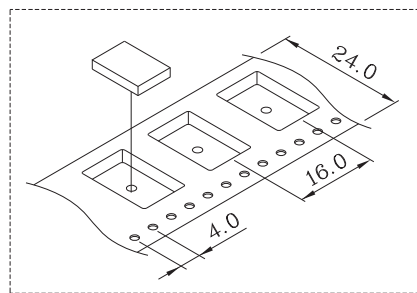
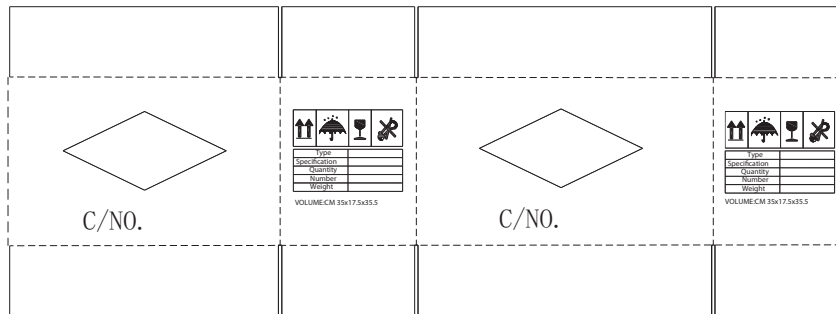


PART NUMBER: CMT-1203

DESCRIPTION: PIEZO AUDIO TRANSDUCER

## RECOMMENDED TEMPERATURE PROFILE FOR REFLOW OVEN



**PART NUMBER: CMT-1203**
**DESCRIPTION: PIEZO AUDIO TRANSDUCER**
**PACKAGING**


Inner Box  
(1 Layer Reel)

Carton Box  
(5 Inner Box)

Inner Box	340mmx340mmx40mm	1x1000PCS=1000PCS
Carton Box	350mmx175mmx355mm	5x1000PCS=5,000PCS

1. CUI Inv#. 037-4631R  
CUI Part#. CMT-1203
2. RoHS Compliant