Piezo Buzzer

12×12×3.0mm

CS12PP030M12-4000

Revision

Date	Version	Status	Changes	Approver
2022/11/02	V0.1	Draft	First release	AX

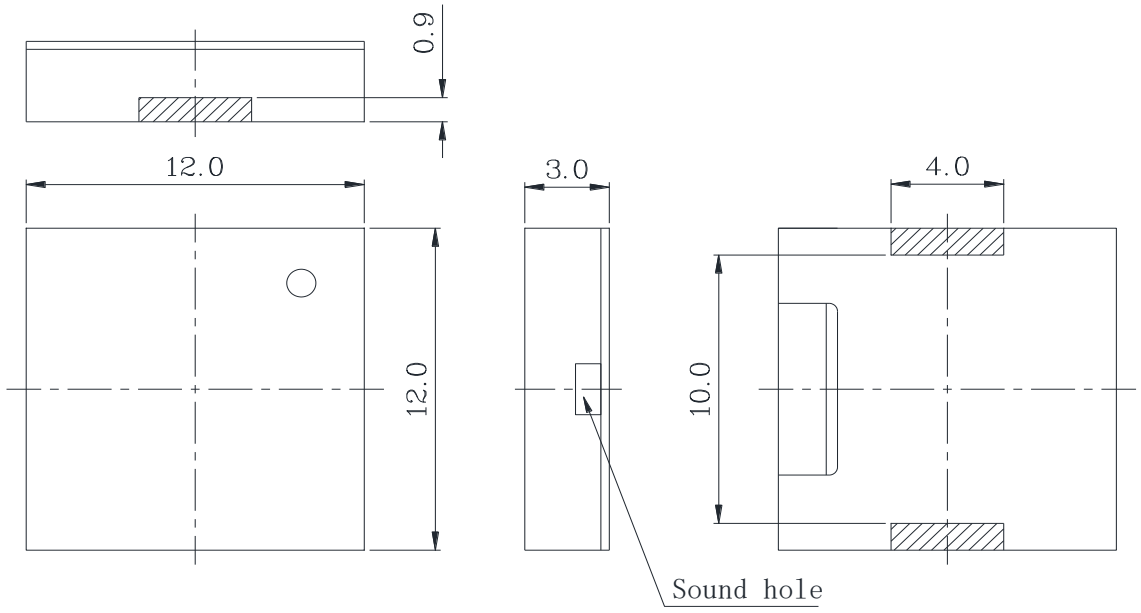
Parameter	Condition	Specification	Units
Oscillation Frequency	Square Wave	4.0	KHz
Operating Voltage		1~25	V_{p-p}
Rated Voltage		1.5	V_{p-p}
Current Consumption	at Rated Voltage	MAX.3	mA
Sound Pressure Level	at 10cm at Rated Voltage	MIN.75	dB
Capacitance	at120Hz	15000±30%	PF
Tone Nature		Constant	
Operating Temperature		-20~ +70	℃
Dimension	See appearance drawing	12 x 12 x H3	mm
Weight (MAX)		0.8	gram
Housing Material		LCK(Black)	
Leading Pin	See appearance drawing	Tin Plated Brass(Sn)	
Environmental Protection Regulation		RoHS	

Notes: All specifications measured at 15~35°C, humidity at 25~75%, under 86~106 kPa pressure, unless otherwise noted.

MECHANICAL DRAWING

Units: mm

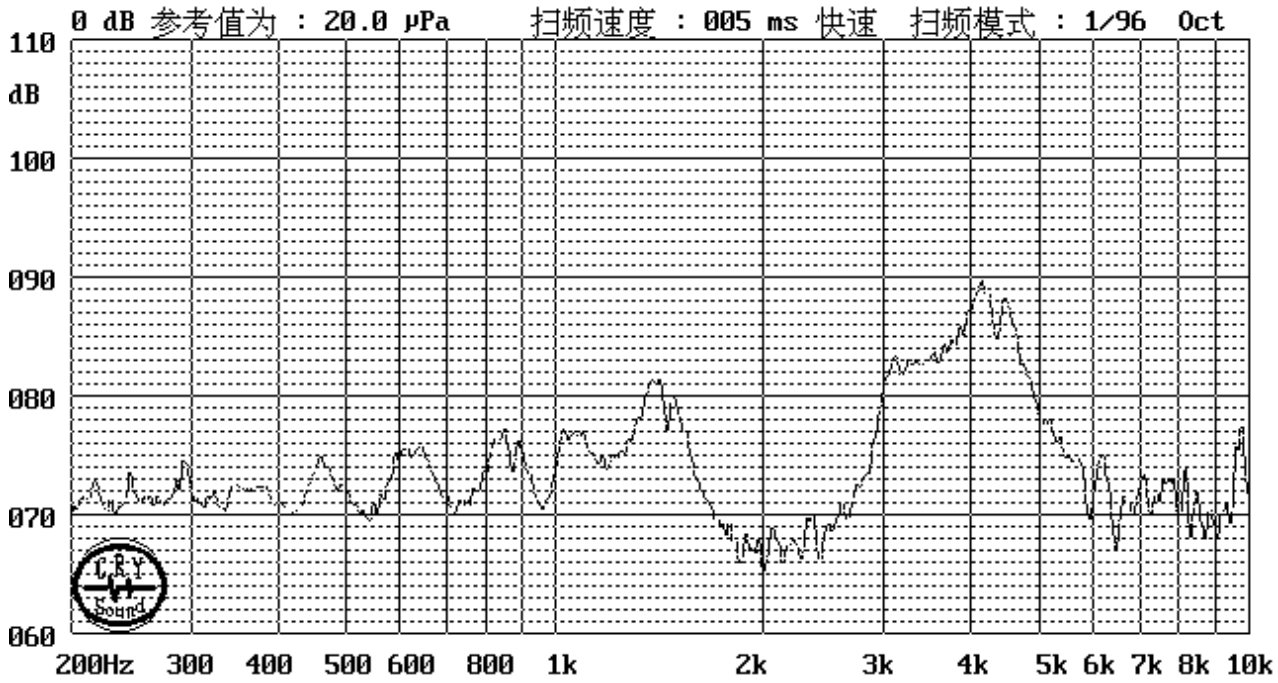
Tolerance: ±0.3mm



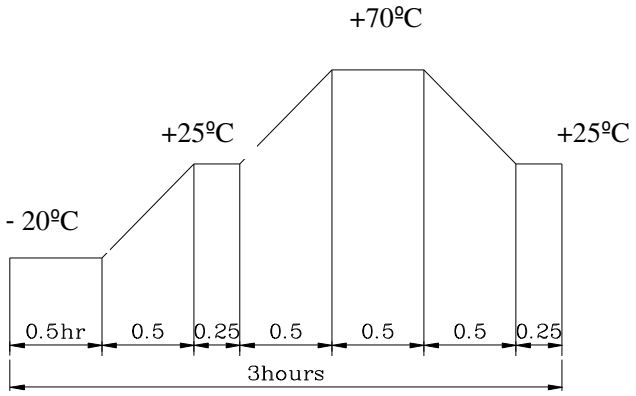
RESPONSE CURVES

Frequency Response Curve

Test condition: 0.1M,



RELIABLITY TEST

1	High Temperature Test (Storage)	After being placed in a chamber with 70□2ºC for 96 hours and thenbeing placed in normal condition for 2 hours.Allowable variation of SPL after test: □10dB.
2	Low Temperature Test (Storage)	After being Placed in a chamber with -20□2ºC for 96 hours and thenbeing placed in normal condition for 2 hours.Allowable variation of SPL after test: □10dB.
3	Humidity Test	After being Placed in a chamber with 90-95% R.H. at 40□2ºC for 96hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: □10dB.
4	Temperature Cycle Test	The part shall be subjected to 5 cycles. One cycle shall be consist of：  Allowable variation of SPL after test: □10dB.
5	Drop Test	Drop on a hard wood board of 4cm thick, any directions ,6 times,at the height of 75cm .Allowable variation of SPL after test: □10dB.
6	Vibration Test	After being applied vibration of amplitude of 1.5mm with 10 to 55 Hz band of vibration frequency to each of 3 perpendicular directions for 2 hours .Allowable variation of SPL after test: □10dB.
7	Solderability Test	Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +300□5ºC for 3□1 seconds . 90% min. lead terminals shall be wet with solder (Except the edge of terminals).
8	Terminal Strength Pulling Test	The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds.No visible damage and cutting off.

Standard Test Condition: a) Temperature : +5 ~ +35℃ b) Humidity : 45-85% c) Pressure : 860-1060mbar

一般测试条件: a) 温度 : +5 ~ +35℃ b) 湿度 : 45-85% c) 气压 : 860-1060mbar

Judgment Test Condition: a) Temperature : +25 ± 2℃ b) Humidity : 60-70% c) Pressure : 860-1060mbar

争议时测试条件 : a) 温度 : +25 ± 2℃ b) 湿度 : 60-70% c) 气压 : 860-1060mbar

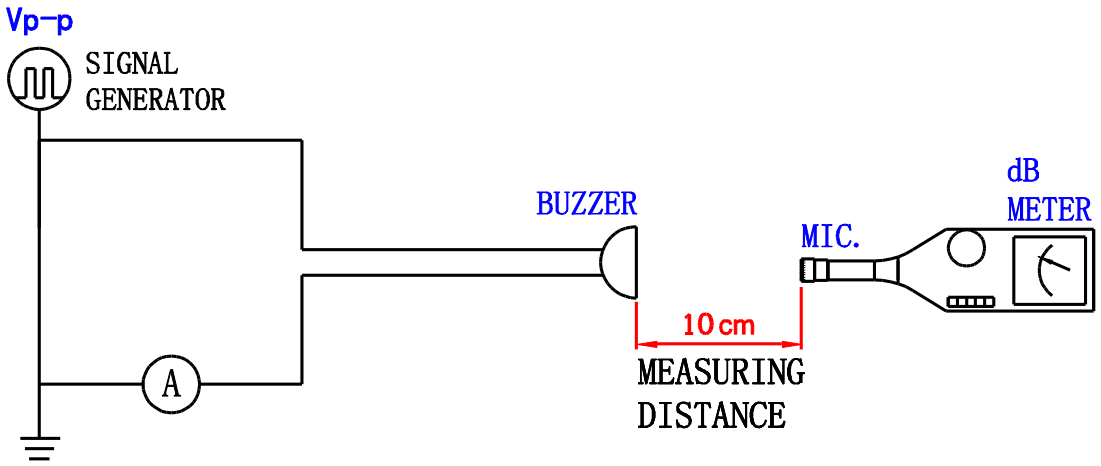
MEASURING METHOD

Standard Measurement conditions

Temperature:25±2℃ Humidity:45-65%

Acoustic Characteristics:

The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



In the measuring test, buzzer is placed as follows:

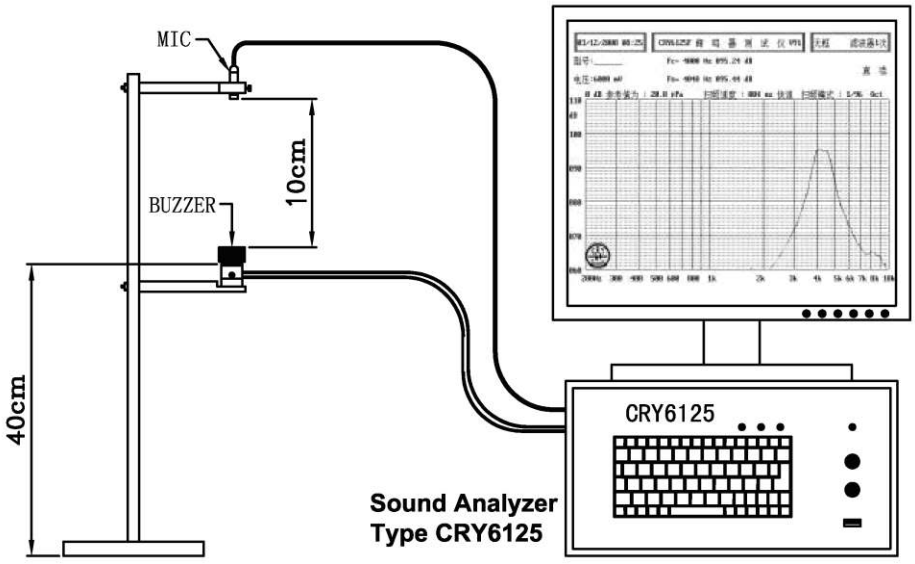
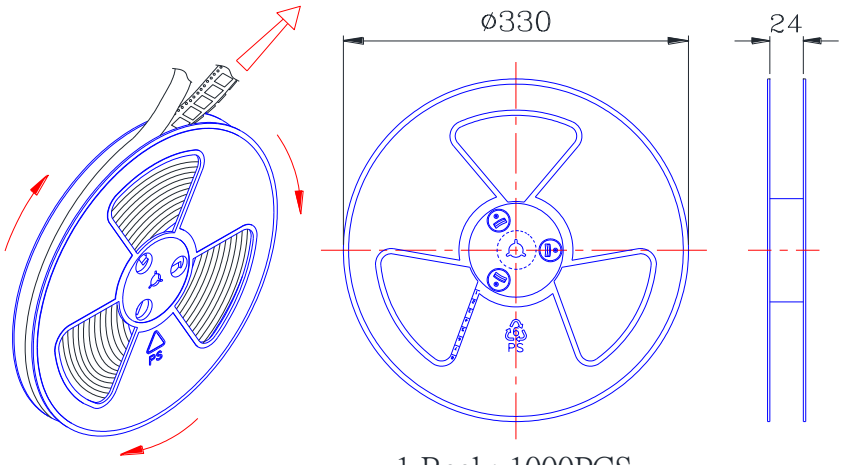
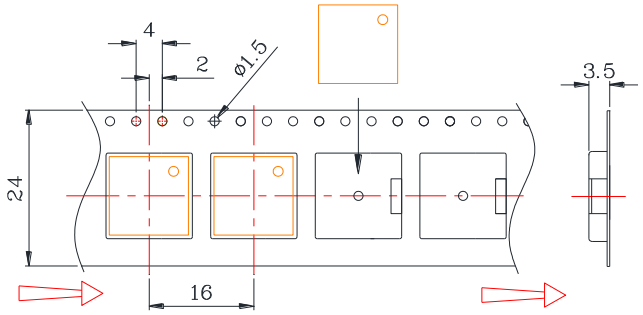


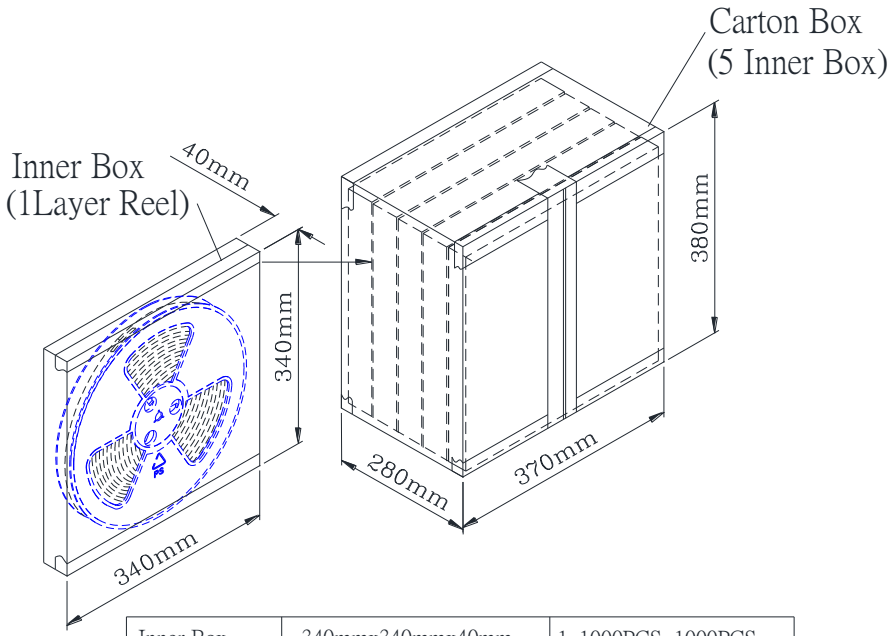
Fig. 1 Block Diagram for Measurement Method

PACKAGING



1 Reel : 1000PCS





Inner Box	340mmx340mmx40mm	1x1000PCS=1000PCS
Carton Box	380mmx370mmx280mm	5x1000PCS=5,000PCS