Piezo SMD buzzer

9×9×1.9 mm

CS09PP019M12-4100-A

Revision

Date	Version	Status	Changes	Approver
2019/09/24	V0.1	Draft	First release	AX

SPECIFICATIONS

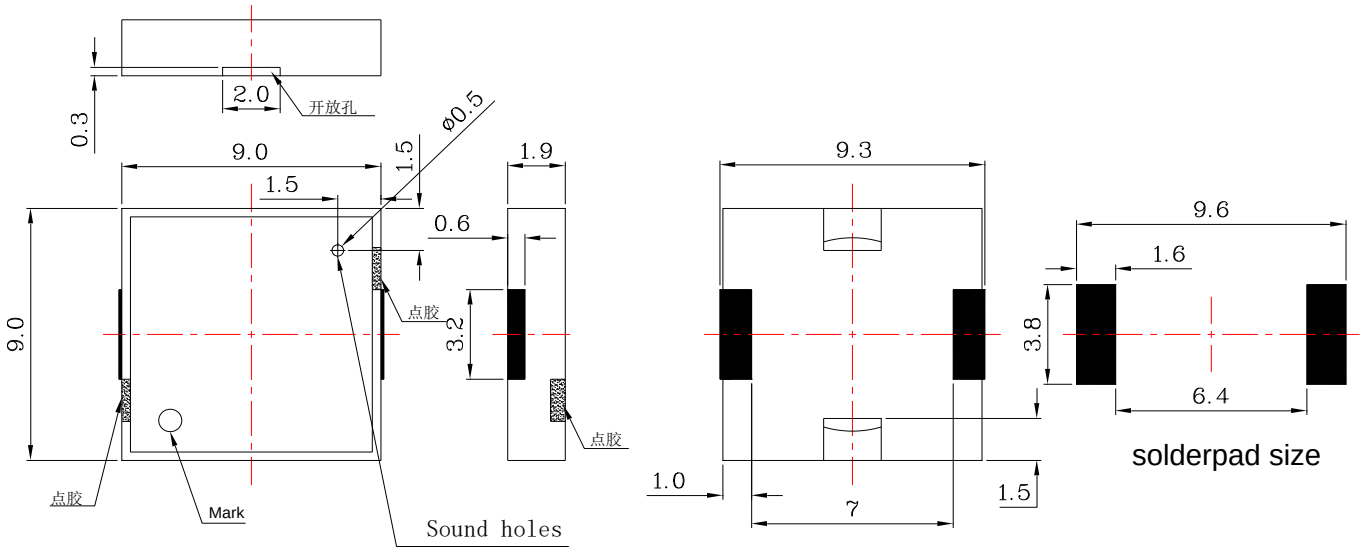
Parameter	Conditions/Description	Values	Units
Oscillation Frequency	Square Wave	4100	Hz
Operating Voltage		1~25	V_{p-p}
Rated Voltage		3	V_{p-p}
Current Consumption	at Rated Voltage	MAX.3	mA
Sound Pressure Level	at 10cm at Rated Voltage	MIN.68	dB
Capacitance	at120Hz	12±30%	nF
Tone Nature		Constant	
Operating Temperature		-40~ +85	℃
Storage Temperature		-40 ~ +85	℃
Weight (MAX)		0.3	gram
Housing Material		PPA(Black)	
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

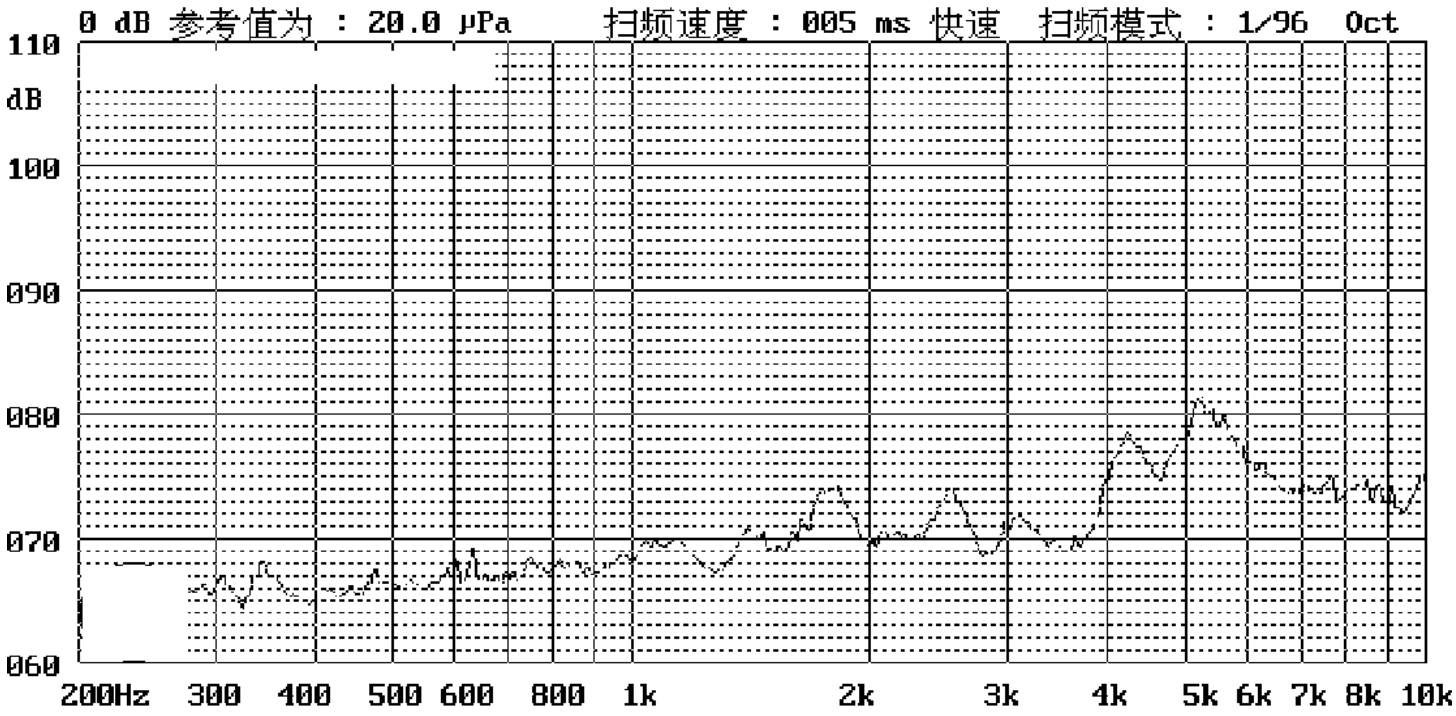
Tolerance: ±0.5mm



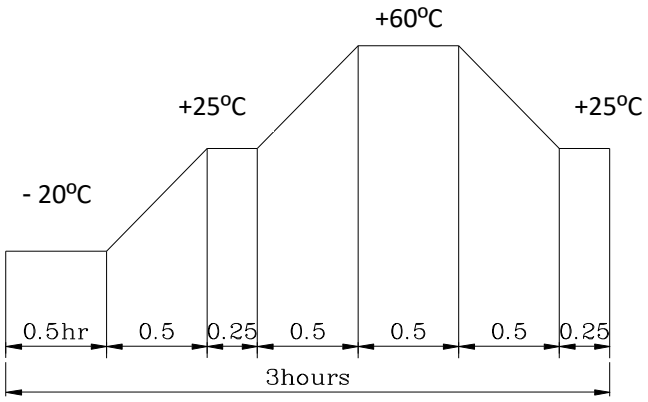
RESPONSE CURVES

Frequency Response Curve

Test condition: 0.1M,



RELIABLITY TEST

1	Reliability Test Performance	After any following test, parts should conform to original performance within ±3 dB tested with Rated Power, after 6 hours of recovery period.
2	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.
3	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.
4	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.
5	Temperature Cycle Test	The part shall be subjected to 5 cycles. One cycle shall be consist of:  Allowable variation of SPL after test: ±10dB.
6	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.
7	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.
8	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).
9	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.

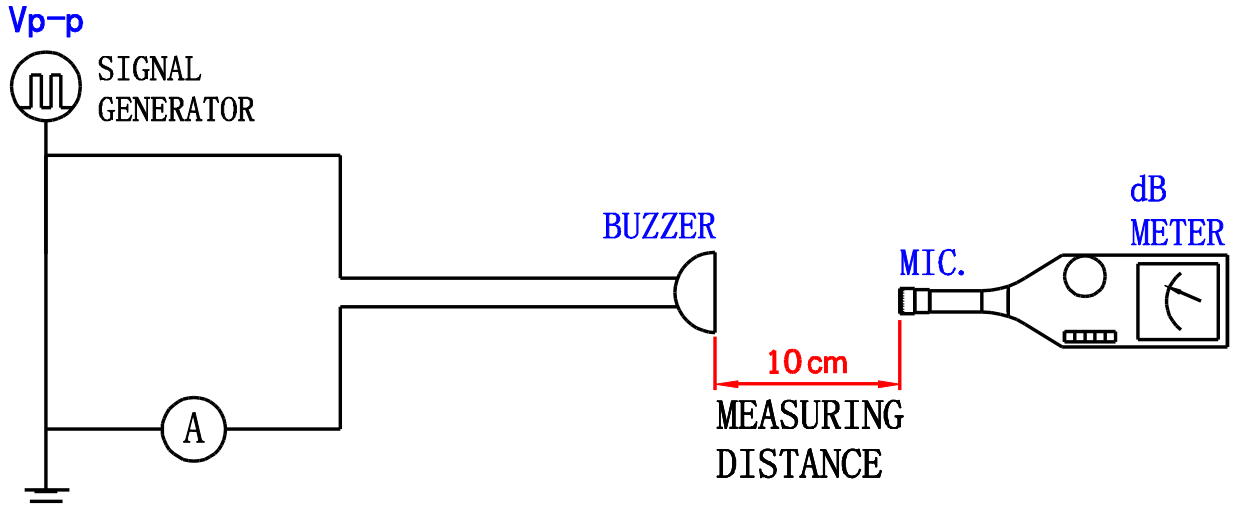
MEASURING METHOD

Standard Measurement conditions

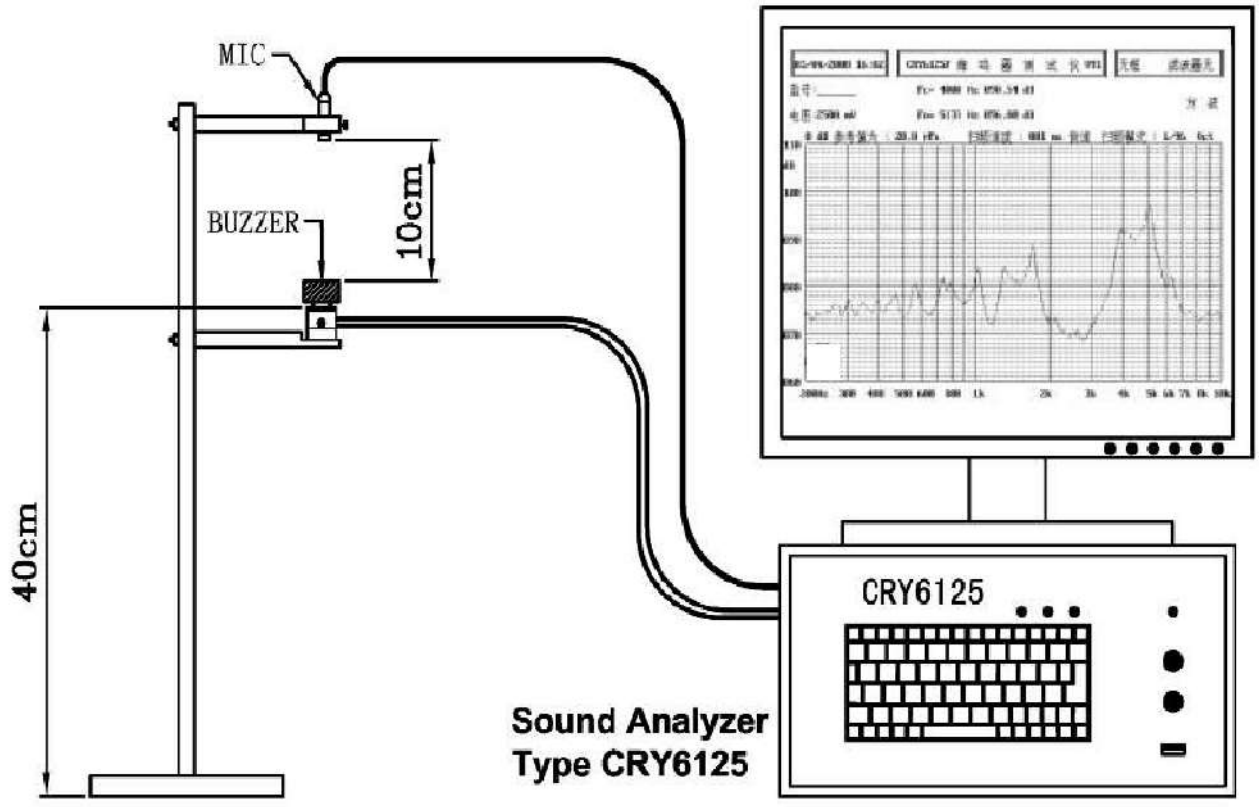
Temperature:25±2℃ Humidity:45-65%

Acoustic Characteristics:

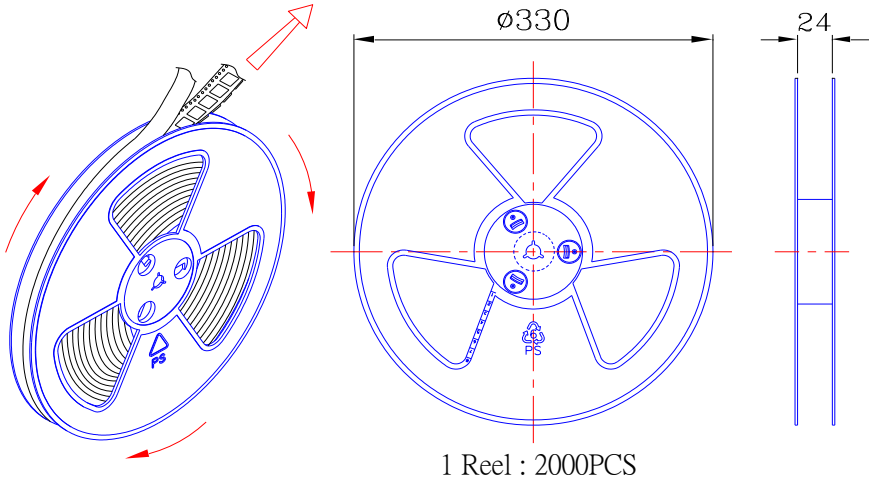
The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below

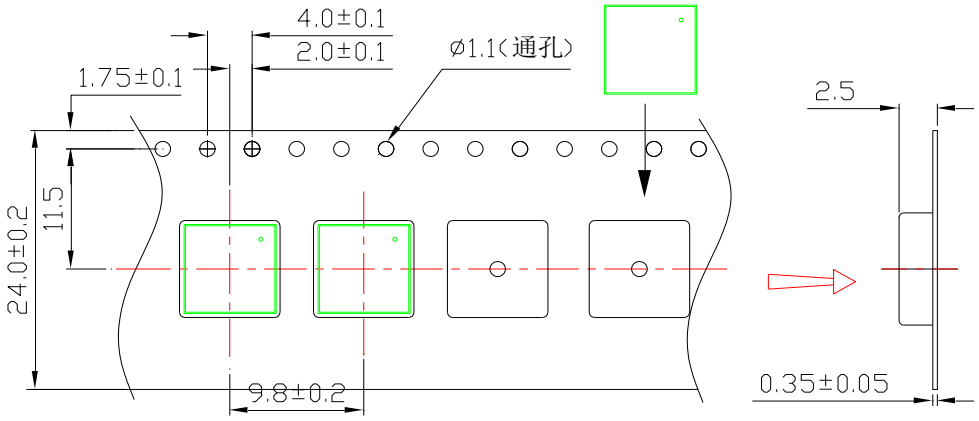


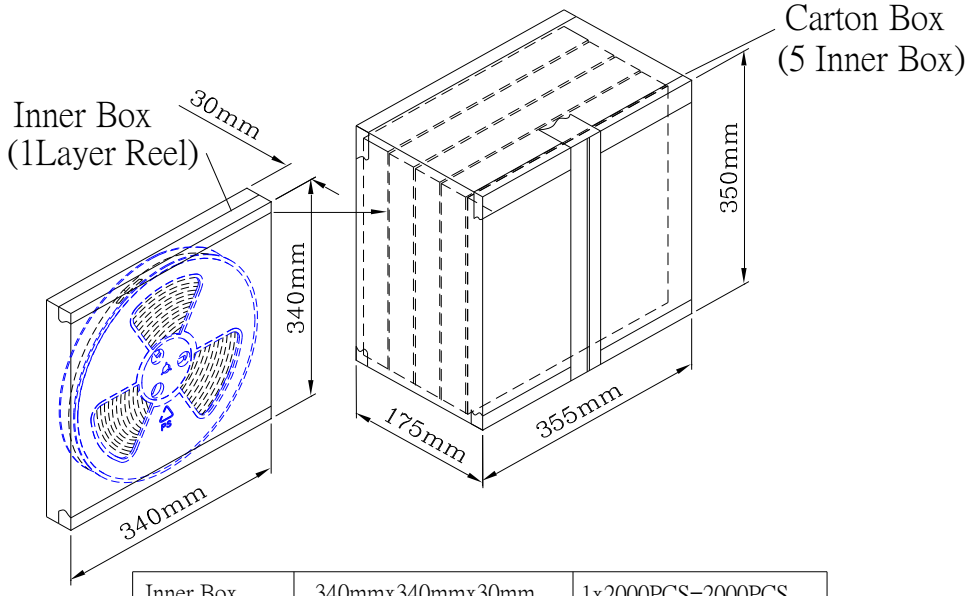
In the measuring test, buzzer is placed as follows:



PACKAGING







Inner Box	340mmx340mmx30mm	1x2000PCS=2000PCS
Carton Box	350mmx355mmx175mm	5x2000PCS=10,000PCS