Magnetic SMD Buzzer

5.2×5.2×2.0mm

CS05MP02M12-4000

Revision

Date	Version	Status	Changes	Approver
2023/5/4	V0.1	Draft	First release	AX

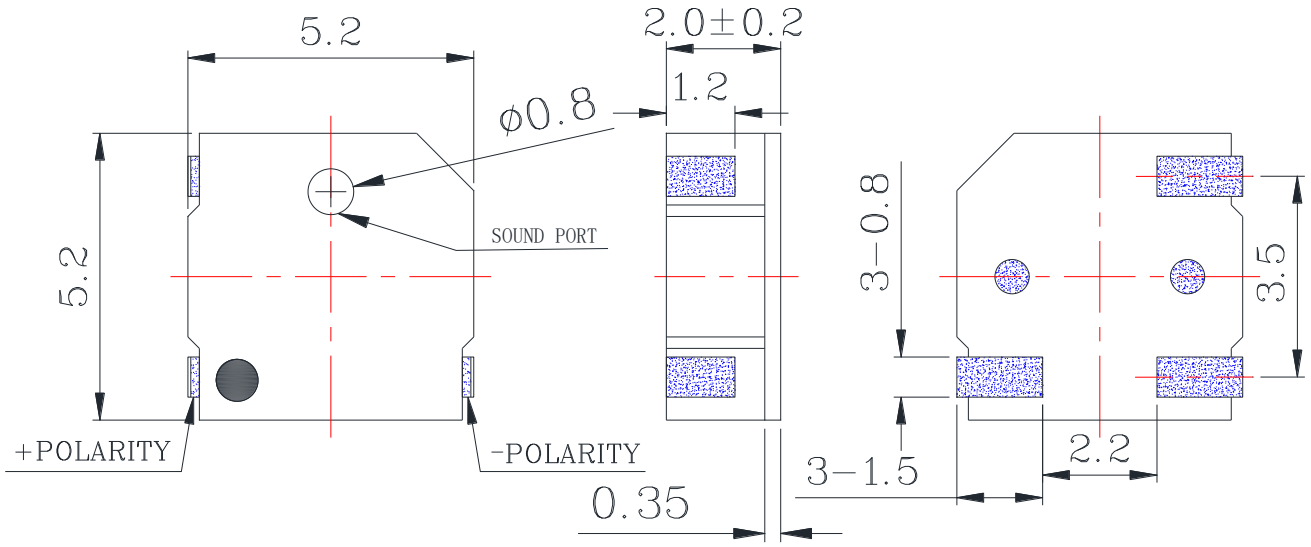
SPECIFICATIONS

Parameter	Conditions/Description	Values	Units
Oscillation Frequency		4000	Hz
Operating Voltage		2~5	V_{p-p}
Rated Voltage		3.3	V_{p-p}
Current Consumption	at Rated Voltage	MAX.100	mA
Sound Pressure Level	at 10cm at Rated Voltage	MIN.80	dB
Coil Resistance		12±3	Ω
Tone Nature		Constant	
Operating Temperature		-30~ +70	℃
Storage Temperature		-40 ~ +80	℃
Dimension	See appearance drawing	5.0*5.0*2H	mm
Housing Material		LCP(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

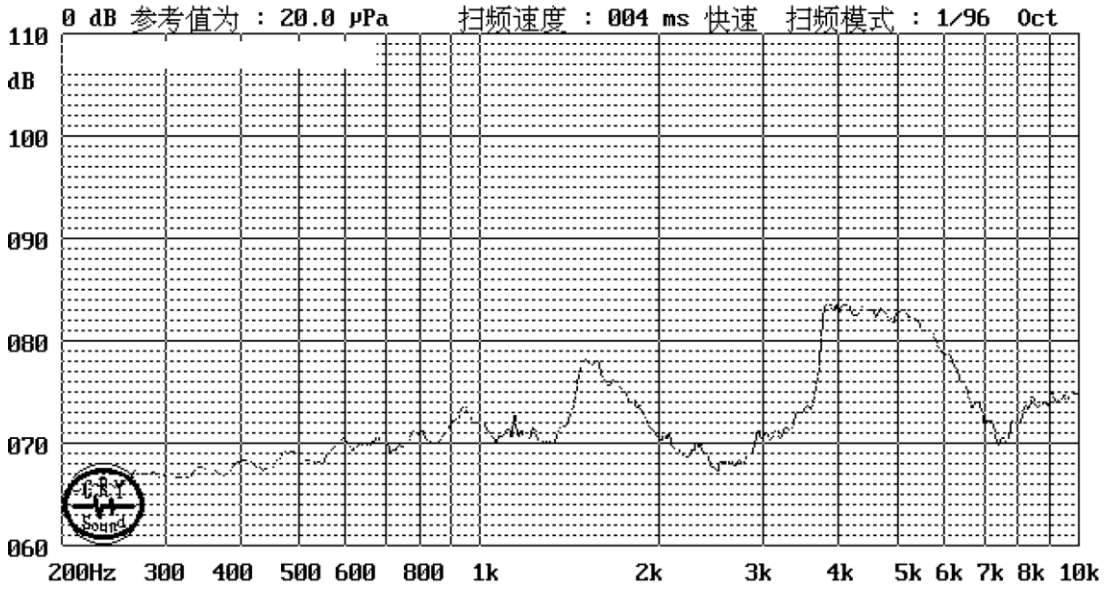
Units: mm



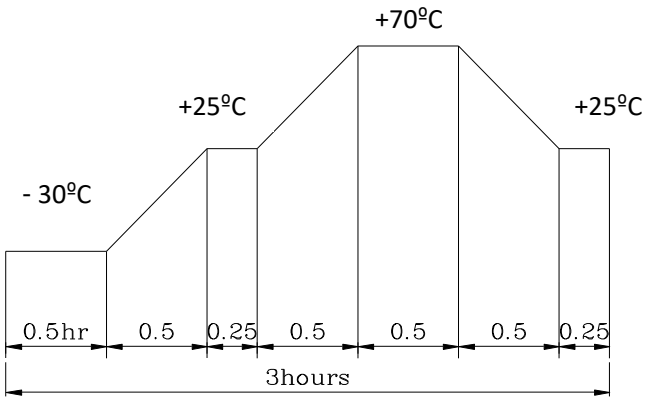
RESPONSE CURVES

Frequency Response Curve

Test condition: 0.1M,



RELIABLITY TEST

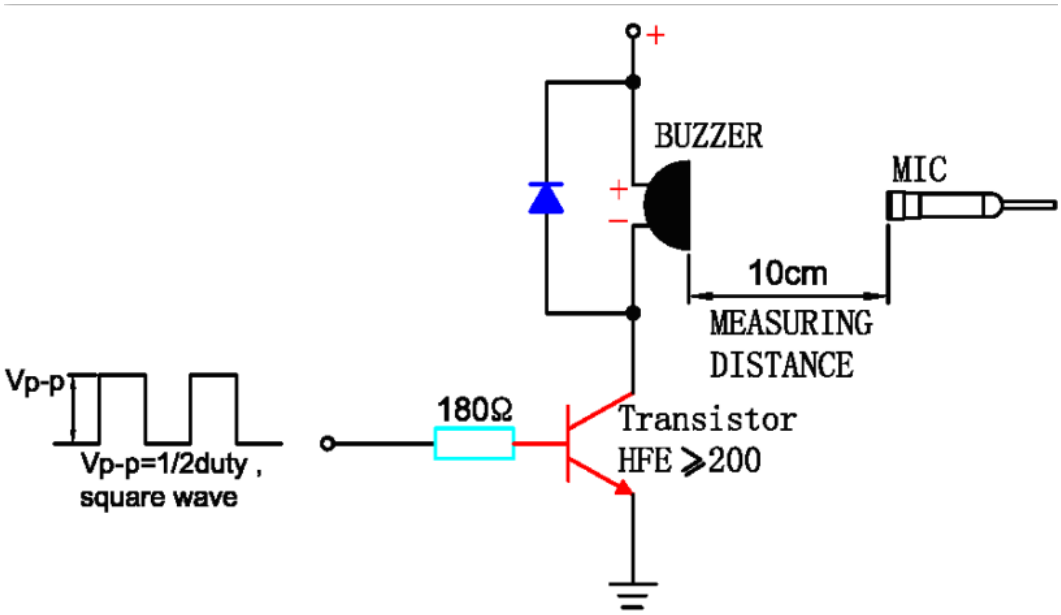
1	Reliability Test Performance	After any following test, parts should conform to original performance within ±3 dB tested with Rated Power, after 6 hours of recovery period.
2	High Temperature Test (Storage)	After being placed in a chamber with 80±2ºC for 96 hours and thenbeing placed in normal condition for 2 hours.Allowable variation of SPL after test: ± 10dB.
3	Low Temperature Test (Storage)	After being Placed in a chamber with -40±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

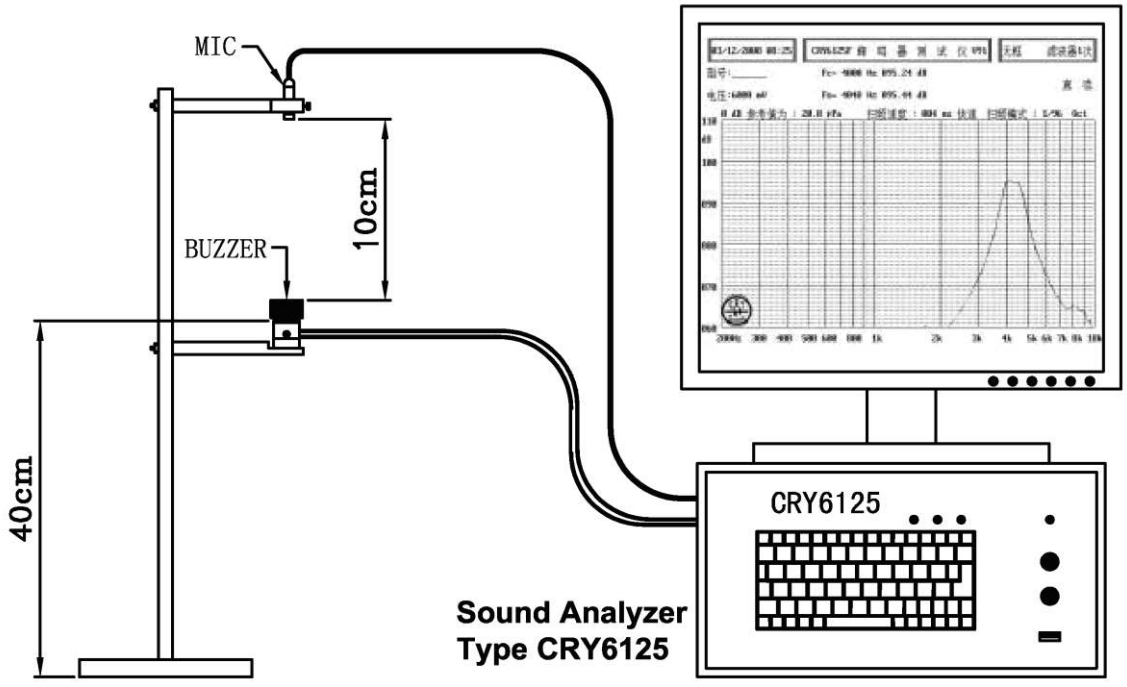
Standard Measurement conditions

Temperature:25±2℃ Humidity:45-65%

Recommended Setting



Recommended Test Circuit

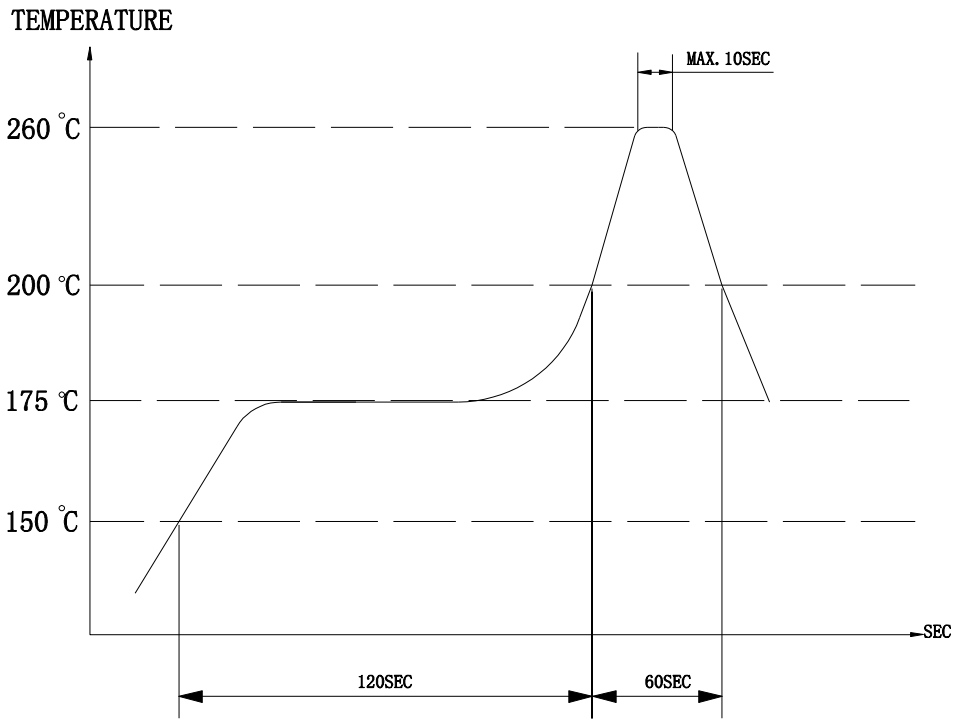


Soldering Condition

(1)Recommendable reflow soldering condition is as follows

(Reflow soldering is twice)

Note:It is requested that reflow soldering should be executed after heat of product goes down to normal.



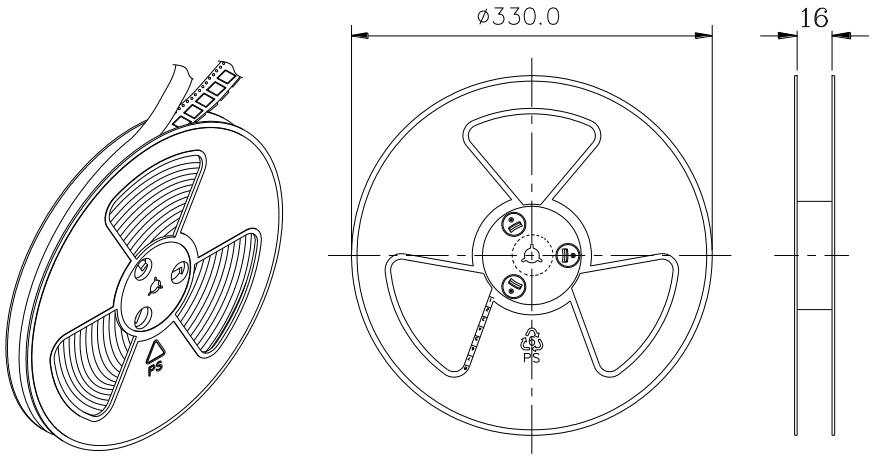
Heat resistant line

(Used when heat resistant reliability test is performed)

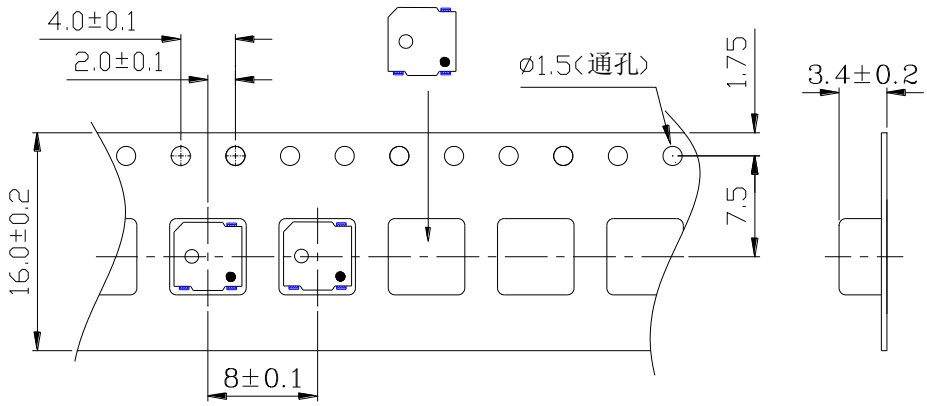
(2)Manual soldering

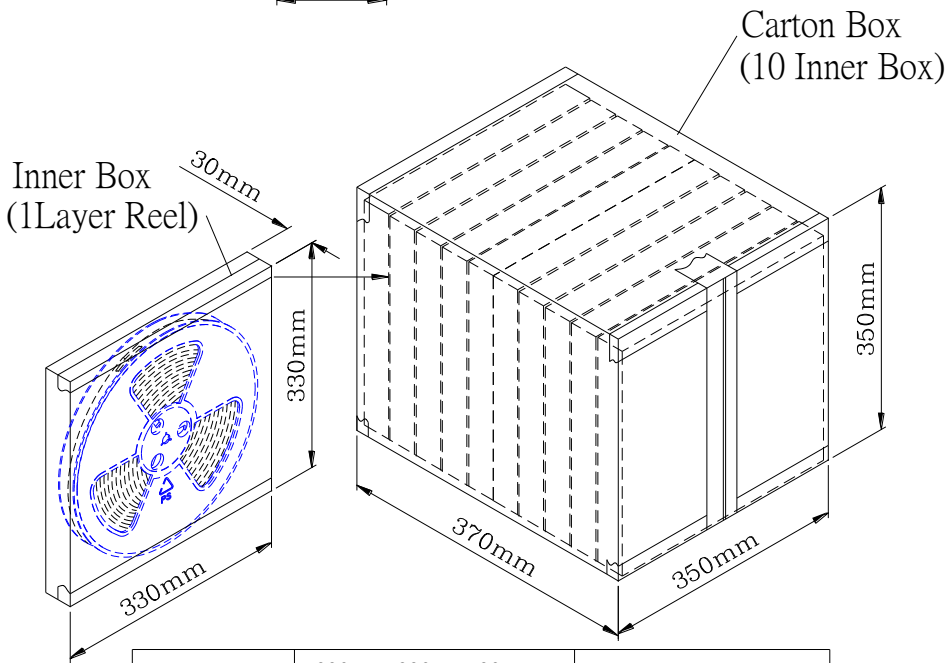
Manual soldering temperature 350° C within 5 sec.

PACKAGING



1 Reel : 2500PCS





Inner Box	330mmx330mmx30mm	1x2500PCS=2500PCS
Carton Box	350mmx350mmx370mm	10x2500PCS=25,000PCS