OBO Pro.2	SPECIFICATIONS	MODEL NO OBO-20UX1
	PART NAME SMD-Electromagnetic Transducer	SHEET 1 OF 7

ALTERNATION HISTORY							
Marking	Date	ECN NO.	REV.	Description	Page	PREPARE BY	APPROVE BY
--	July.29.2019	---	暫定	Provisional Document	7	汪冬冬	林建宏

REV.	DATE	PREPARED BY	CHECKED BY	APPROVED BY
暫定	July.29,2019	汪冬冬	林建宏	林建宏

MODEL NO : OBO-20UX1

Features:Conformity RoHS Directive(2011/65/EU) Requests.

1. General Specifications

	Items	Specification
1.1	※Sound Pressure Level	70 dB min./10cm/3Vo-p
1.2	Rated Voltage	3Vo-p
1.3	Resonant Frequency	4.0KHz Vo-p=1/2duty , square wave
1.4	※Rated Current	90 mA MAX./ 3Vo-p
1.5	Operating Voltage	2 ~ 4 Vo-p
1.6	Coil Resistance	17±3Ω
1.7	Housing Material	LCP（Black）
1.8	Leading Pin	Tin Plated Brass(Sn)
1.9	Operating Temp. Range	-20℃ to +70℃
1.0	Storage Temp Range	-30℃ to +80℃
1.11	Weight(MAX)	0.1 gram

2. Standard State

2.1 Standard State

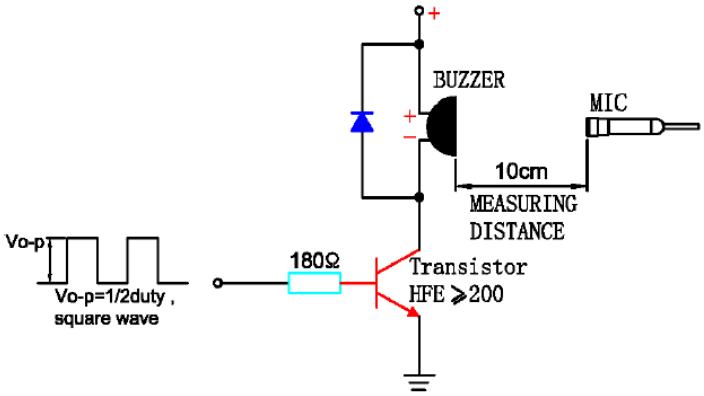
Ordinary Temperature	+5℃ to +35℃
Ordinary Humidity	45% to 85%
Ordinary air pressure	860 to 1060hPa

2.2 Basic State

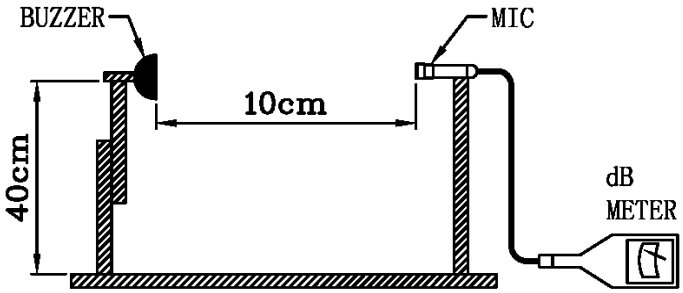
Temperature	+25±2℃
Humidity	45% to 65%
Ordinary air pressure	860 to 1060hPa

3. Acoustic Characteristics:

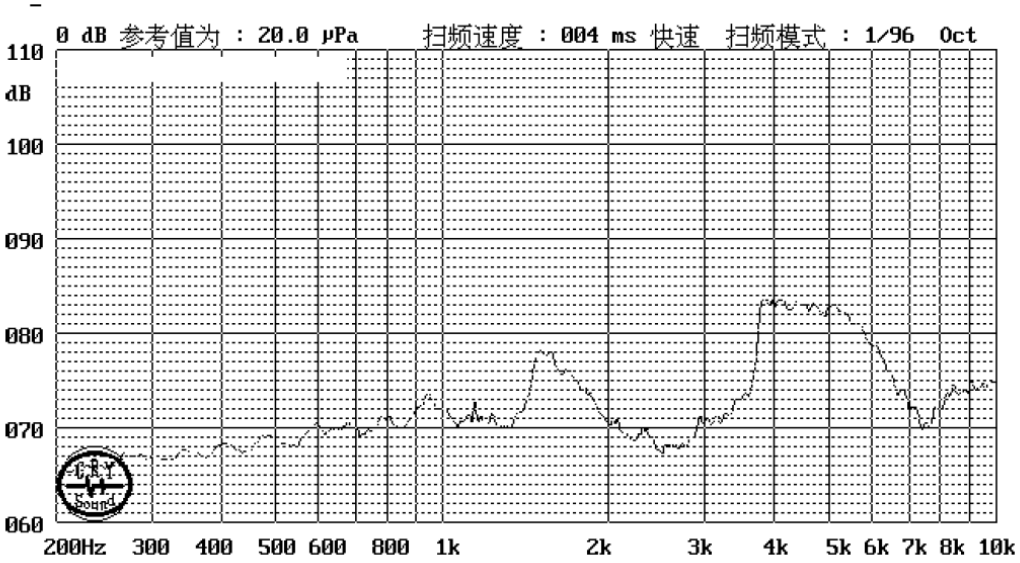
3.1 The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below



3.2 Standard Test Fixture

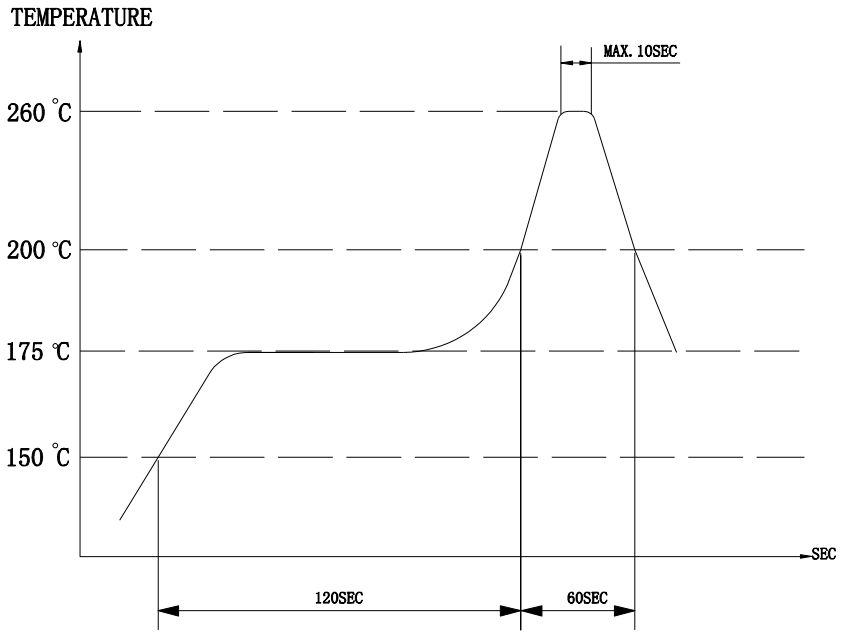


4. Typical Frequency Response Curve



5. Soldering Condition

4.1Recommendable 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)

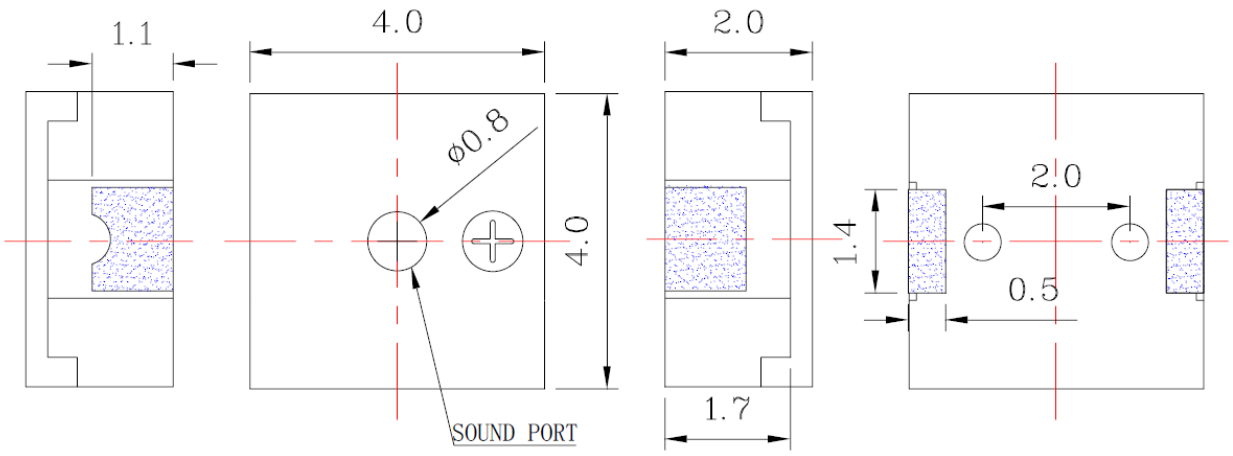
4.2 Hand Soldering

Soldering iron temperature 350℃ less than 5 second.

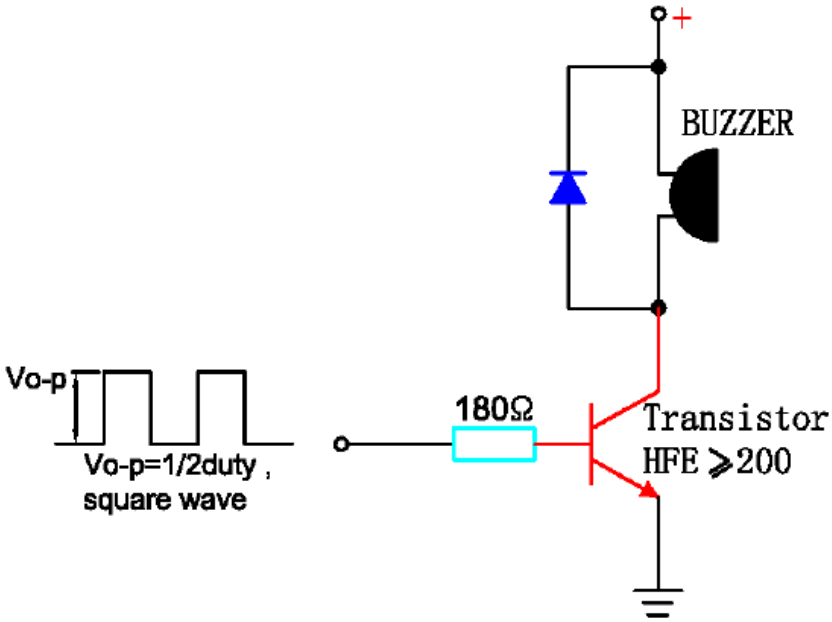
6. Mechanical Layout and Dimensions

5.1 Dimensions

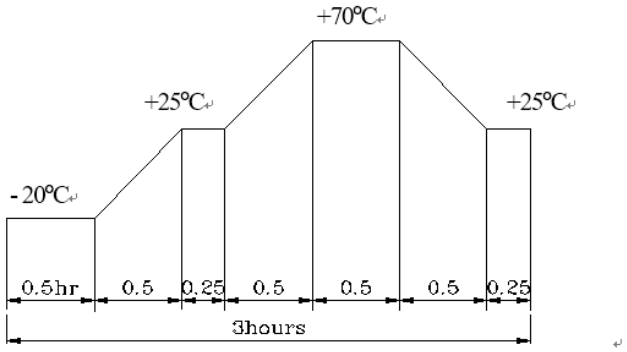
Tolerance: ±0.3mm Uint: mm



7. Recommend Driving Circuit



8.RELIABILITY TEST

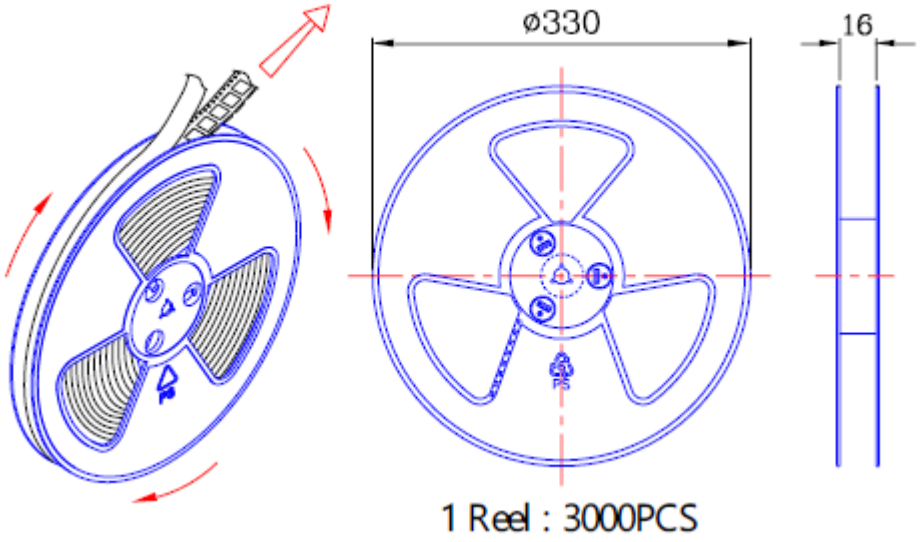
NO.	ITEM	TEST CONDITION AND REQUIREMENT
1	High Temperature Test (Storage)	After being placed in a chamber with 80±2ºC for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: ±10dB.
2	Low Temperature Test (Storage)	After being Placed in a chamber with -30±2ºC for 96 hours and then being 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 96 hours 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 for2 hours .Allowable variation of SPL after test: ±10dB.
7	Solder ability 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 for10 seconds .No visible damage and cutting off.

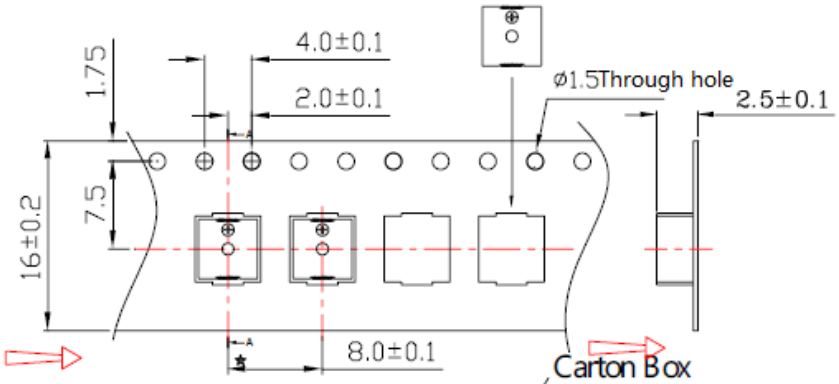
TEST CONDITION.

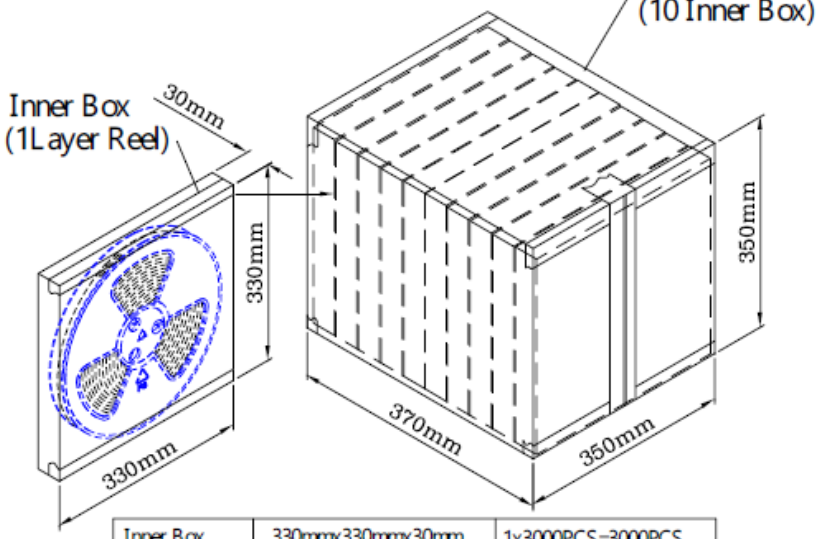
Standard Test Condition : a) Temperature : +5 ~ +35℃ b) Humidity : 45-85%
c) Pressure : 860-1060mbar

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

9. PACKING







Inner Box	330mmx330mmx30mm	1x3000PCS=3000PCS
Carton Box	350mmx350mmx370mm	10x3000PCS=30,000PCS