



SPECIFICATION FOR MAGNETIC TRANSDUCER

Item No.: LF-MT05B01

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# Specification of Magnetic Transducer

## 1. Scope

This specification is applied to the magnetic transducer, which are used for alarm systems.

## 2. Item No.: LF-MT05B01

## 3. Ratings

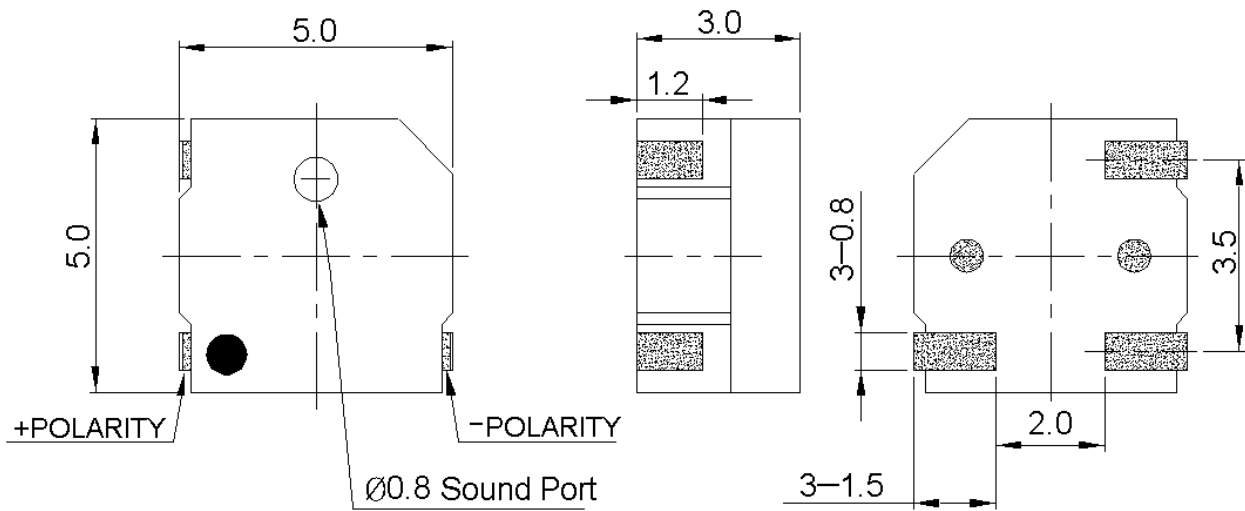
3.1	Rated Voltage	3.0 V <sub>0-p</sub>	
3.2	Operating Voltage	2.0 ~ 4.0 V <sub>0-p</sub>	
3.3	Current Consumption	110 mA max.	
3.4	Coil Resistance	12 ± 3 ohm	
3.5	Sound Pressure Level	75dB min. (10cm) *Frequency=4,000Hz, V <sub>0-p</sub> =3.0V, 1/2 duty square wave.	
3.6	Resonant Frequency	4,000 Hz	
3.7	Operating Temperature	- 40°C ~ + 85 °C	
3.8	Storage Temperature	- 40°C ~ + 85 °C	
3.9	Case Material	LCP	

## 4. Reliability

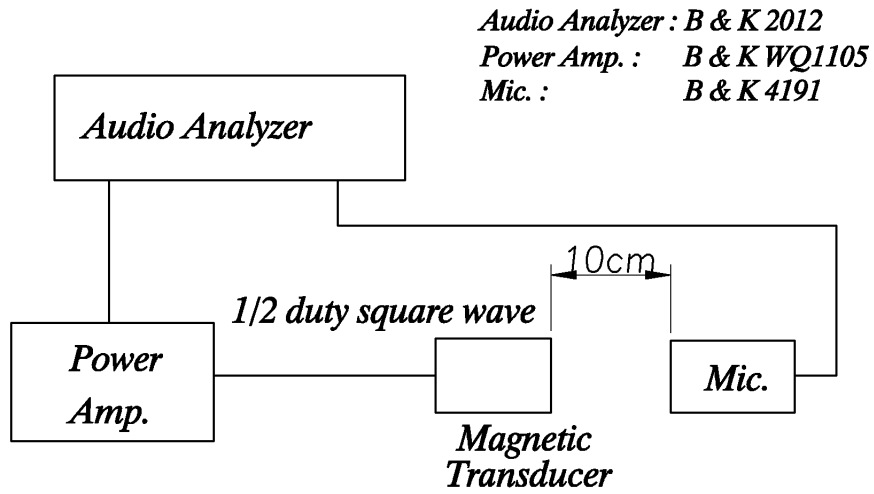
4.1	Temperature Characteristics (Static test)	<p>Be placed in a chamber at                      -20°C → +25°C → +60°C → +25°C                      30min. 15min. 30min. 15min. × 5cycles</p> <ul style="list-style-type: none"> <li>After above test, sounder shall be measured after being placed in natural condition for 2 hours ; without applying power.</li> </ul>
4.2	High Temperature (Static test)	<ul style="list-style-type: none"> <li>After being placed in a chamber with +80 ± 3°C for 48 hours and then being placed in natural condition for 2 hours without applying power, transducer shall be measured.</li> </ul>
4.3	Low Temperature (Static test)	<ul style="list-style-type: none"> <li>After being placed in a chamber with -30 ± 2°C for 48 hours and then being placed in natural condition for 2 hours without applying power, transducer shall be measured</li> </ul>
4.4	Humidity	<ul style="list-style-type: none"> <li>After being placed in a chamber with 90 to 95% R.H. at + 40 ± 3°C for 48 hours and then being placed in natural condition for 2 hours without applying power, transducer shall be measured.</li> </ul>
4.4	Vibration	<ul style="list-style-type: none"> <li>Transducer shall be measured after being applied vibration of amplitude of 1.5 mm with 10 to 55 Hz band of vibration frequency to each three mutually perpendicular directions for 2 hours.</li> </ul>
4.5	Drop Test	<ul style="list-style-type: none"> <li>The buzzer is put in a normal box then drop on a hard wood board of 4cm thick, each direction , total 6 times at the height of 75cm.</li> </ul>

All data at 25°C, humidity 40% ~ 80% unless otherwise specified.

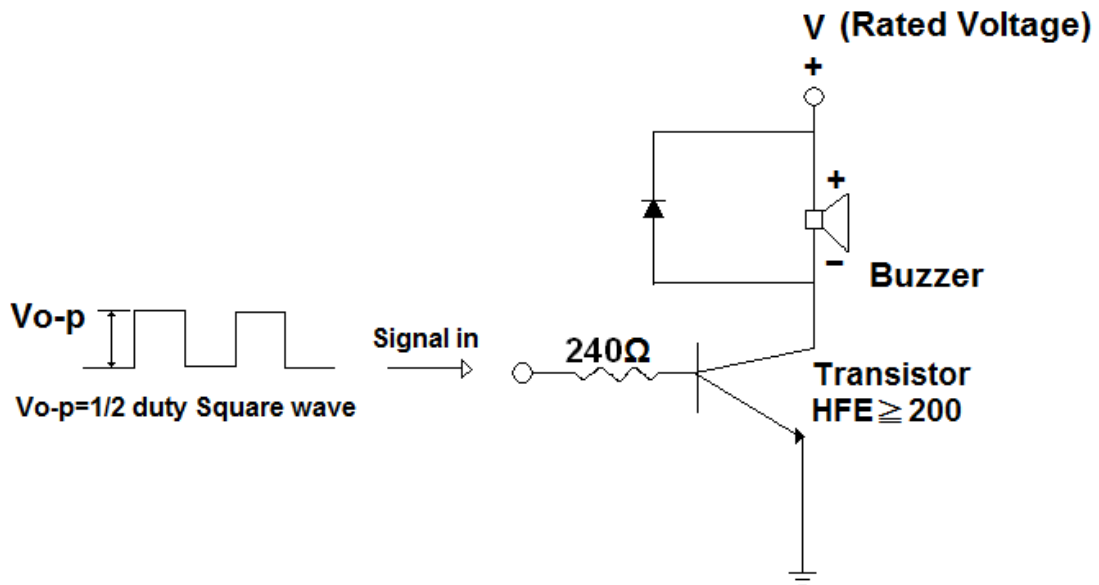
5. Dimension unit: mm±0.5



6. Test circuit

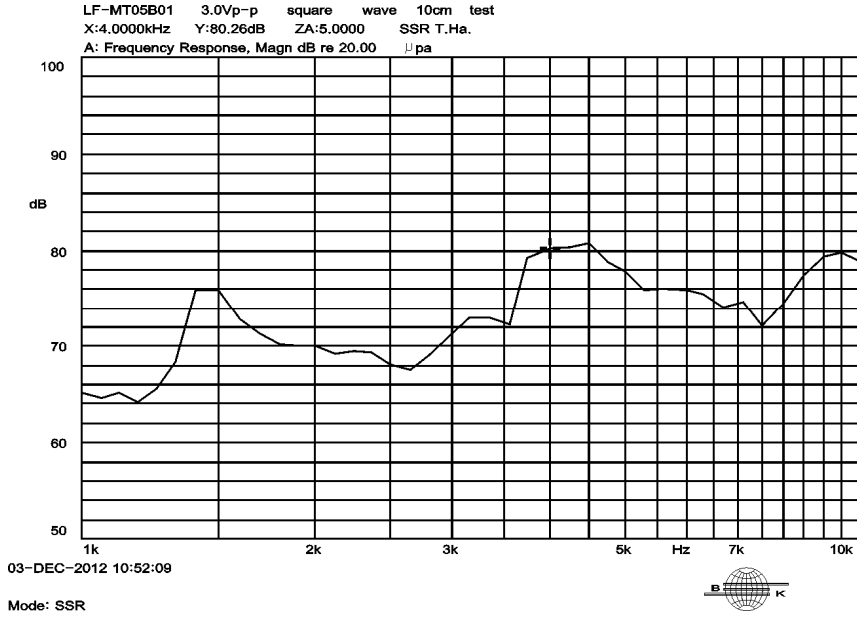


7. Standard driving circuit for transducer



8.

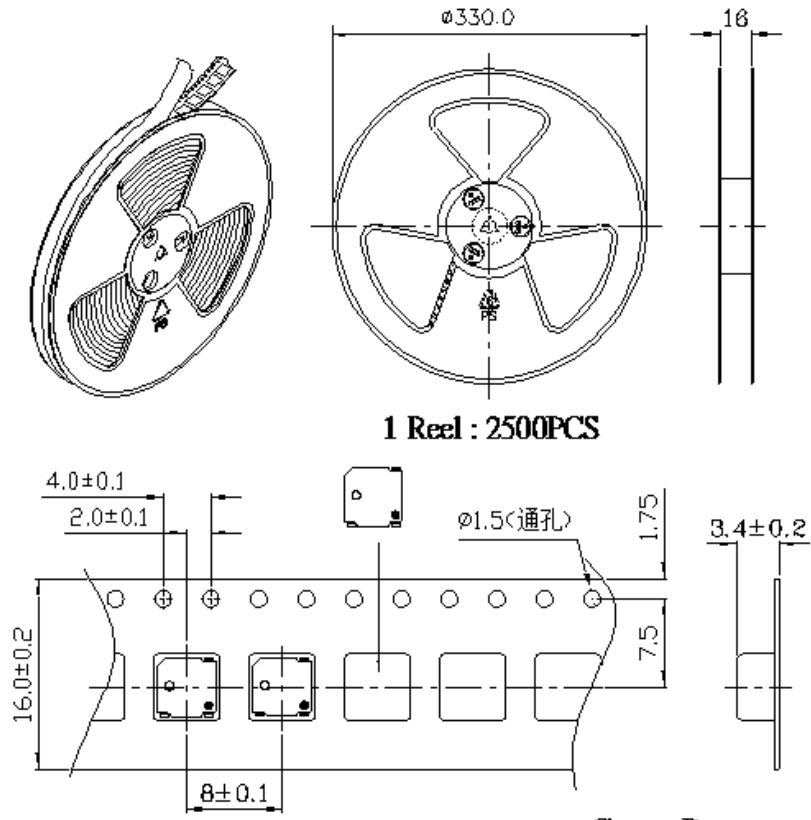
FREQUENCY RESPONSE CURVE OF LF-MT05B01  
 Input Voltage: 3.0Vo-p Square Wave, measuring Distance: 10cm



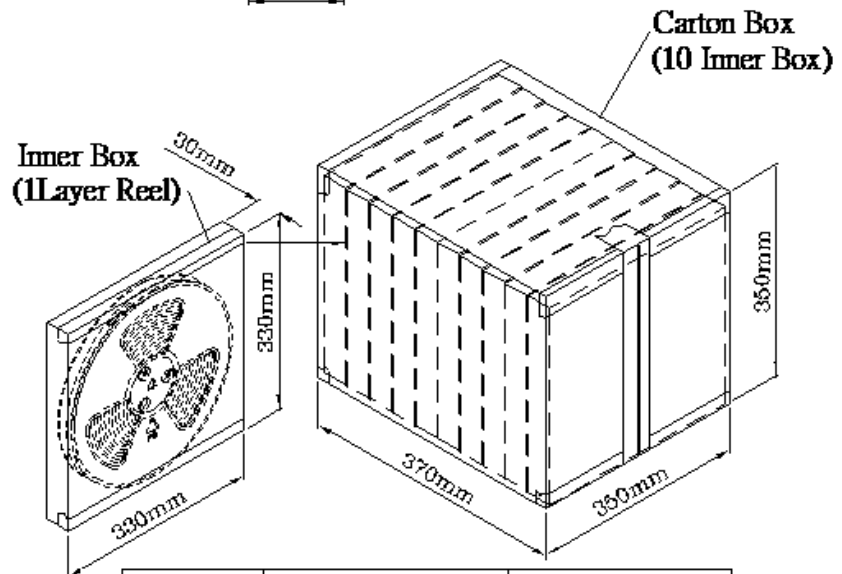
9. Recommended Soldering Condition:

Item.	Soldering condition		Application	Remarks
9.1	IR Reflow Soldering	<p>Frequency: Maximum 2 times.</p> <p>Please mark: Cool down the Buzzer and PCBA to room temperature before re-soldering.</p> <p>Testing: Cool down the buzzer at room temperature for minimum four hours before testing.</p>	SMD Buzzer	Please do not wash the product.
9.2	Manual soldering	<p>Temperature: 350±10°C, maximum 1.5 seconds</p> <p>Soldering area: minimum 1.5mm from the body.</p>	Buzzer	Duration: Minimum 1 minute between soldering positive and negative electrodes.

## 10. Packing



1 Reel : 2500PCS



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