

## SPECIFICATIONS SHEET FOR APPROVAL

MAGNETIC TRANSDUCER  
P/N: MTS8540A05LM-01

**DESCRIPTION: L8.5mm, W8.5mm, H4.0mm Magnetic Transducer,  
2731Hz, 5Vo-p, 87dB at 10cm, SMD,  
RoHS Compliance (Directive 2002/95/EC)**

**VERSION: 02**

**DATE: 29-Jan-2015**

### REVISIONS

VERSION	DESCRIPTION	DATE
01	Released from engineering	9 Aug10
02	Added the date code marking	29 Jan15

**APPROVED BY :**

**CUSTOMER NAME :**

**DATE :**

## SPECIFICATIONS SHEET

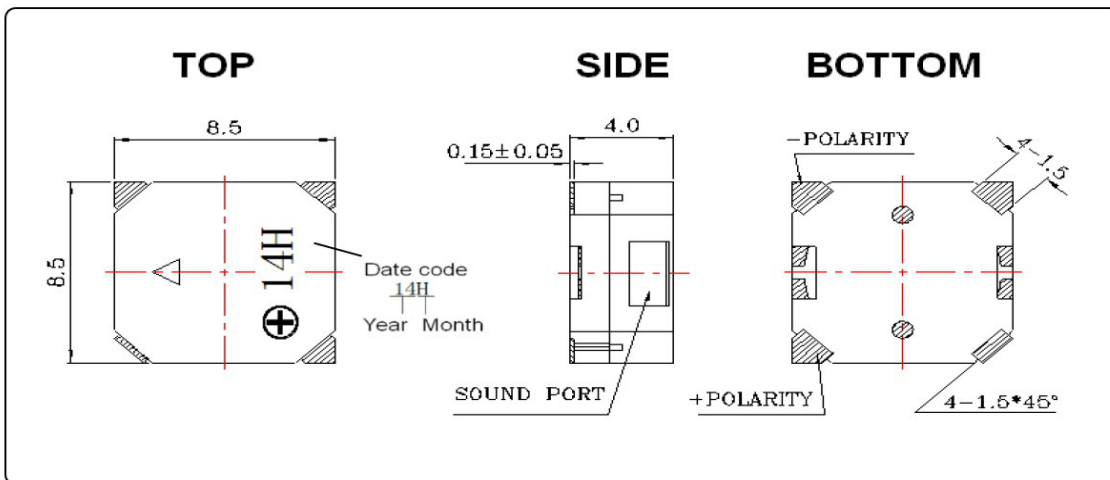
MAGNETIC TRANSDUCER  
P/N: MTS8540A05LM-01

### 1. SPECIFICATIONS

PARAMETERS	VALUES	UNITS
*MIN SOUND PRESSURE LEVEL AT 10 CM	87	dBA
RATED VOLTAGE	5	Vo-p
OPERATING VOLTAGE	4 – 7	Vo-p
RESONANCE FREQUENCY	2,731	Hz
*MAX OPERATING CURRENT	80	mA
COIL RESISTANCE	40 ± 3	Ohm
OPERATING TEMPERATURE	-40 to +85	°C
STORAGE TEMPERATURE	-40 to +85	°C
HOUSING MATERIAL	LCP	-
WEIGHT	0.8	g

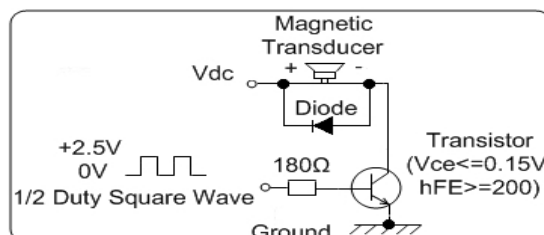
\*Value applying rated voltage (1/2 duty square wave, resonance frequency)

### 2. DIMENSIONS (unit in mm)



Tolerance: ±0.5mm except specified

### 3. RECOMMENDED CIRCUIT



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#### 4. RELIABILITY TEST

Requirement : Allowable variation of SPL after test:  $\pm 10\text{dB}$ .

a) HIGH TEMPERATURE TEST

After being placed in a chamber with  $85\pm 2^\circ\text{C}$  for 96 hours and then being placed in normal condition for 2 hours.

b) LOW TEMPERATURE TEST

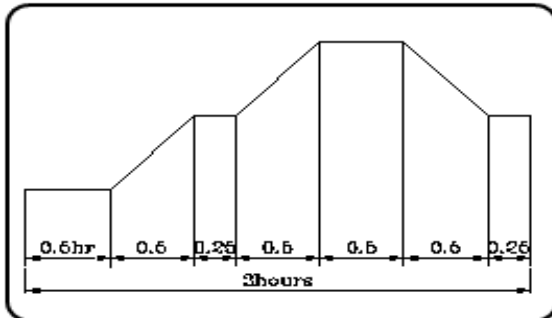
After being placed in a chamber with  $-40\pm 2^\circ\text{C}$  for 96 hours and then being placed in normal condition for 2 hours.

c) HUMIDITY TEST

After being placed in a chamber with 90-95% R.H. at  $40\pm 2^\circ\text{C}$  for 96 hours and then being placed in normal condition for 2 hours.

d) TEMPERATURE CYCLE TEST

The part shall be subjected to 5 cycles. One cycle shall be consist of :



e) 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.

f) DROP TEST

Drop on a hard wood board of 4cm thick, any directions ,6 times,at the height of 75cm .

g) SOLDERABILITY TEST

Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of  $+300\pm 5^\circ\text{C}$  for  $3\pm 1$  seconds. 90% min. lead terminals shall be wet with solder(Except the edge of terminals).

h) TERMINAL STRENGTH PULLING TEST

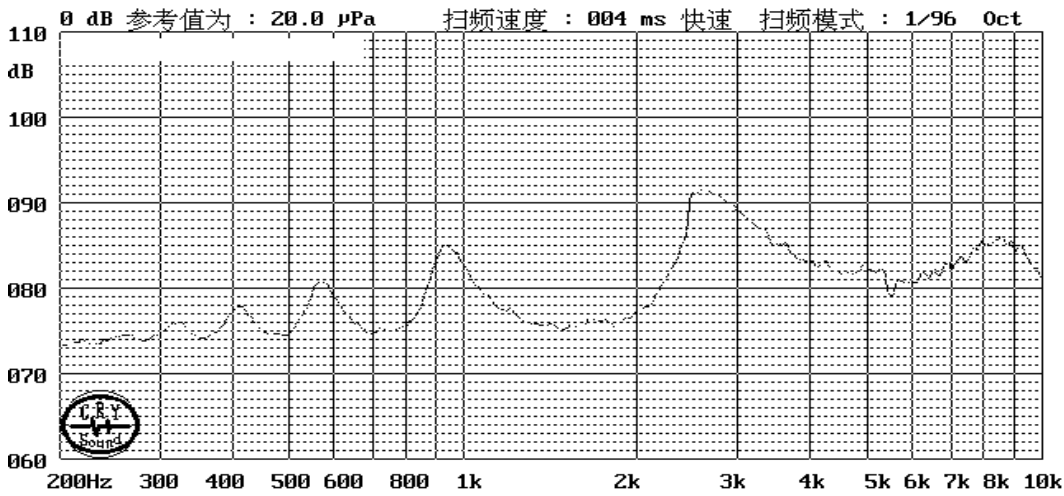
The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off.

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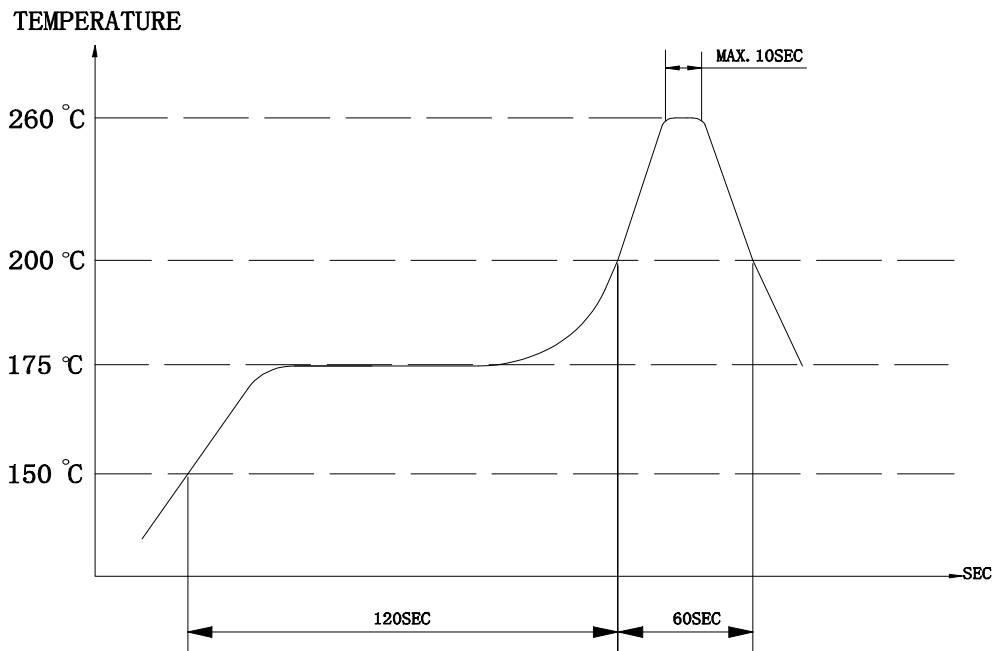
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### 5. TYPICAL FREQUENCY RESPONSE CURVE



### 6. RECOMMENDED REFLOWING PROFILE

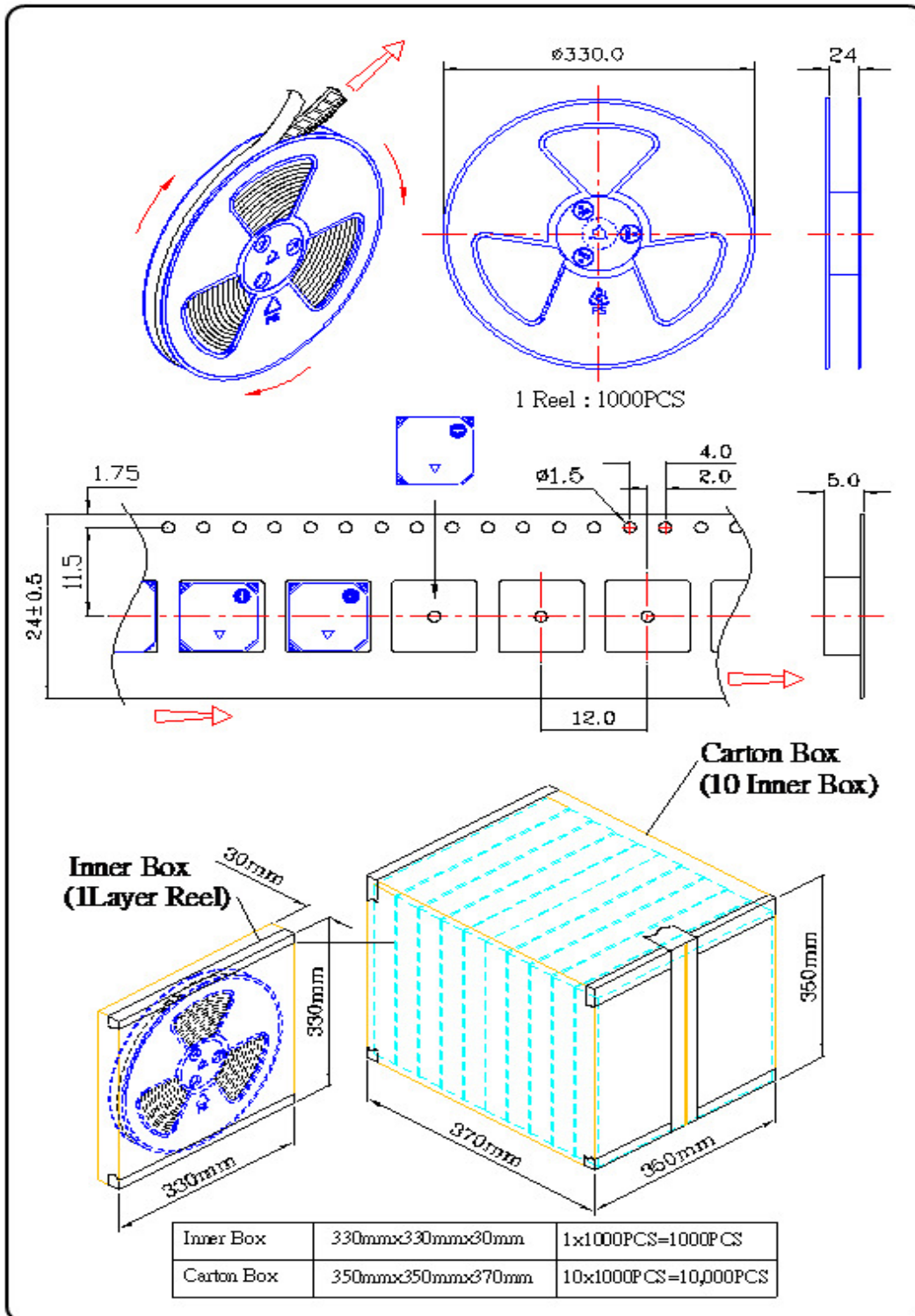


Manual Soldering Condition: Soldering temperature 350 °C within 5 sec.

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**7. PACKING INFORMATION**



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