
SPECIFICATIONS SHEET FOR APPROVAL

MAGNETIC TRANSDUCER
TPi Part No.: 1MT1087

**DESCRIPTION: L4mm, W4mm, H2mm Magnetic Transducer,
4,000Hz, 3Vo-p, 70dB at 10cm, SMD**

VERSION: 04

DATE: 20-Mar-2015

REVISIONS

VERSION	DESCRIPTION	DATE
01	Released from engineering	14-Jan-14
02	Add terminal material, Added recommend PCB land pattern and packing information	7-Nov-14
03	Updated dimension drawing (add D/C print) and packing information	14-Jan-15
04	Revise the solderpad drawing	20-Mar-15

APPROVED BY :

CUSTOMER NAME :

DATE :

SPECIFICATIONS SHEET

MAGNETIC TRANSDUCER

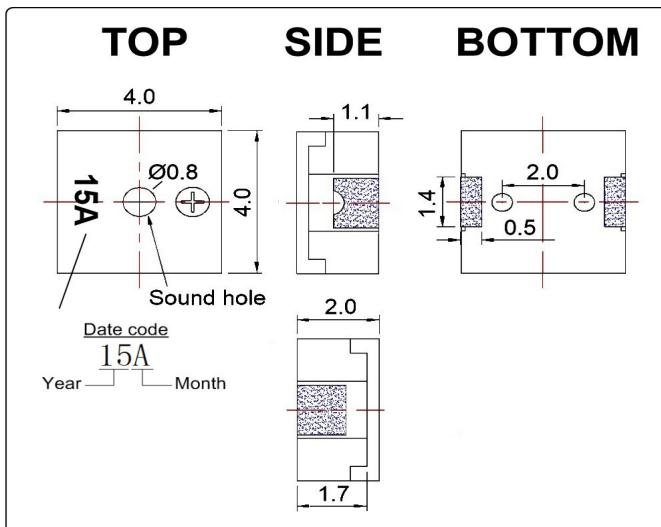
TPi Part No.: 1MT1087

1. SPECIFICATIONS

PARAMETERS	VALUES	UNITS
*MIN SOUND PRESSURE LEVEL AT 10 CM	70	dBA
RATED VOLTAGE	3	Vo-p
OPERATING VOLTAGE	2 - 4	Vo-p
RESONANCE FREQUENCY	4,000	Hz
*MAX OPERATING CURRENT	90	mA
COIL RESISTANCE	17 ± 3	Ohm
OPERATING TEMPERATURE	-20 to +70	°C
STORAGE TEMPERATURE	-30 to +80	°C
HOUSING	LCP (Black)	-
TERMINAL MATERIAL	Tin plated brass	-
WEIGHT	0.1	g

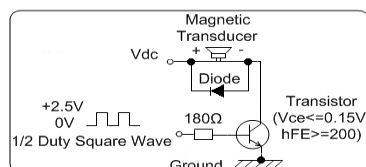
*Value applying rated voltage (1/2 duty square wave, resonance frequency)

2. DIMENSIONS (unit in mm)



Tolerance: ±0.5mm except specified

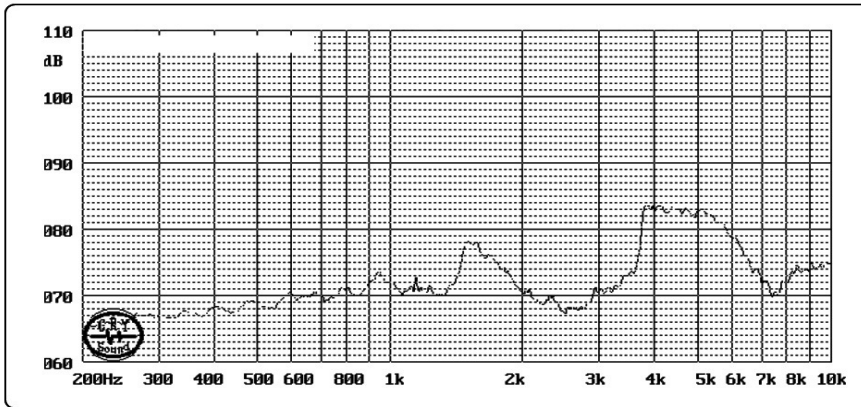
3. RECOMMENDED CIRCUIT



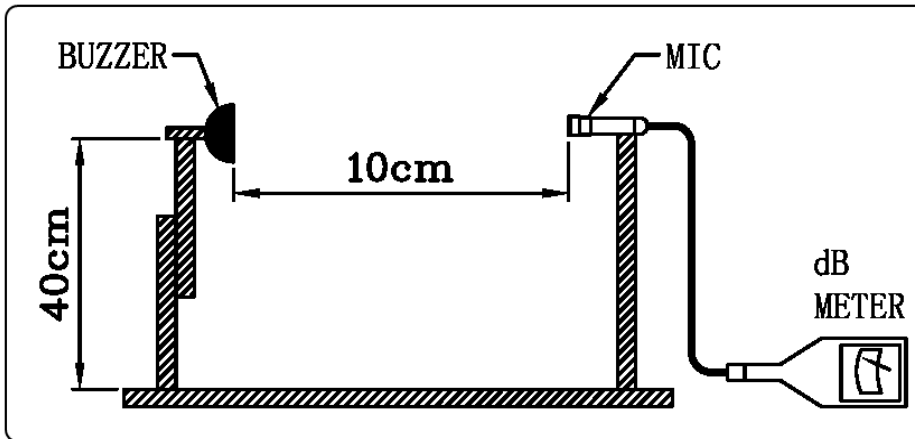
VERSION: 04
DATE: 20-Mar-15

All specifications subject to change without notice

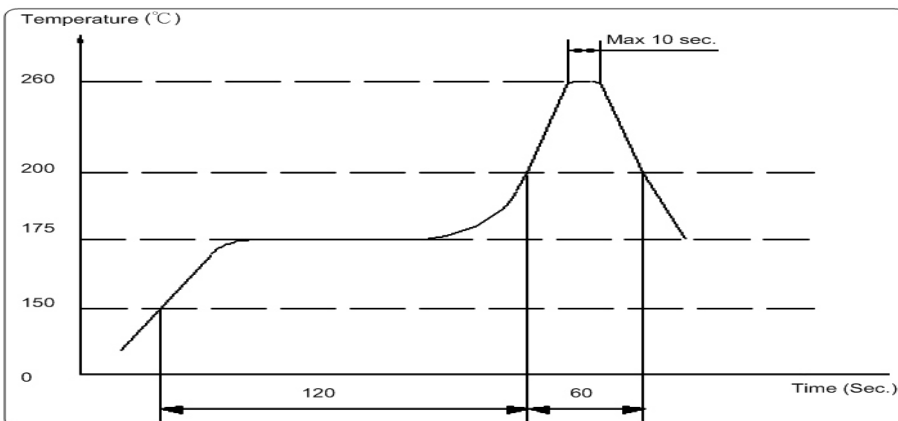
4. TYPICAL FREQUENCY RESPONSE



5. MEASURING CONDITION



6. RECOMMENDED REFLOWING PROFILE



VERSION: 04
DATE: 20-Mar-15

All specifications subject to change without notice

7. RELIABILITY TEST

a) HIGH TEMPERATURE TEST

After exposure at $+70 \pm 2^\circ\text{C}$ for 96 hours and room temperature for 2 hours, the value of frequency/current/SPL should meet specifications shown in page 2.

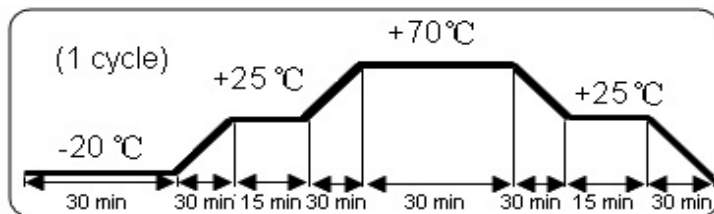
b) LOW TEMPERATURE TEST

After exposure at $-20 \pm 2^\circ\text{C}$ for 96 hours and room temperature for 2 hours, the value of frequency/current/SPL should meet specifications shown in page 2.

c) HUMIDITY TEST

$25 \pm 2^\circ\text{C}$, 90-95%RH, 5hr=>up to $55 \pm 2^\circ\text{C}$, 90-95%RH, 0.5hr => $55 \pm 2^\circ\text{C}$, 90-95%RH, 5hr=>down to $25 \pm 2^\circ\text{C}$, 90-95%RH, 0.5hr, 10 cycles

d) THERMAL SHOCK TEST



After exposure to above temperature cycle for 5 times and room temperature for 2 hours, the value of frequency/current/SPL should meet specifications shown in page 2.

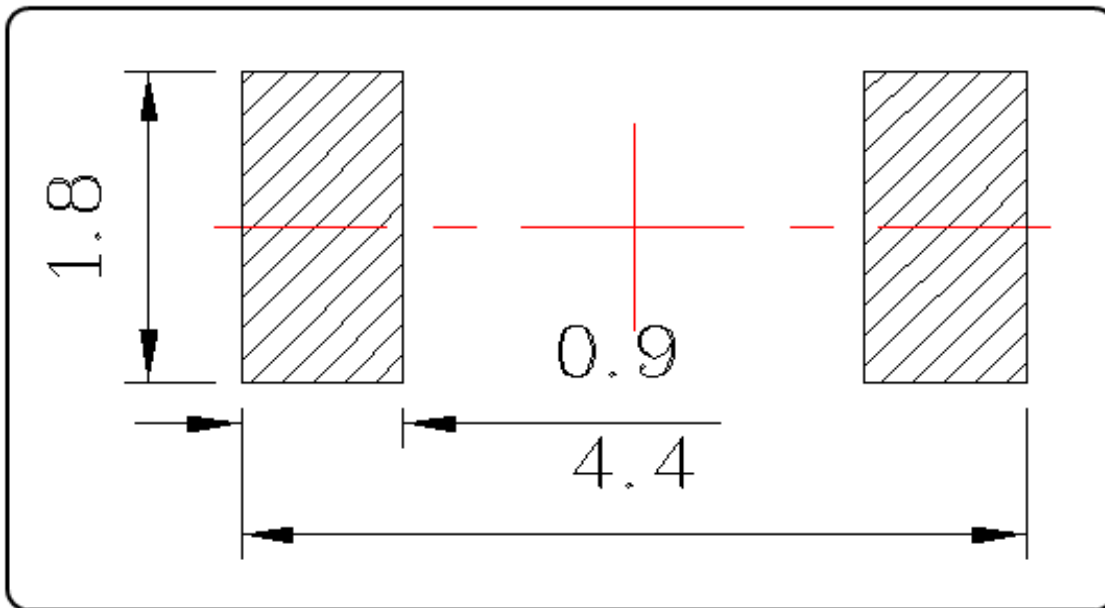
e) VIBRATION TEST

After vibrating the object with 1.5mm amplitude at 10 - 50 Hz in 3 perpendicular directions for 2 hours each, the value of frequency/current/SPL should meet specifications shown in page 2.

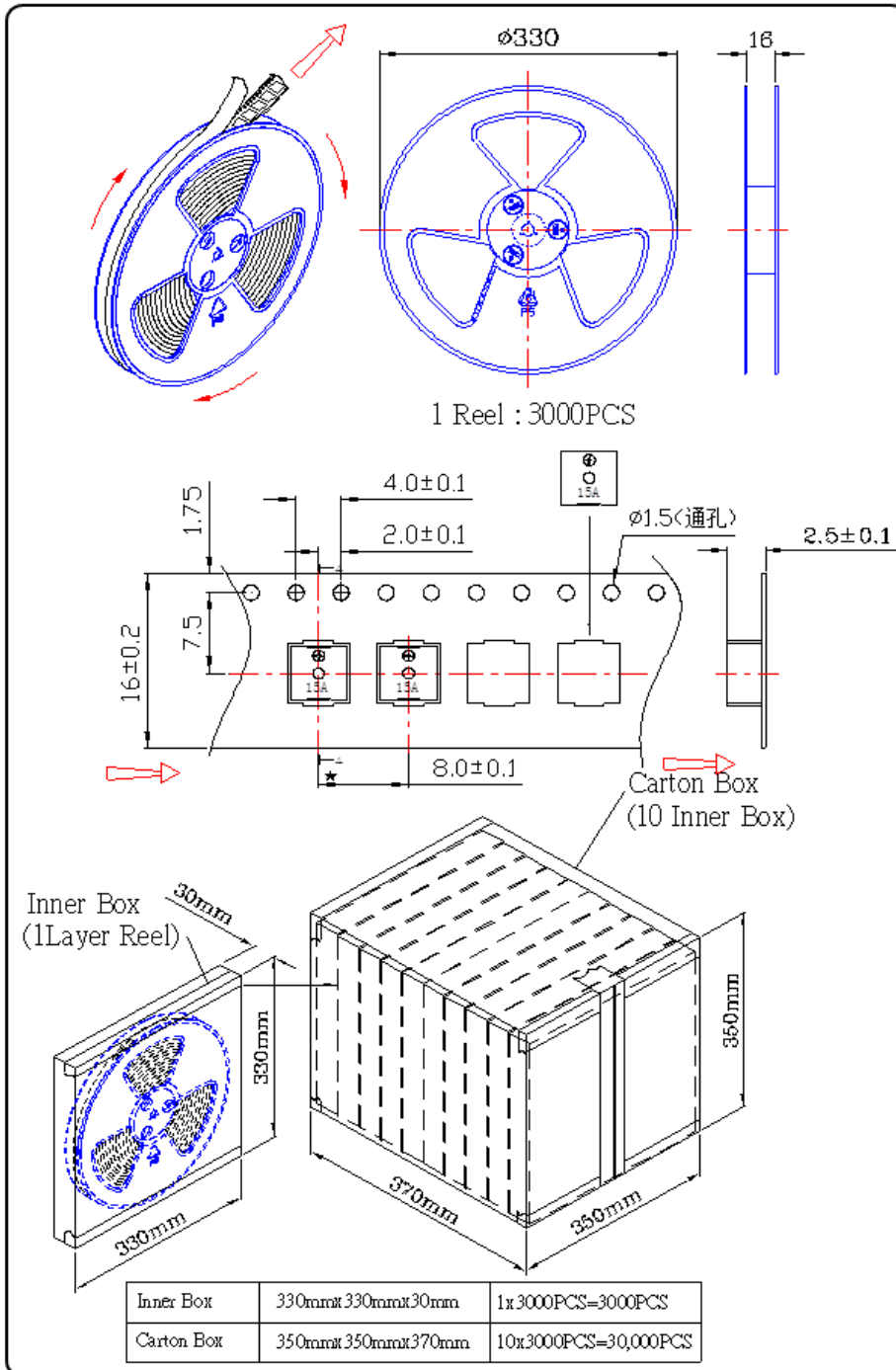
f) DROP TEST

After Dropping naturally from 700mm height onto the surface of 10mm wooden board with 3 directions, the value of frequency/current/SPL should meet specifications shown in page 2.

8. RECOMMEND PCB LAND PATTERN



9. PACKING INFORMATION



VERSION: 04
DATE: 20-Mar-15

All specifications subject to change without notice