DIGISOUND®

F-B-M8503ESB

Electrical and Acoustical Parameter

Rated Voltage (Vp-p) *	3.0
Operating Voltage (Vp-p)	1.0 – 4.5
Coil Resistance (Ω)	20±10
Rated Current (mA) *	Mean 80 Peak 200
Sound Pressure Level (dBA) *	Min 85
Resonant Frequency (Hz)	2670
Remark:	* rated voltage, 3KHz, 10cm, square wave, 1/2duty.

Mechanical, Environmental Parameter

Contact / Wire	Pad
Operating Temperature (°C)	-30 to +70
Storage Temperature (°C)	-40 to +85
Material Housing	n.a.
Color Housing	Black
Component Weight (g, +/-0.2)	0.8
Remark:	

Approval

RoHs	☑
UL	☐

Designed by	MZ	16.05.2014	Dimensions without tolerance ±0.5mm	Index: 00	Current date
Released by	CB	16.05.2014	Drawing number 140516.1BSO		16.05.2014
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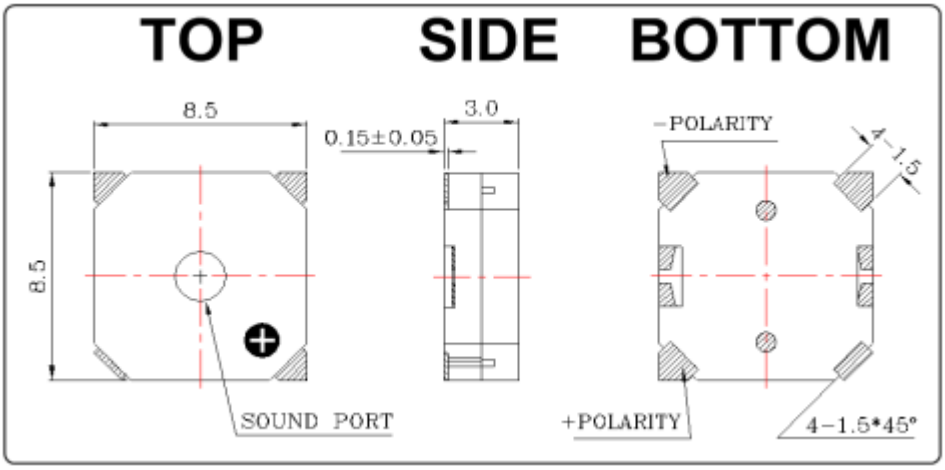
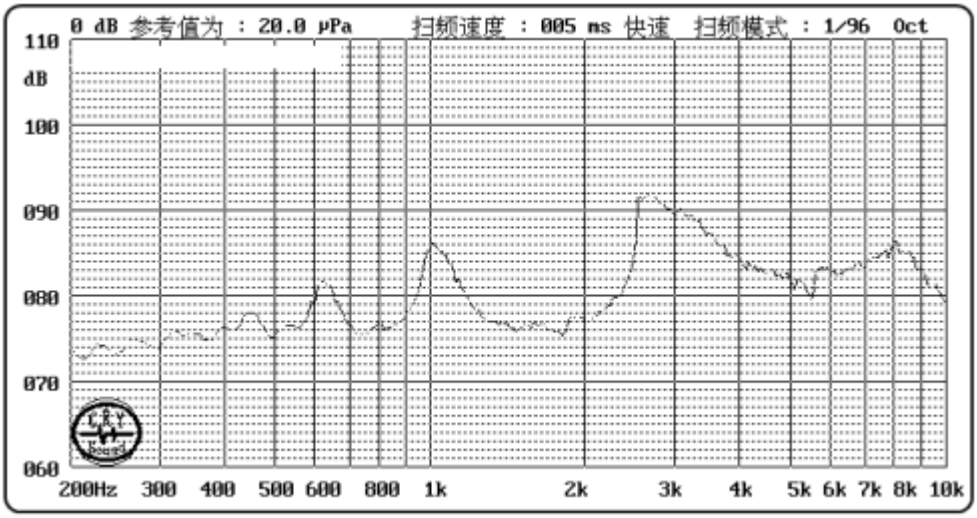
Drawing of Component

Unit:mm



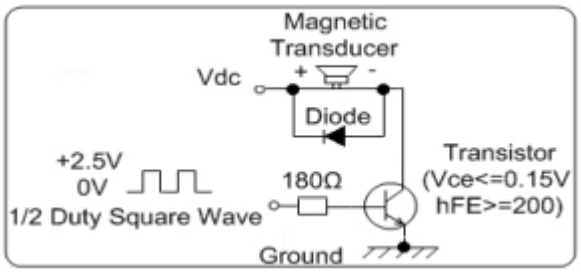
Leading pin :Tin plated Brass(Sn)

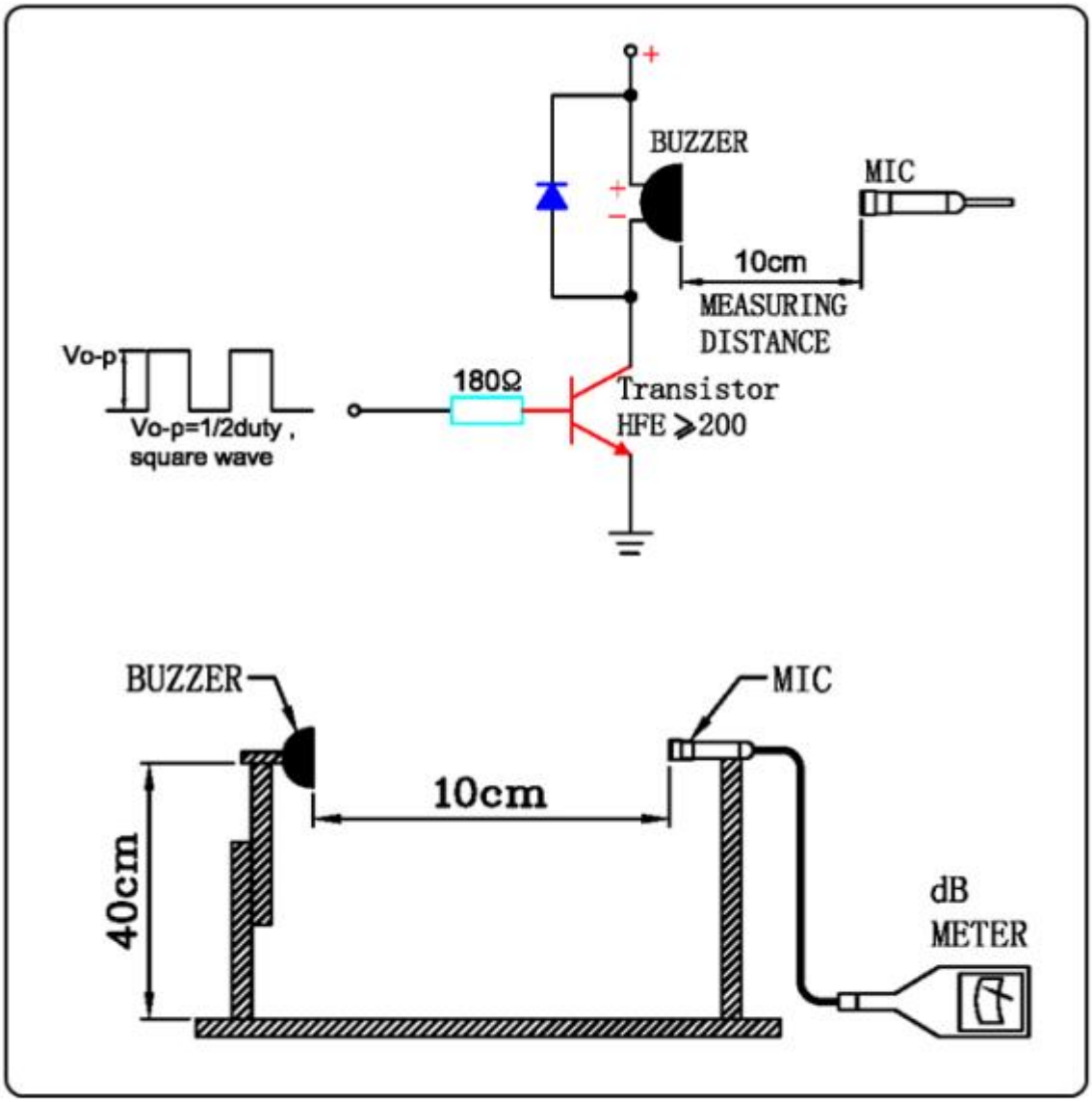
Frequency Response



Test Method

Recommended Circuit





Reliability Test

Requirement : Allowable variation of SPL after test: ±10dB.

a) HIGH TEMPERATURE TEST

After being placed in a chamber with 80±2ºC for 96 hours and then being placed in normal condition for 2 hours.

b) LOW TEMPERATURE TEST

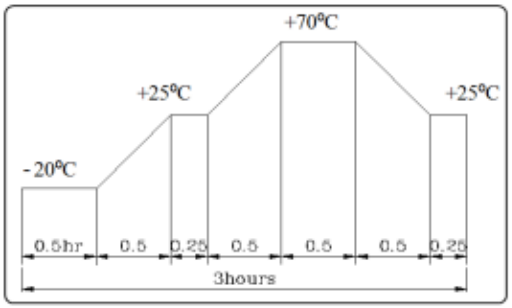
After being placed in a chamber with -30±2ºC for 96 hours and then being placed in normal condition for 2 hours.

c) HUMIDITY TEST

After being placed in a chamber with 90-95% R.H. at 40±2ºC 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 .

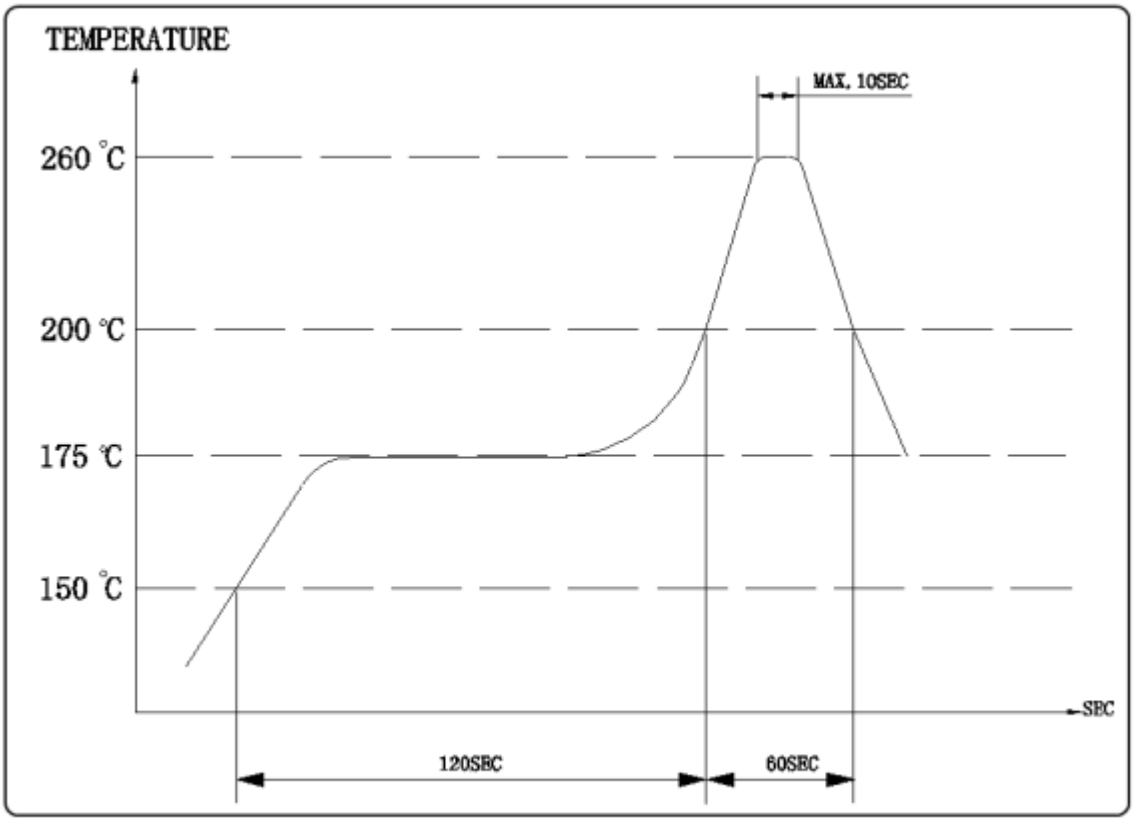
g) SOLDERABILITY TEST

Lead terminals are immersed in rosin for 5 seconds and then immersed in solder bath of +300±5ºC for 3±1 seconds. 90% min. lead terminals shall be wet with solder(Except the edge of terminals).

h) TERMINAL STRENGTH PULLING TEST

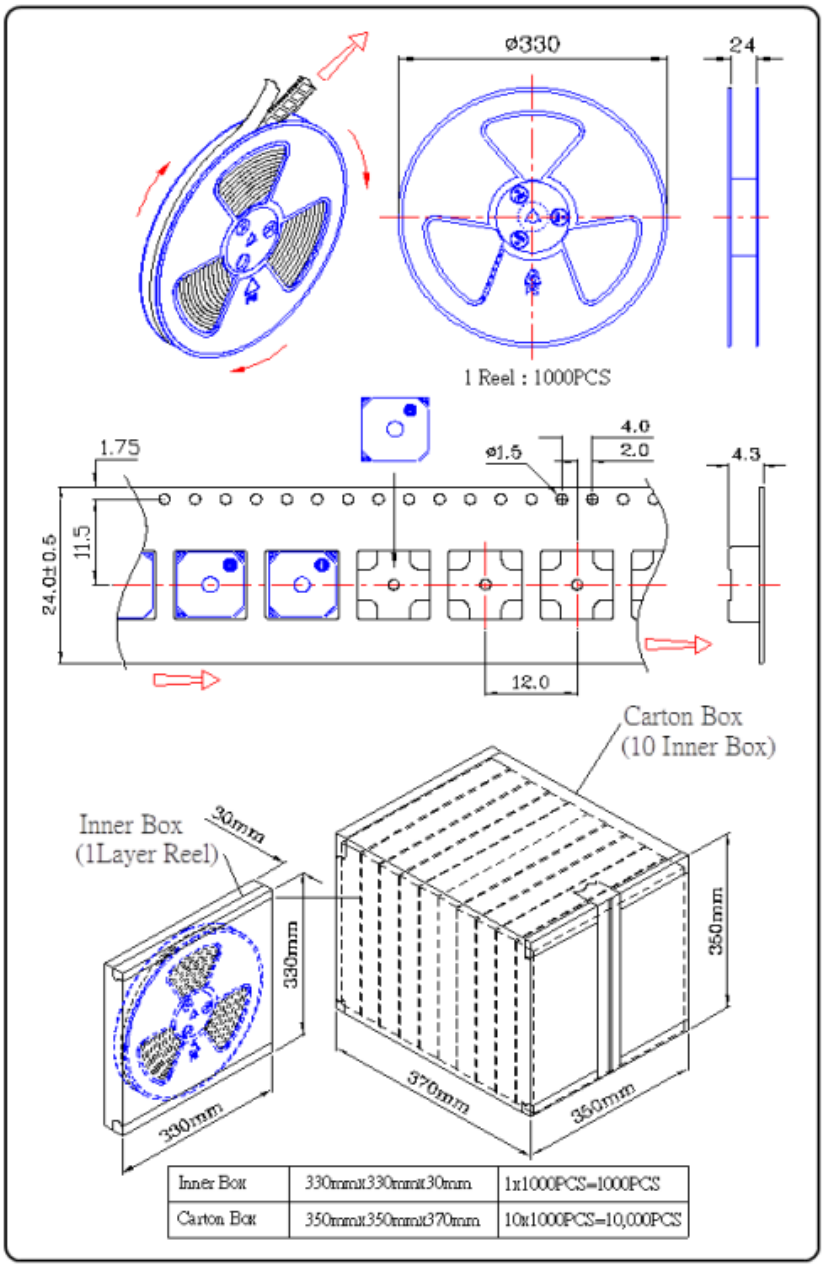
The force of 9.8N(1.0kg) is applied to each terminal in axial direction for 10 seconds. No visible damage and cutting off.

Soldering Conditions



Solder profile according to JSTD020D-01

Packaging Information



Revision Table

Index Nr.	Date Reason - Procedure Change description	Drawing Date	implementation LS-Nr.: Date	Comments