

Magnetic-SMT-Buzzer without oscillator

Electrical and Acoustical Parameter

Rated Voltage (Vpp)	3
Operating Voltage (Vpp)	2 - 5
Max. Current Consumption* ** (mA)	80
Coil Resistance ** (Ω , $\pm 3\Omega$)	18
Sound Pressure Level * ** (dBA @ 10cm)	min 85
Resonance Frequency (Hz)	2730

Remark: *Applying rated voltage (Resonant frequency, Square wave[50% duty cycle])
** Basic State: Temp(20±2°C), Humidity(40~70%RH), Air pressure(860~1060hPa)

Mechanical, Environmental

Contact / Wire	SMT
Operating Temperature (°C)	-40 - +105
Storage Temperature (°C)	-40 - +120
Housing Material	LCP
Housing Colour	white
MSL Level *	4
Component Weight (g)	0,5

Remark: *≤30°C/60%RH 72h floor life

Approval

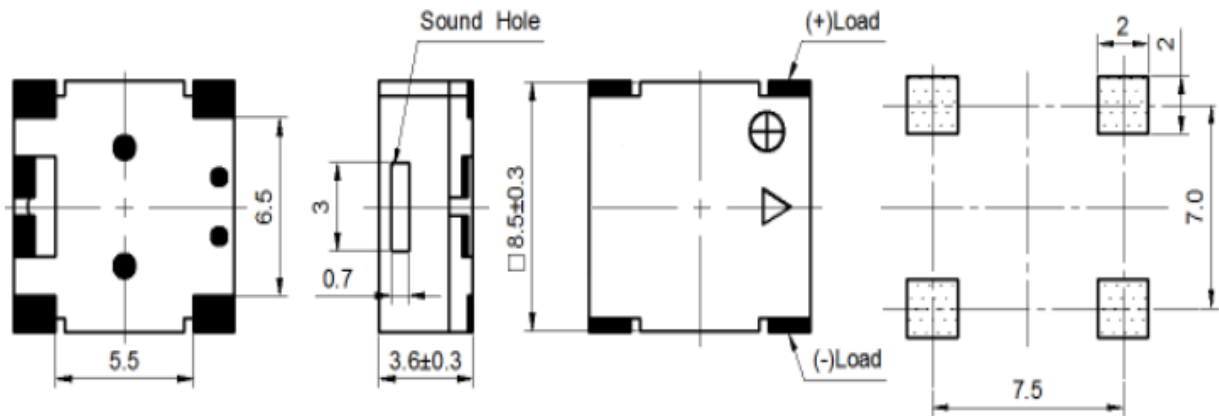
RoHs	<input checked="" type="checkbox"/>
REACH	<input checked="" type="checkbox"/>



Designed by	MZ	19.07.2013	Copyright DIGISOUND-Electronic GmbH All specifications are subject to change without notice	Index: 01	Current date
Released by	CB	19.07.2013	Drawing number 130719.1PDB		25.09.2016
Changed by	HZ	25.09.2016			Page 1 of 7

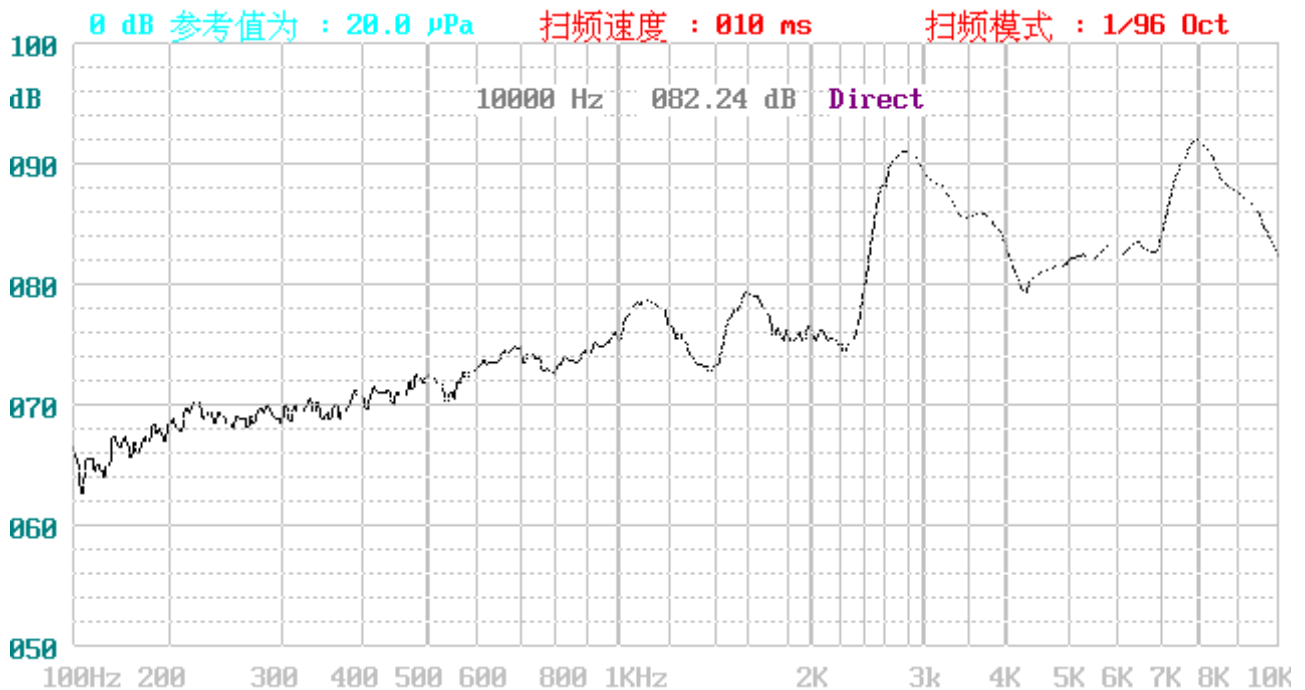
Drawing of Component and PCB Footprint

Unit: mm



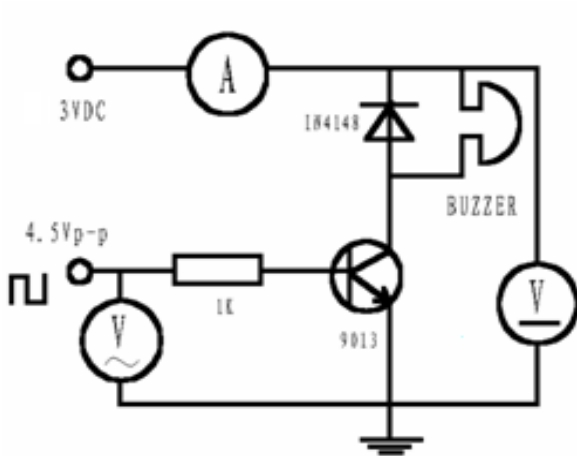
Dimensions without tolerance $\pm 0,5$ mm

Frequency Response

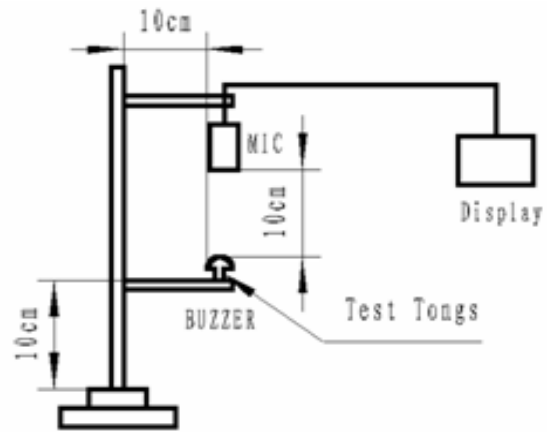


Designed by	MZ	19.07.2013	Copyright DIGISOUND-Electronic GmbH All specifications are subject to change without notice	Index: 01	Current date
Released by	CB	19.07.2013	Drawing number 130719.1PDB		25.09.2016
Changed by	HZ	25.09.2016			Page 2 of 7

Test Method



Test Circuit

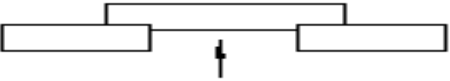


Test Equip

Reliability Test

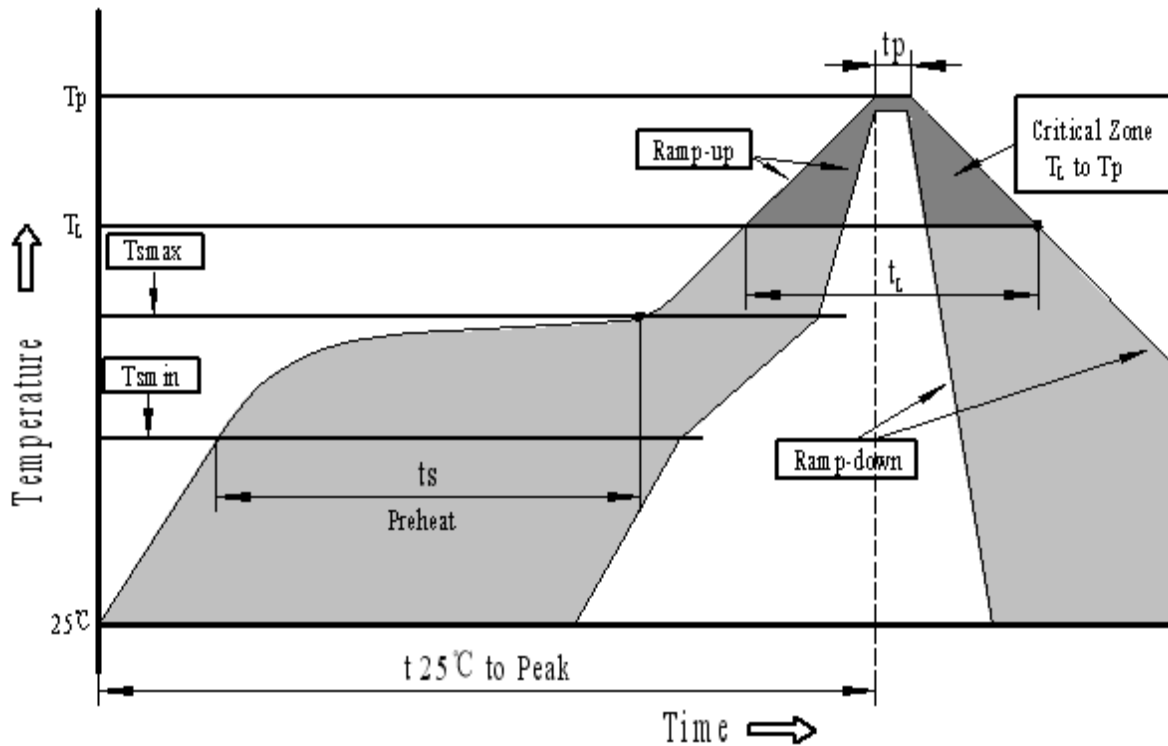
NO.	ITEM	TESTING CONDITION	VARIANCE AFTER TEST
1	High temp. storage life	The part shall be capable of withstanding a storage temperature is +80°C for 120 hours	After the test the part shall meet specifications without any degradation in appearance and performance except SPL shall be initial value±10dB or more.
2	Low temp. storage life	The part shall be capable of withstanding a storage temperature is -30°C for 120 hours	
3	Temp. Cycle	Total 5 cycles, 1 cycle consisting of -30±2°C, 30 minutes 20±5°C 15 minutes 80±2°C, 30 minutes 20±5°C 15 minutes	
4	Humidity Test	30±2°C, 90~95% RH, 120 hours	
5	Vibration Test	The part shall be subjected to a vibration cycle is 10Hz in a period of 1 minute. Total peak amplitude shall be 1.52mm (9.3g). The vibration test shall consist of 2 hours per plane in each three mutually perpendicular planes for a total time of 6 hours.	

Designed by	MZ	19.07.2013	Copyright DIGISOUND-Electronic GmbH All specifications are subject to change without notice	Index: 01	Current date
Released by	CB	19.07.2013	Drawing number	130719.1PDB	25.09.2016
Changed by	HZ	25.09.2016			Page 3 of 7

6	Shock	Sounder shall be measured after being applied shock ($980m/s^2$) for each three mutually perpendicular directions to each of 3 times by half sine wave.	
7	Drop Test	Dropped naturally from 700mm height onto the surface of 10mm thick wooden board. 2 directions-upper and side of the part are to be applied.	
8	Lead pull	The part shall be pushed with a force of 9.8N for 10 ± 1 seconds behind the part. 	After the test part shall meet specifications without any degradation in appearance and performance.
9	Recommended temp. Profile for Reflow Oven	Shown in Fig.1	

Designed by	MZ	19.07.2013	Copyright DIGISOUND-Electronic GmbH All specifications are subject to change without notice	Index: 01	Current date
Released by	CB	19.07.2013	Drawing number 130719.1PDB		25.09.2016
Changed by	HZ	25.09.2016			Page 4 of 7

Solder Profile

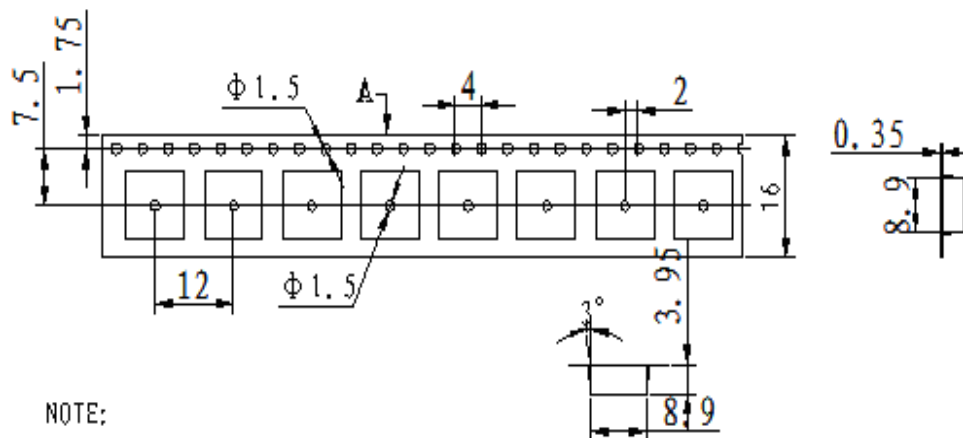


Recommended temperature Profile for Reflow Oven (Fig.1)

Profile Feature	Pb-Free Assembly
Average ramp-up rate(Tl to Tp)	3°C /second max.
Preheat	
-Temperature Min.(Tsm in)	150°C
-Temperature Min.(Tsm ax)	200°C
-Temperature Min.(ts)	60~180 seconds
Tsm ax to Tl	
-Ramp-up Rate	3°C /second max.
Time maintained above:	
- Temperature(Tl)	217°C
-Time(Tl)	60~150 seconds
Peak temperature(Tp)	250°C +0/-5°C
Time within 5°C of actual Peak temperature (tp)	6 seconds max.
Ramp-down Rate	6°C /second max.
Time 25°C to Peak Temperature	8 minutes max.

Designed by	MZ	19.07.2013	Copyright DIGISOUND-Electronic GmbH All specifications are subject to change without notice	Index: 01	Current date
Released by	CB	19.07.2013	Drawing number	130719.1PDB	25.09.2016
Changed by	HZ	25.09.2016			Page 5 of 7

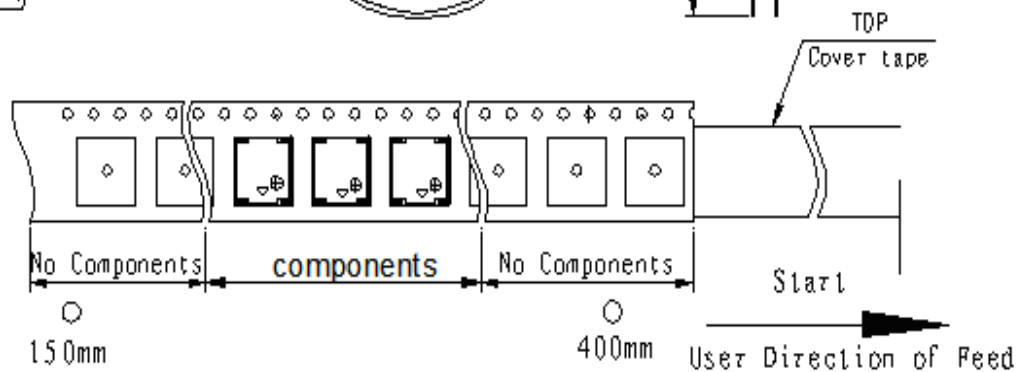
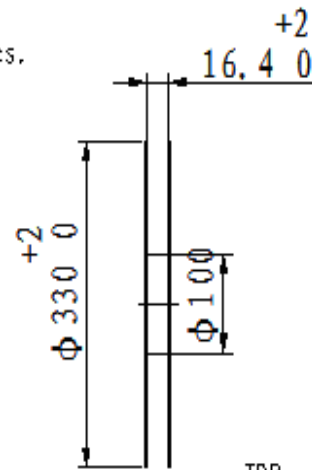
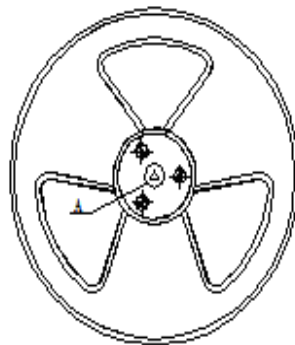
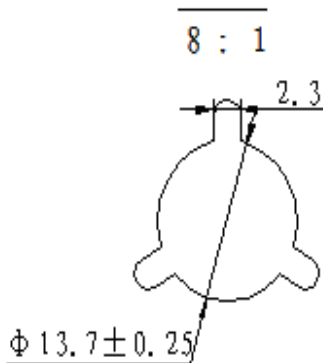
Packaging Information



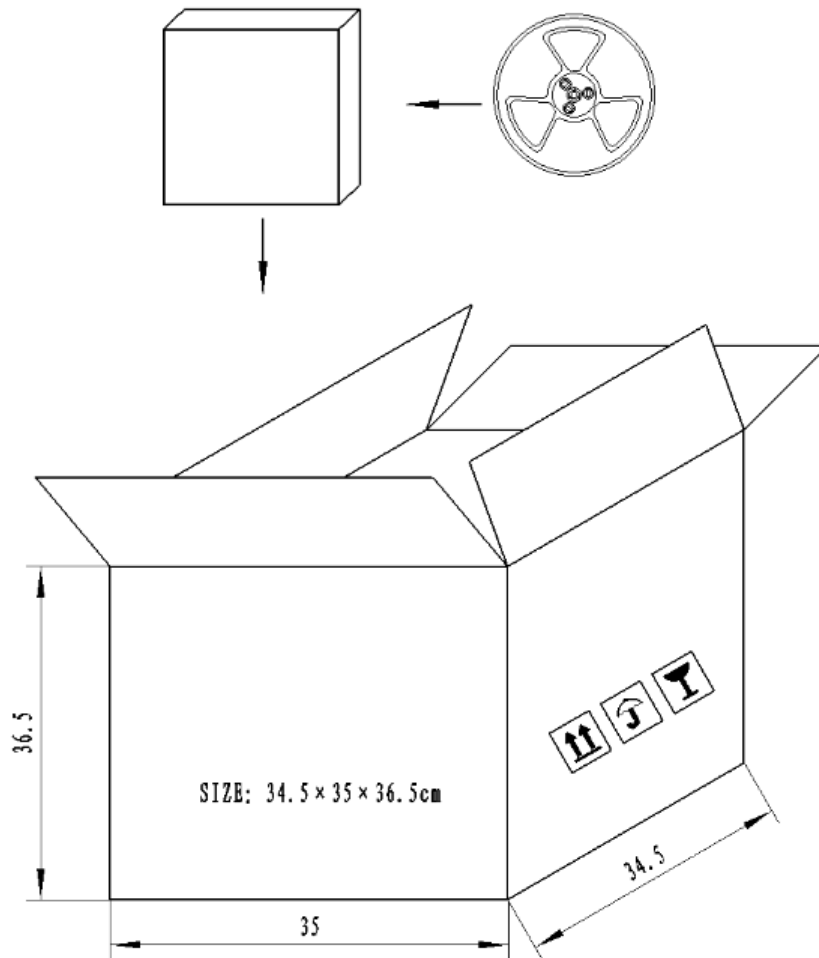
NOTE:

1. 10 sprocket hole pitch cumulative tolerance $\pm 0.20\text{mm}$.
2. All dimensions meet ETA-481-D requirements.
3. Thickness: $0.35 \pm 0.05\text{mm}$.
4. Component loaded per 13" reel: 1000 pcs.

A



Designed by	MZ	19.07.2013	Copyright DIGISOUND-Electronic GmbH All specifications are subject to change without notice	Index: 01	Current date
Released by	CB	19.07.2013	Drawing number 130719.1PDB		25.09.2016
Changed by	HZ	25.09.2016			Page 6 of 7



NOTES:

- 1.1000 PCS per box
- 2.Total 10 boxes per carton
- 3.Total 10000 PCS carton

Revision Table

Index Nr.	Reason - Procedure Change description	Date	Name	Comments
01	Change MSL Level, housing color new data sheet format	25.09.2016	HZ	

Designed by	MZ	19.07.2013	Copyright DIGISOUND-Electronic GmbH All specifications are subject to change without notice	Index: 01	Current date
Released by	CB	19.07.2013	Drawing number 130719.1PDB		25.09.2016
Changed by	HZ	25.09.2016			Page 7 of 7