F/SWI 155

DIGISOUND®

Electrical and Acoustical Parameter

Rated voltage (VDC) *	5.0
Operating voltage (VDC)	3.0 - 8.0
Rated current (VDC)*	max. 30
Sound pressure level (dBA) *	min. 88
Resonanz Frequency (Hz)	2300±300
Remark:	

Mechanical, Enviromental Parameter

Contact / Wire	Pad
Operating temperature (°C)	-40 to +85
Storage temperature (°C)	-40 to +85
Material housing	PPS
Color Housing	grey
Component weight (g)	3.0
Remark:	

Approval

RoHs	☑
UL	☐

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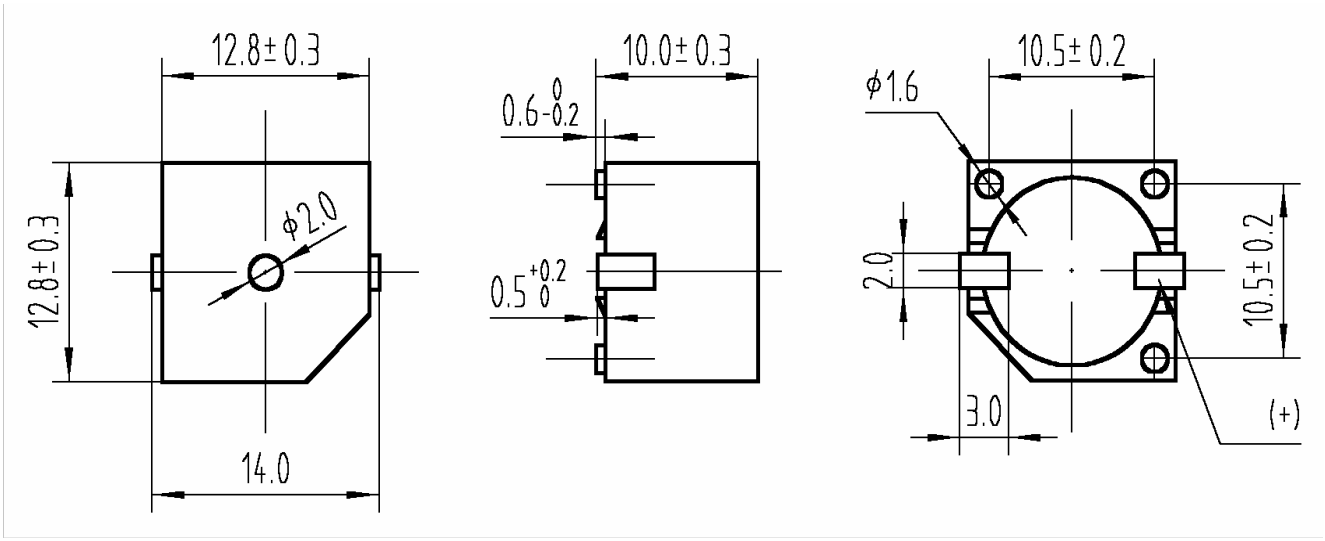
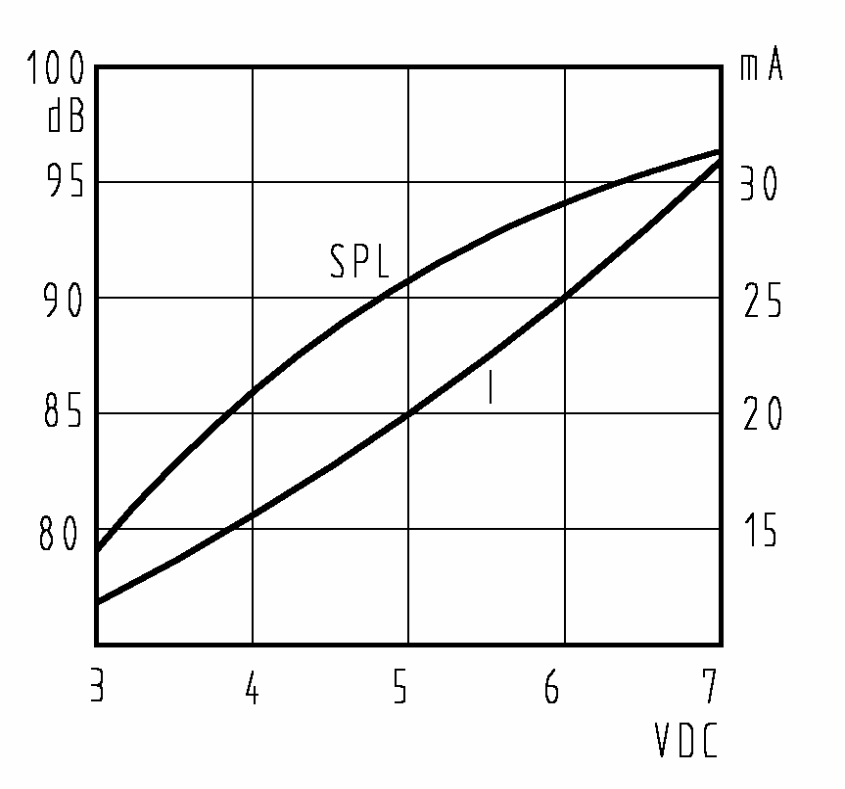
Drawing of Component

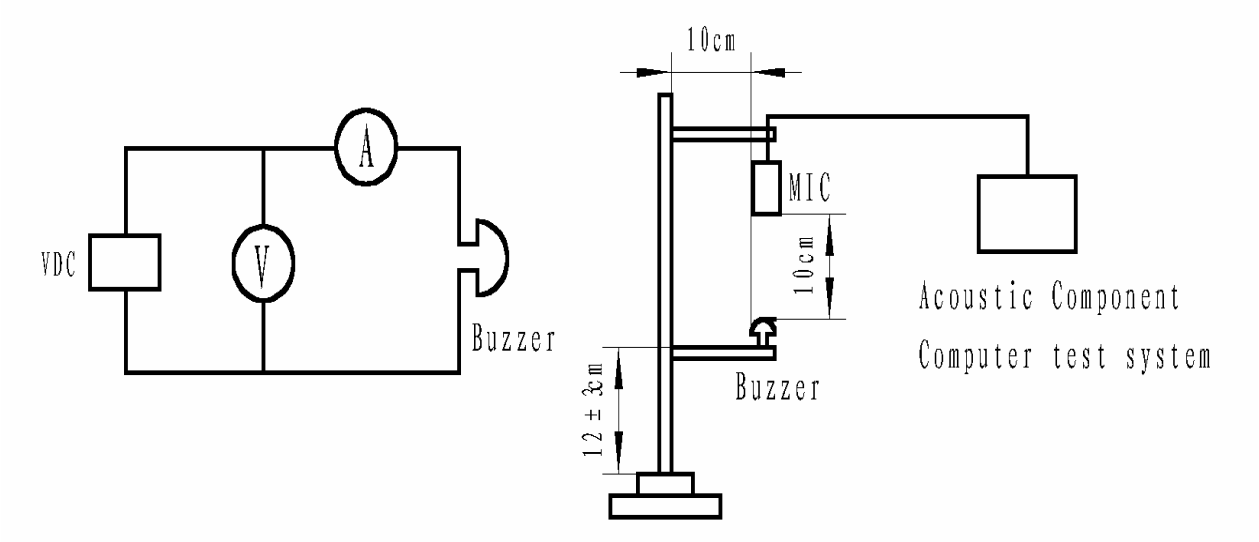
Unit:mm Tolerance: ±0.5mm Except Specified



Input Voltage VS. Sound Pressure Level & Current Consumption

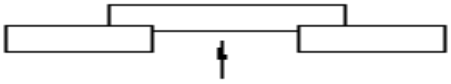


Test method

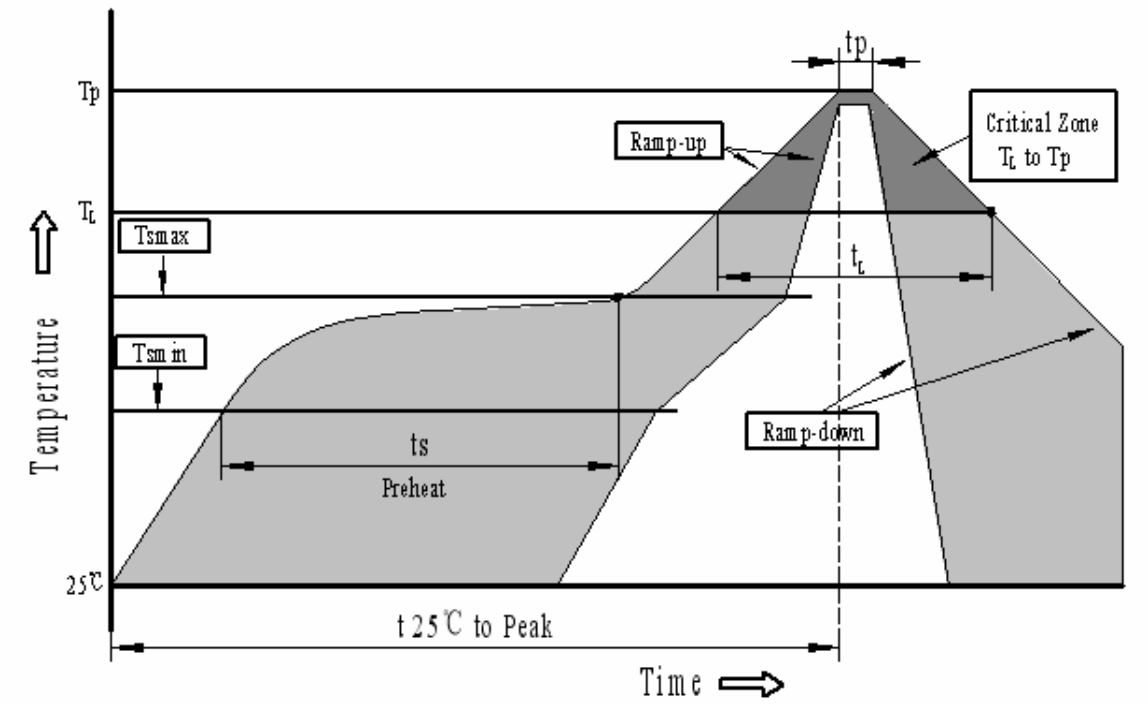


Reliability test

NO.	ITEM	TESTING CONDITION	VARIANCE AFTER TEST
1	High temp. storage life	The part shall be capable of withstanding a storage temperature is +80℃ 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℃ for120 hours	
3	Temp. cycle	Total 5 cycles, 1 cycle consisting of -30±2℃, 30 minutes 20±5℃ 15 minutes 80±2℃, 30 minutes 20±5℃ 15 minutes	
4	Humidity Test	40±2℃, 90～95% RH, 120 hours	
5	Vibration test	The part shall be subjected to a vibration cycle is 10Hz in a period is 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.	
6	Shock	Sounder shall be measured after being applied shock (980m/s²) for each three mutually perpendicular directions to each of 3 times by half sine wave.	
7	Solder ability	The part leads (pins) shall be immersed in molten solder maintained at 235+5℃ for a period of 2.0+0.5 seconds	Ninety-five percent (95%) coverage with a continuous coating of bright new solders.
8	Solder heat resistance	The part leads (pins) shall be immersed in molten solder maintained at 250±10℃ for a period of 30 seconds.	After the test part shall meet specifications without any degradation in appearance and performance.

9	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.
10	Recommended temp. Profile for Reflow Oven	Shown in Fig.1	
Warranty:For a period of one year from date of manufcture under normal operations.			

Recommended Temp. Profile for Reflow Oven (Fig.1)



Profile Feature	Pb-Free Assembly
Average ramp-up rate(T_L to Tp)	3℃/second max.
Preheat	
-Temperature Min.(Ts_{min})	150℃
-Temperature Min.(Ts_{max})	200℃
-Temperature Min.(ts)	60～180 seconds
Ts_{max} to T_L	
-Ramp-up Rate	3℃/second max.
Time maintained above:	
- Temperature(T_L)	217℃
-Time(T_L)	60～150 seconds
Peak temperature(Tp)	245℃+0/-5℃
Time within 5℃of actual Peak temperature (tp)	6 seconds max.
Ramp-down Rate	6℃/second max.
Time 25℃ to Peak Temperature	8 minutes max.

F/SWI 155

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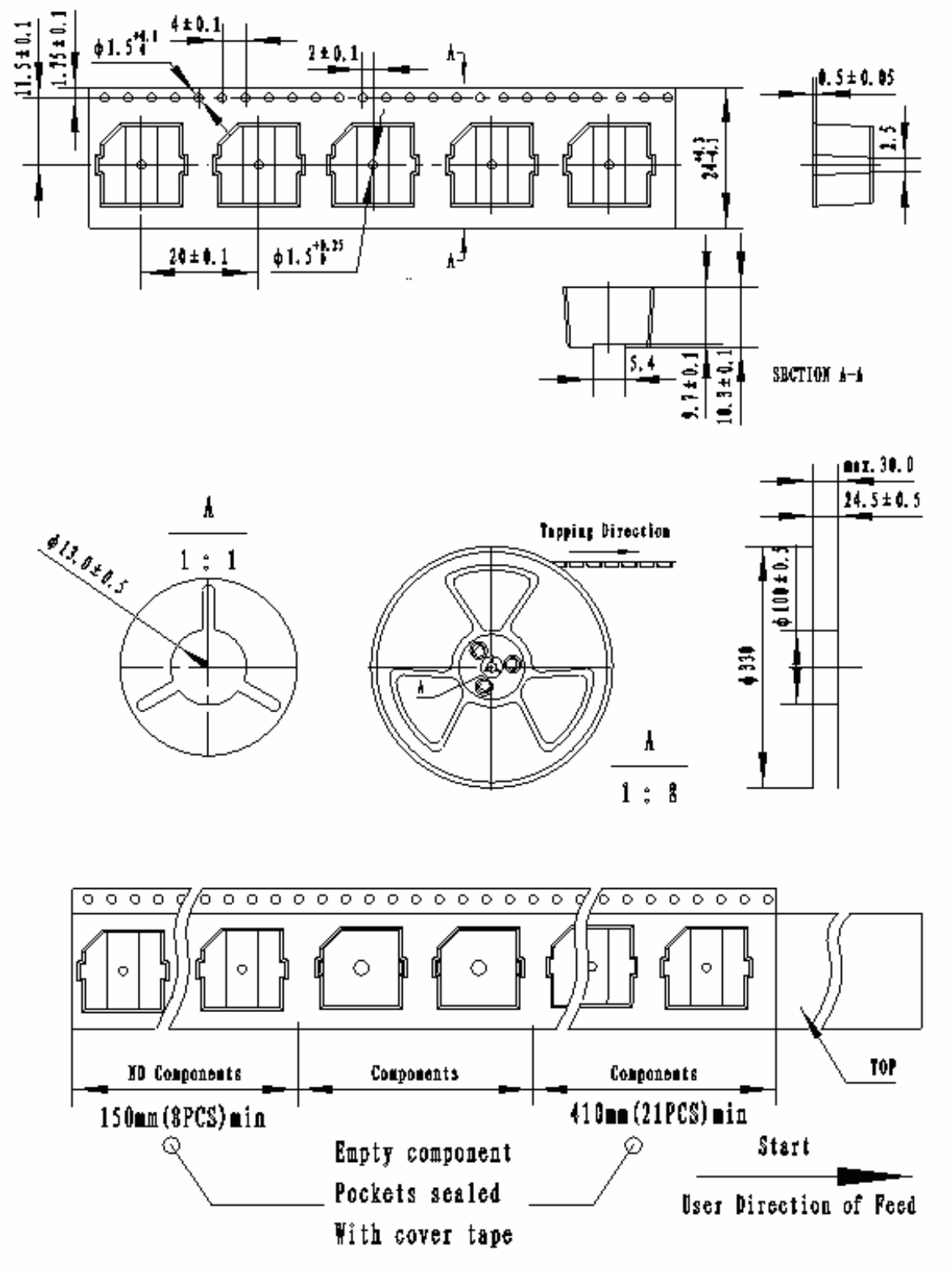
Packaging Information



Designed by	MZ	04.02.2011	Dimensions without tolerance ±0.3mm	Index: 04	Current date
Released by	MZ	04.02.2011	Drawing number	110204.1PDB	04.02.2011
Changed by					Page 6 of 7

DIGISOUND®

Revision Table

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