

SPECIFICATION FOR APPROVAL
SMD PIEZO TRANSDUCER

Model Name	SPT-9020B-03040
Note	

APPROVED BY:

Customer name / Stamp / Sign / Date

REVISION NOTES:

Date	Description of Revision

NINGBO SANCO ELECTRONICS CO., LTD.

Tel: +86-574-83851068; Fax: +86-574-83851096

E-mail: sales@sancoelectronics.com Http: www.sancobuzzer.com

NINGBO SANCO ELECTRONICS CO., LTD.

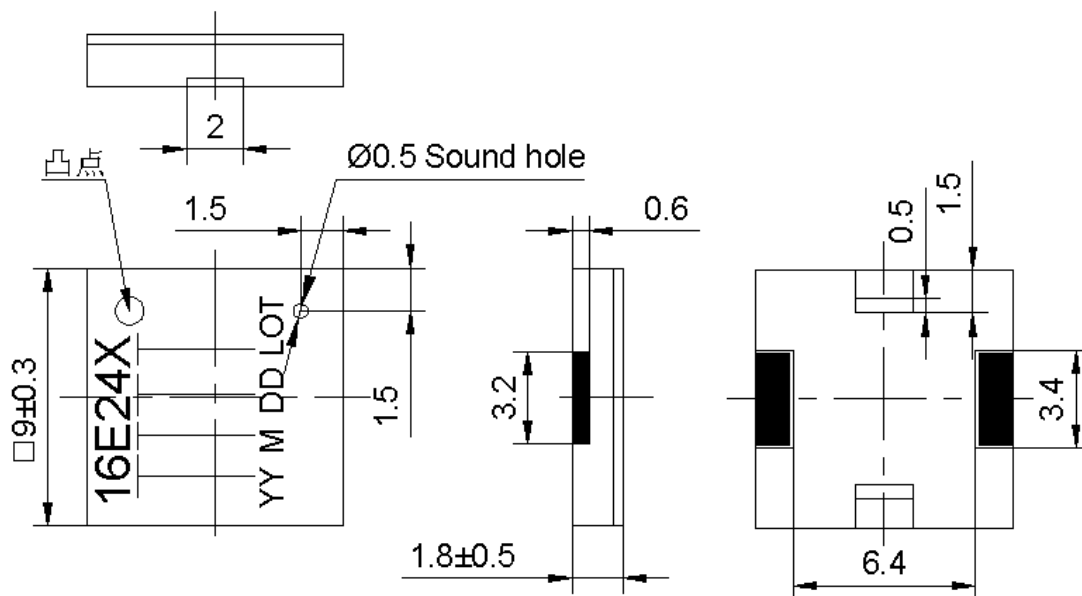
SMD PIEZO TRANSDUCER

1	Model No.	SPT-9020B-03040
2	Rated Voltage (Vp-p)	3
3	Operating Voltage (Vp-p)	1~25
4	Resonant Frequency (Hz)	4000±500
5	Static Capacitance at1KHz (PF)	12000±30%
6	*Sound Output at 10cm (dB)	≥65
7	*Current Consumption (mA)	≤3
8	Operating Temperature (°C)	-20~+70
9	Storage Temperature (°C)	-30~+80
10	Weight (g)	0.25
11	Housing Material	LCP
12	RoHS	Yes

*Applying rated voltage (Resonant frequency, Square wave)

DIMENSIONS (UNIT: mm)

Tolerance: ±0.5mm Except Specified



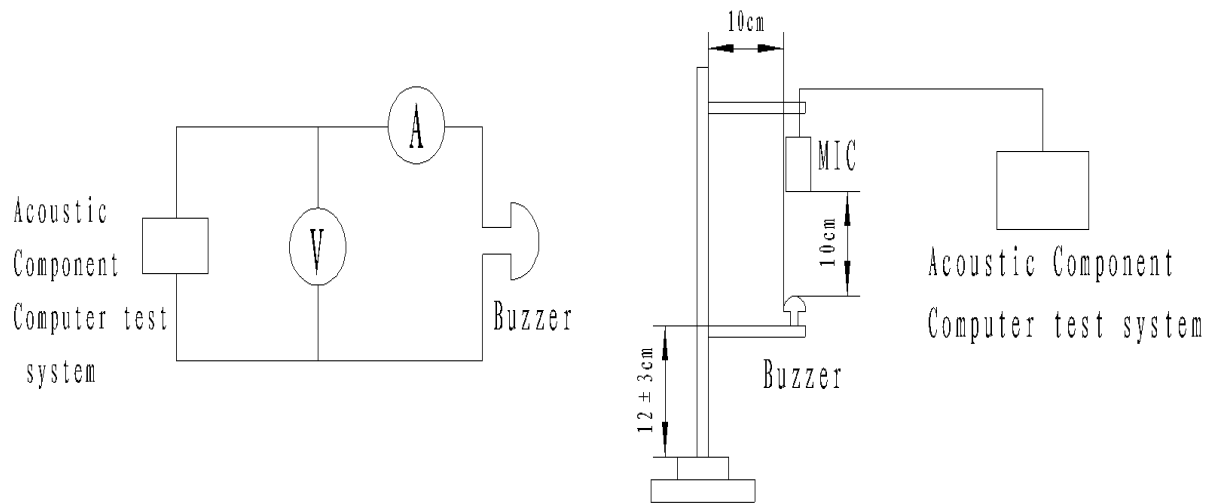
NINGBO SANCO ELECTRONICS CO., LTD.

Tel: +86-574-83851068; Fax: +86-574-83851096

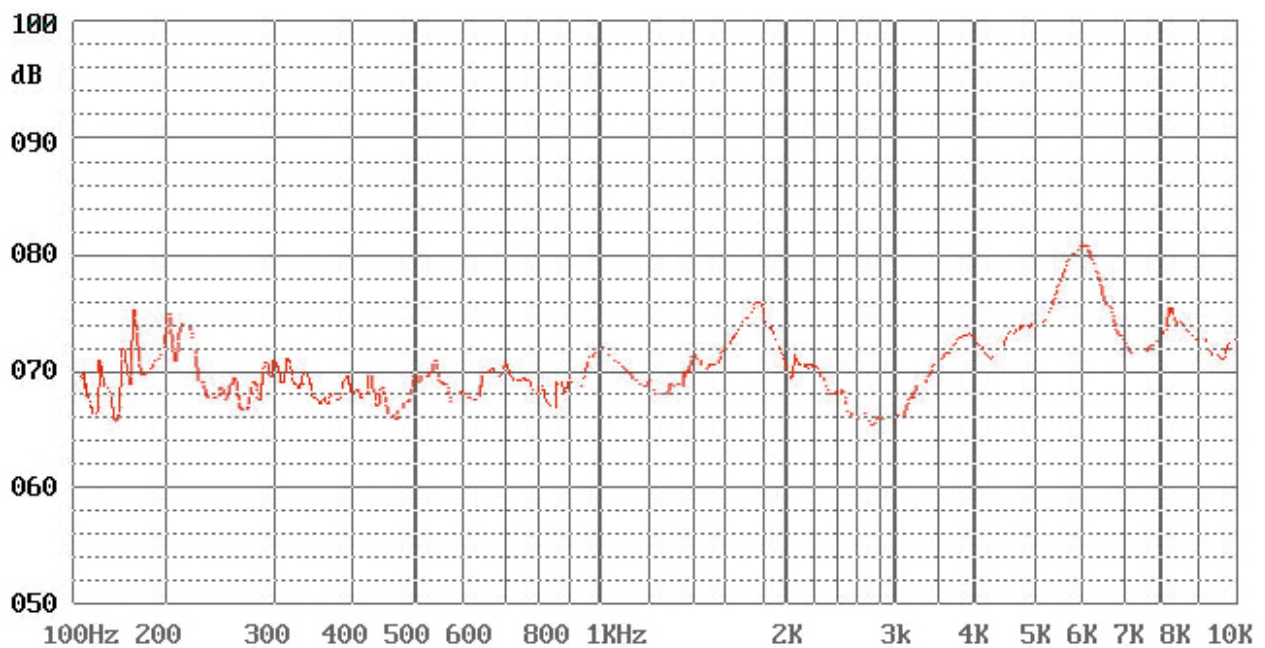
E-mail: sales@sancoelectronics.com Http: www.sancobuzzer.com

NINGBO SANCO ELECTRONICS CO., LTD.

TEST METHOD:



FREQUENCY RESPONSE:



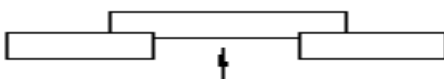
NINGBO SANCO ELECTRONICS CO., LTD.

Tel: +86-574-83851068; Fax: +86-574-83851096

E-mail: sales@sancoelectronics.com Http: www.sancobuzzer.com

NINGBO SANCO ELECTRONICS CO., LTD.

RELIABLY TEST:

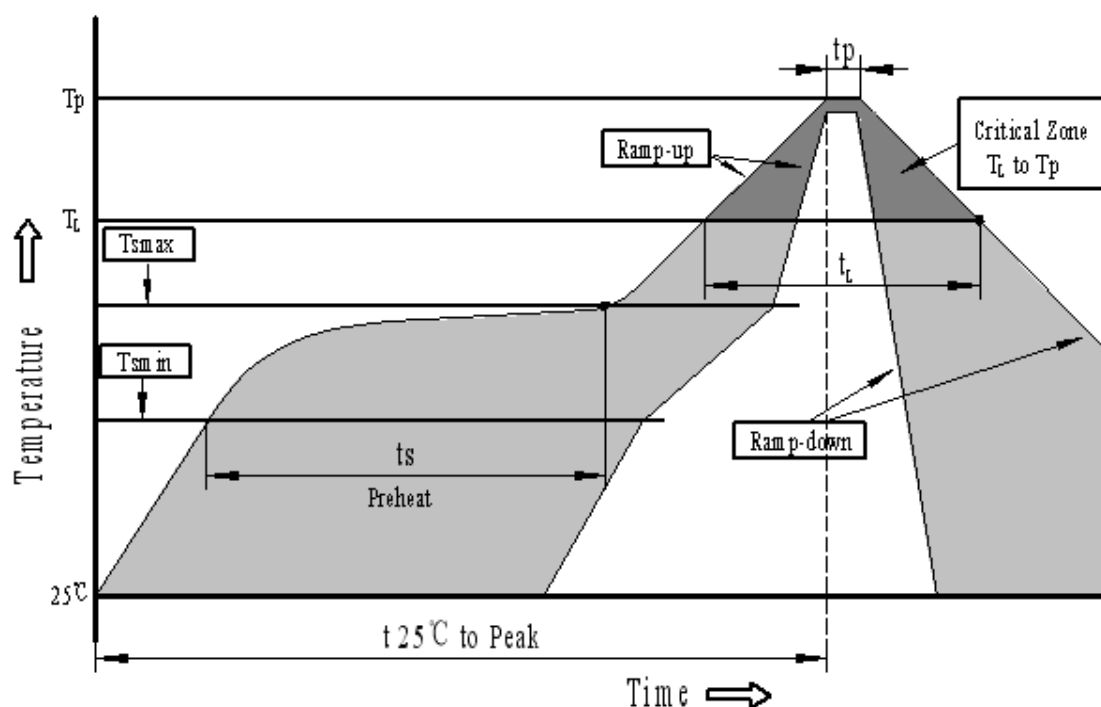
NO.	ITEM	TESTING CONDITION	VARIANCE AFTER TEST
1	High temp. storage life	The part shall be capable of withstanding a storage temperature is +80℃ for 120 hours	<i>All specifications must be satisfied after the test.</i>
2	Low temp. storage life	The part shall be capable of withstanding a storage temperature is -30℃ for 120 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	30±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/s ²) 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 manufacture under normal operations.			

NINGBO SANCO ELECTRONICS CO., LTD.

Tel: +86-574-83851068; Fax: +86-574-83851096

E-mail: sales@sancoelectronics.com Http: www.sancobuzzer.com

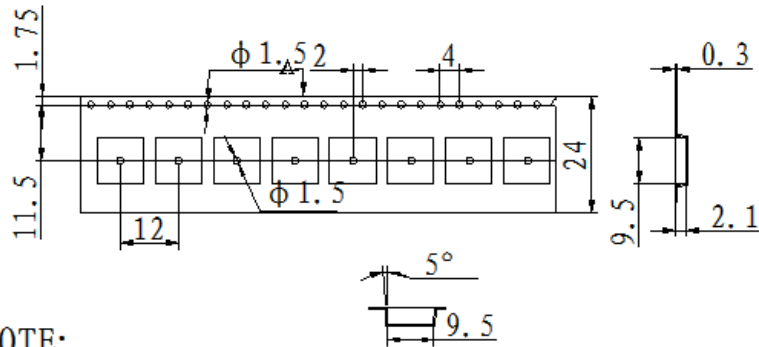
Recommended Temp. Profile for Reflow Oven (Fig.1)



Profile Feature	Pb-Free Assembly
Average ramp-up rate(T_L to T_p)	3°C/second max.
Preheat	
-Temperature Min.(T_{smin})	150°C
-Temperature Min.(T_{smax})	200°C
-Temperature Min.(t_s)	60~180 seconds
T_{smax} to T_L	
-Ramp-up Rate	3°C/second max.
Time maintained above:	
- Temperature(T_L)	217°C
-Time(T_L)	60~150 seconds
Peak temperature(T_p)	245°C+0/-5°C
Time within 5°C of actual Peak temperature (t_p)	6 seconds max.
Ramp-down Rate	6°C/second max.
Time 25°C to Peak Temperature	8 minutes max.

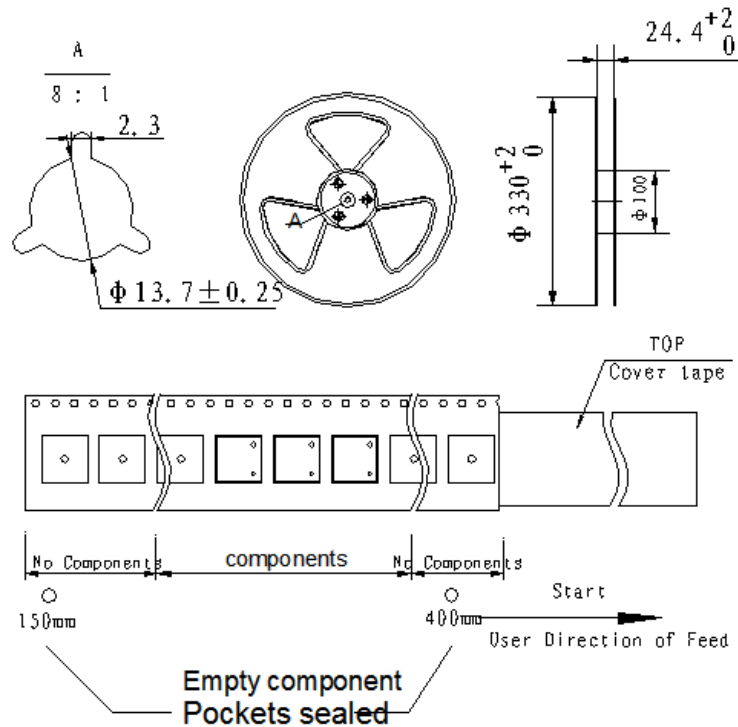
NINGBO SANCO ELECTRONICS CO., LTD.

PACKING:



NOTE:

- 1.10 sprocket hole pitch cumulative tolerance $\pm 0.20\text{mm}$.
2. All dimensions meet EIA-481-D requirements.
3. Thickness: $0.3 \pm 0.1\text{mm}$.
4. Component loaded per 13" reel: 2000pcs.



NINGBO SANCO ELECTRONICS CO., LTD.

Tel: +86-574-83851068; Fax: +86-574-83851096

E-mail: sales@sancoelectronics.com Http: www.sancobuzzer.com

PACKING:

