



Contitec Electronics Ltd.
Martin-Kollar-Str. 4
D-81829 München


Tel. +49 89 99 81 86 30
Fax. +49 89 3219 50 75
eMail: sales@contitec.com
web: www.contitec.com

Component Specification

Product : Piezo Buzzer
Part Number : CA-P121230A-304075ES
Drawing No : U12BT403

Content

1. General
2. Electrical & Acoustical Characteristics
3. Test Circuit
4. Frequency Characteristics
5. Dimensions & Structure
6. Reliability Test
7. Packing
8. Revision

	Part No.	Drawing No.	Page
	CA-P121230A-304075ES	U12BT403	2 / 8

1) General


This product is applied to our standard the transducer specification. Please contact us for customer specific solutions.

2) Electrical & Acoustical Specifications

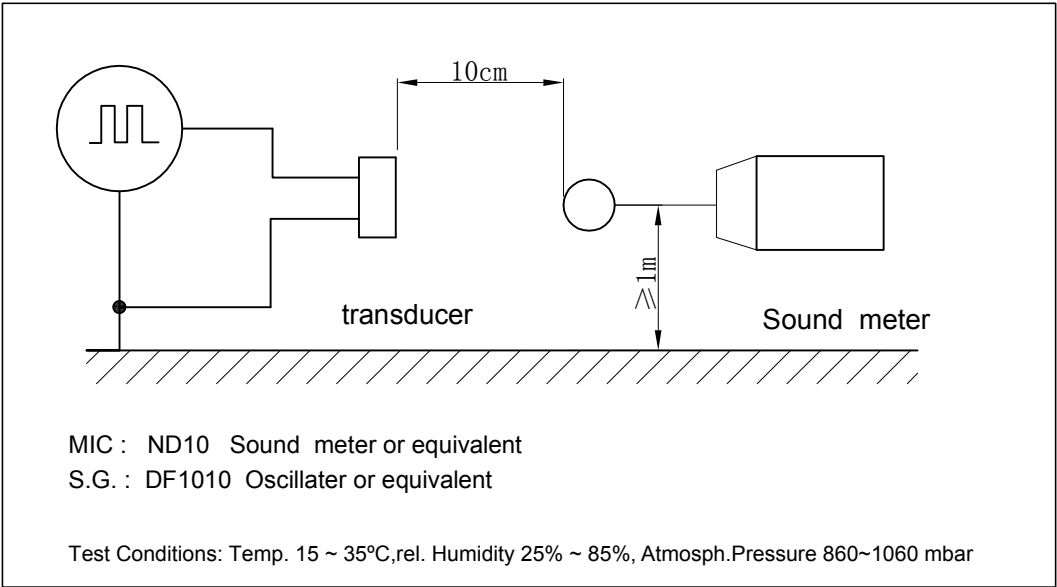
	Type	Specification
1	Rated Voltage Vpp	3V
2	Operating Voltage Vpp	1~25V
3	Max. Rated Current	1mA
4	Resonance Frequency	4000 Hz
5	Min. Sound Pressure Level	75dB/10cm/rated voltage
6	Electrostatic Capacity	15000±30% pF
7	Operating Temperature Range	-30 +105°C*
8	Store Temperature Range	-40+105°C
9	Weight	0.40g
10	Dimension	12 x 12 x 3
11	Housing Material	LCP

* Subject to final approval

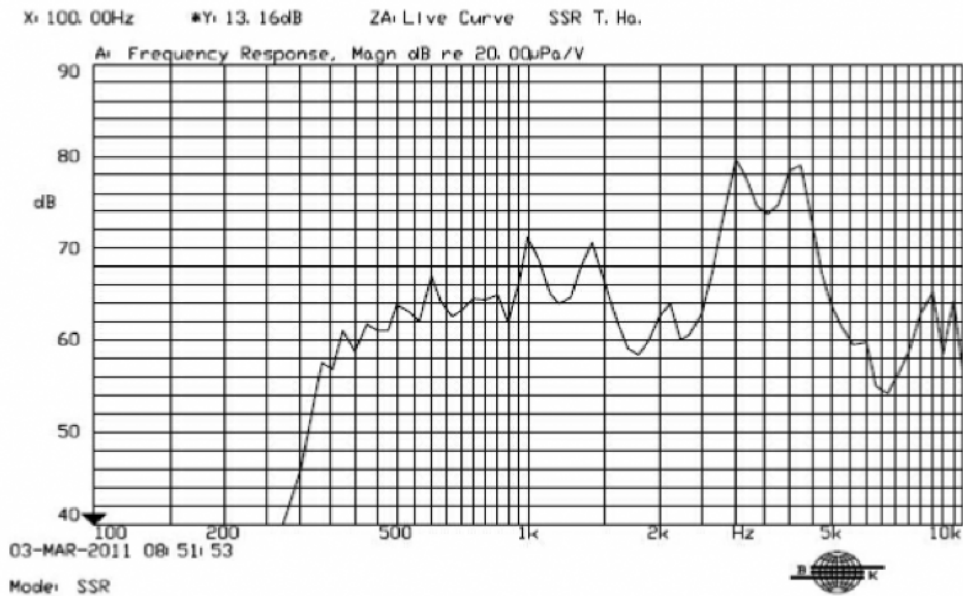
1 . 1	05/08/16	Package	Zhu	LI	G. Schubert
1 . 0	12/02/15	Production release	L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by

	Part No.	Drawing No.	Page
	CA-P121230A-304075ES	U12BT403	3 / 8


3) Test Circuit



4) Frequency Characteristics

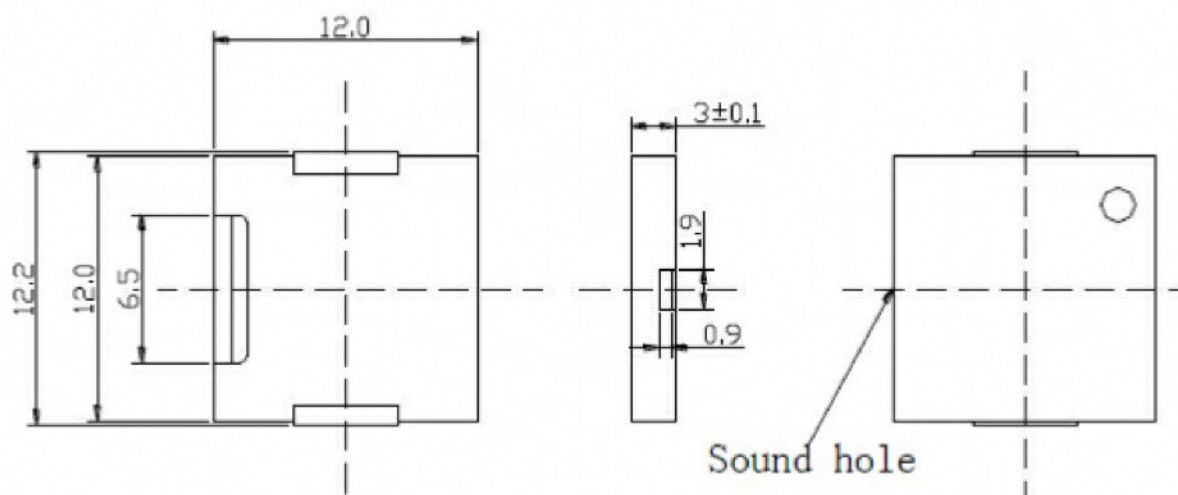


1.1	05/08/16	Package	Zhu	LI	G. Schubert
1.0	12/02/15	Production release	L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by


	Part No.	Drawing No.	Page
	CA-P121230A-304075ES	U12BT403	4 / 8

5) Dimensions & Structure

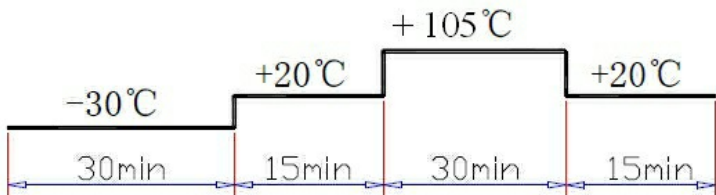
- 1) All parts meet ROHS
- 2) Wave solder allowed
- 3) wash not allowed



1.1	05/08/16	Package	Zhu	LI	G. Schubert
1.0	12/02/15	Production release	L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by


	Part No.	Drawing No.	Page
	CA-P121230A-304075ES	U12BT403	5 / 8

6) Reliability Test

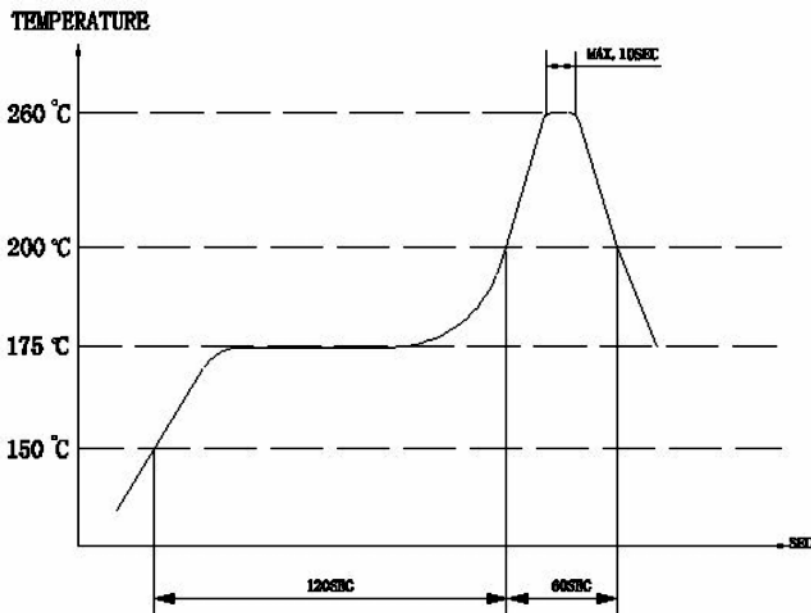
No	Items	Specification
1	Heat Resistance	After being placed in a chamber with 105 °C for 96 hours and then being placed in normal condition for 2 hours.
2	Cold Resistance	After being Placed in a chamber with -30°C for 96 hours and then being placed in normal condition for 2 hours.
3	Temperature Cycle*	<p>The part shall be subjected to 5 cycles. One cycle shall be consist of</p> 
4	Temp./Humidity Resistance	After being Placed in a chamber with 90-95% R.H. at 40/2°C for 96 hours and then being placed in normal condition for 2 hours. Allowable variation of SPL after test: 6 dB.
5	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 .
6	Drop test	Drop on a hard wood board of 4cm thick, any directions ,6 times, at the height of 75cm .
7	Pass criteria	Allowable variation of SPL after test: 6dB.

* Subject to final approval


1 . 1	05/08/16	Package	Zhu	LI	G. Schubert
1 . 0	12/02/15	Production release	L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by

	Part No.	Drawing No.	Page
	CA-P121230A-304075ES	U12BT403	6 / 8

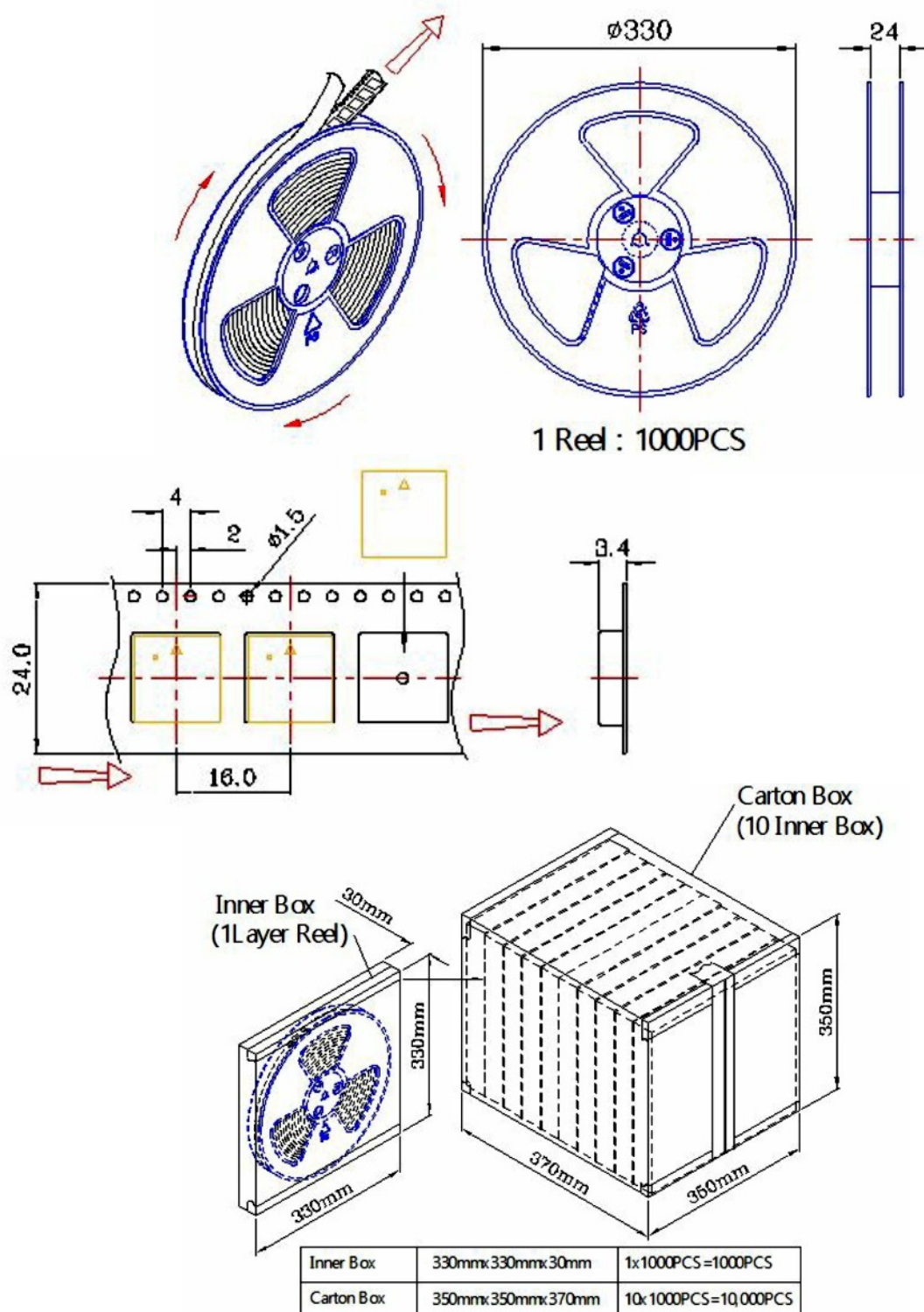
Reliability Test

No	Items	Specification
8	Manual Solderability	Manual soldering temperature +350°C for 5 seconds
9	Reflow Soldering	 <p>The graph shows the temperature profile for reflow soldering. The y-axis is labeled 'TEMPERATURE' and has markers at 150 °C, 175 °C, 200 °C, and 260 °C. The x-axis is labeled 'SEC' and has markers for 120SEC and 60SEC. The profile starts at 150 °C, rises to 175 °C, and remains at 175 °C for 120SEC. It then rises to a peak of 260 °C, which is maintained for a duration labeled 'MAX. 10SEC'. Finally, it cools down to 175 °C, which is maintained for 60SEC before returning to 150 °C.</p>


1 . 1	05/08/16	Package	Zhu	LI	G. Schubert
1 . 0	12/02/15	Production release	L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by

	Part No.	Drawing No.	Page
	CA-P121230A-304075ES	U12BT403	7 / 8

7) Packing



1.1	05/08/16	Package	Zhu	LI	G. Schubert
1.0	12/02/15	Production release	L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by

	Part No.	Drawing No.	Page
	CA-P121230A-304075ES	U12BT403	8 / 8

8) Revision

Rev. No	Date	Page	Description	Sign
1 . 0	12/02/15	all	Production release	Wang.Xue
1 . 1	05/08/16	all	Package	Li

1 . 1	05/08/16	Package	Zhu	LI	G. Schubert
1 . 0	12/02/15	Production release	L. Hua	T. Feng	G. Schubert
Revision	Date	Notes	Drawn by	Checked by	Approved by