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1. General

Operating temperature: -40°C to +85°C component weight [g]: 0,35
 Storage temperature: -40°C to +85°C
 Contact: SMD housing color:
 Packageing: tor IP rating:
 ESD conform
 RoHs conform: yes
 Remark:
 reflowable, Achtung DB noch nicht fertig!

2. Electrical and acoustical specification

Description	Value	Tolerance
Rated voltage [V]	3	
Operating voltage [V]	1 -	25
Frequency [Hz]	4000	
SPL [dBA]	rated voltage, 4kHz, square wave 50% duty cycle	min 75
Current consumption [mA]		max 1
Tone constant-pulse		

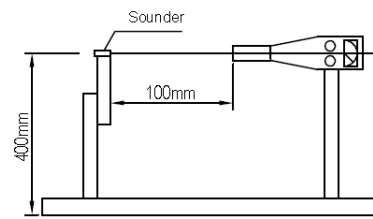
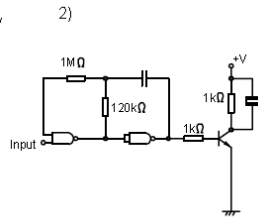
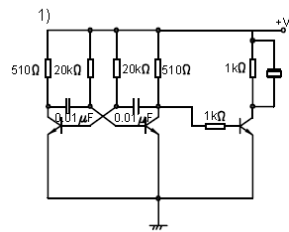
Remark:

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GREWUS		dimensions without tolerance: ± 0.3	scale:	
Designed by: Ralf Hinnerichs	15.10.2014	part number: BPE 1203S-06 A	index:	Last update:
Released by: Ralf Hinnerichs	15.10.2014		A	15.10.2014
drawing number: 419275025		Buzzer	Page 1 of 5	

3. Test method and conditions, frequency curve

1) Unstable multi-vibrator using Transistor, 2) Circuits using inverters or NAND gates.

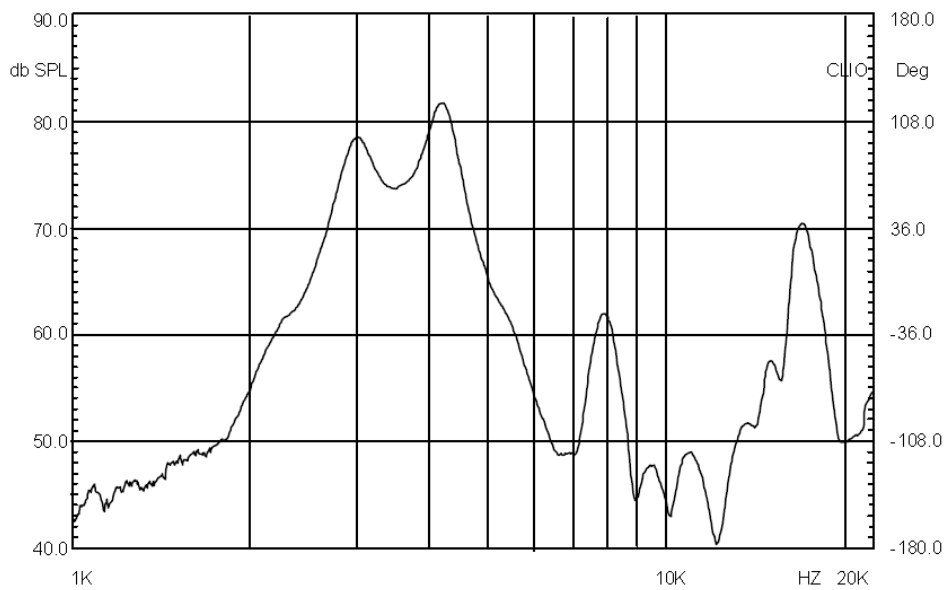


Recommended Circuit

Standard test Fixture

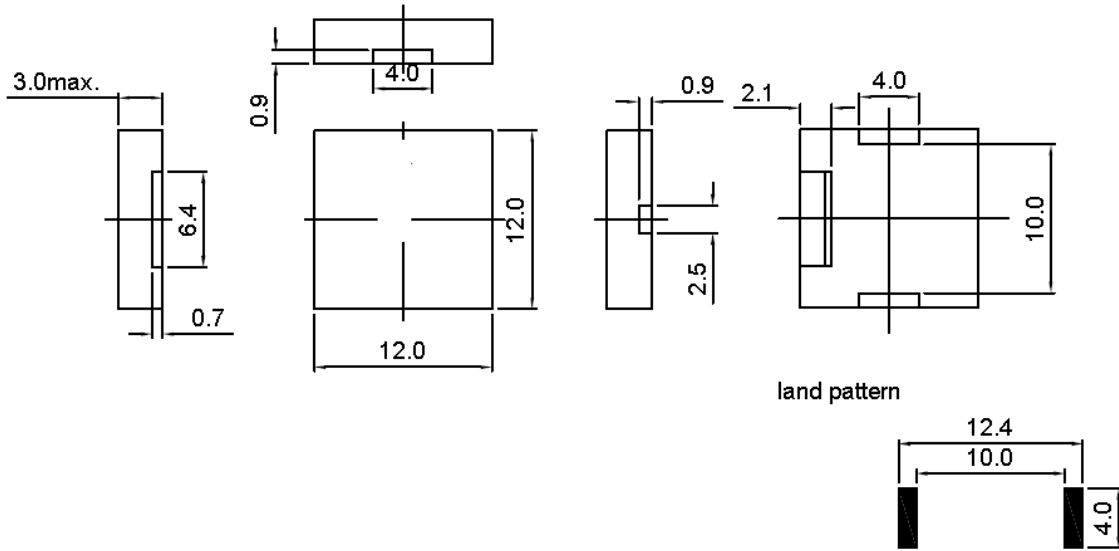
Frequency curve

Frequency Response (Square wave 3Vp-p 10cm)

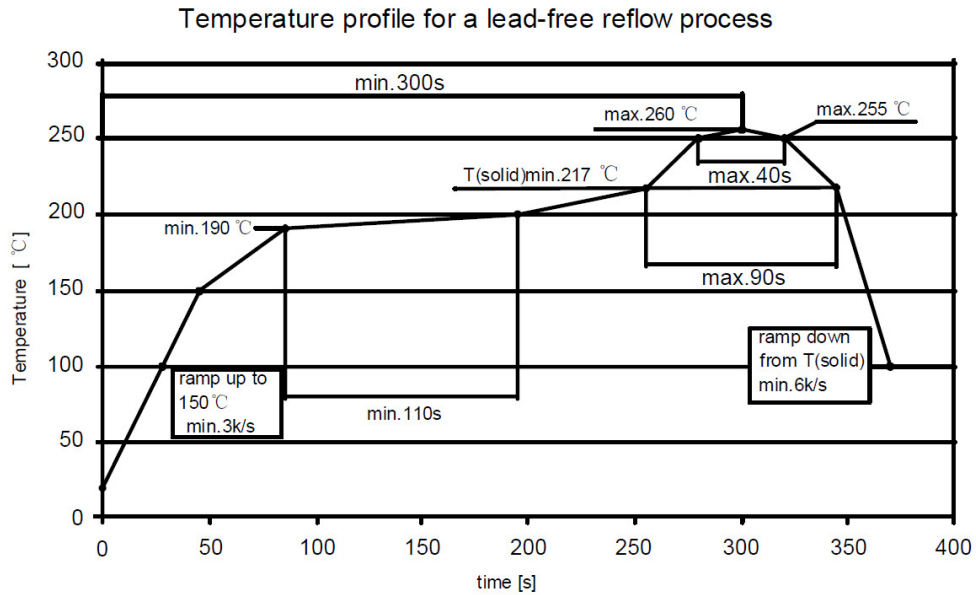


GREWUS			Dimensions without tolerance ± 0.3		Scale	
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Drawing number 419275025					Page	2 of 5

4. Drawing



Recommended reflow condition



GREWUS			Dimensions without tolerance ± 0.3		Scale	
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Drawing number 419275025					Page	3 of 5

5. Reliability test

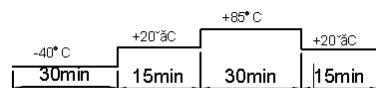
5.1 high temperature test

Temperature +85 C, Duration 96hrs

5.2 low temperature test

Temperature -40 C, Duration 96hrs

5.3 Temperature cycle test (5 cycles)



5.4 Humidity test

Temperature +40 C, Relative Humidity 93%, Duration 96hrs

5.5 Vibration Test

Vibration Frequency 10~55Hz, Amplitude 1.52mm, Duration 2hrs each of 3 axis

5.6 Drop test

Height 70cm, (to 10mm thickness woodenboard), Direction 3

5.7 Solderability

Temperature 255 5 C, Duration 3 0.5sec

5.8 Solder Heat Resistance

Temperature 255 10 C, Duration 30sec

Notice: All specification must be satisfied in this condition.

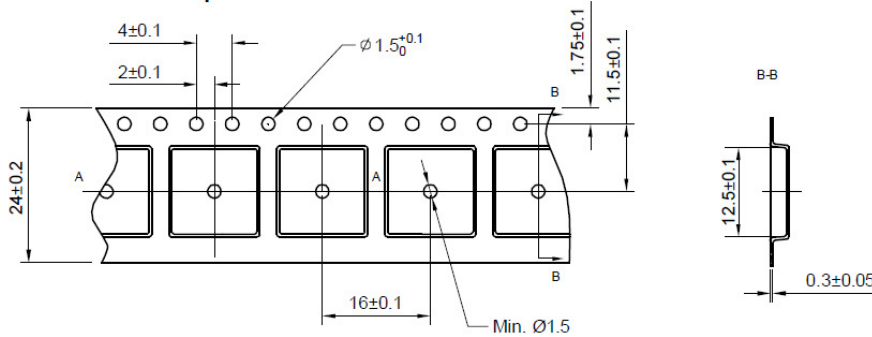
SPL: allowable deviation 5dB of the initial value after testing

all these tests above should be measured after leaving normal temperature for 2hrs.

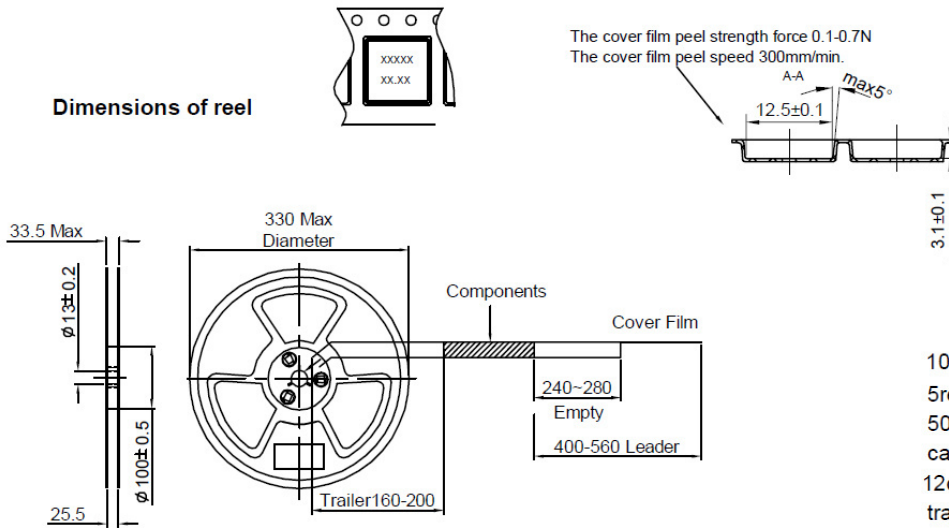
GREWUS			Dimensions without tolerance ± 0.3	Scale	
Designed by	Hinnerichs	15.10.2014	Part number BPE1203P-06A	Index	Date
Released by	Hinnerichs	15.10.2014		A	15.10.2014
Drawing number 419275025			Page 4 of 5		

6. Packaging

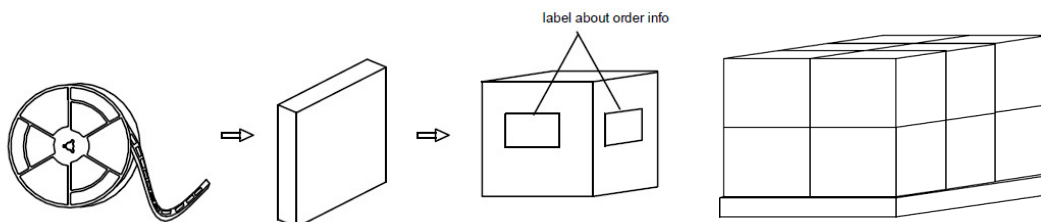
Dimensions of carrier tape



Dimensions of reel



1000pcs/reel
5reel/carton
5000 pcs/carton in total
carton size 38x28x37cm
12carton/tray
tray size 85x77x74cm



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