



DEVETECH ELECTRONICS CO. LTD

SMD BUZZER
CUSTOMER: DACHS ELECTRONICA P/
N: DVZ-052020F-0304

DESIGNED BY	
CHECKED BY	
APPROVED BY	

Address: 11/F.,F.Block, Hang Lok Building, 130Wing Lok St., Hong Kong.
Address: A3L1, Youpinyishu, Huanmei Rd., Dameisha, Yantian district, Shenzhen, China
Tel: (86) 13632770721 Email: sales@devetechelectronics.com
Website: www.devetechelectronics.com



CONTENTS		
N°	Contents	Page
1	Scope	3
2	Specification	3
3	Appearance drawing	4
4	Typical Frequency response curve	4
5	Recommend driving circuit	5
6	Testing method	5
7	Soldering condition	6
8	Reliability	6

1. Scope

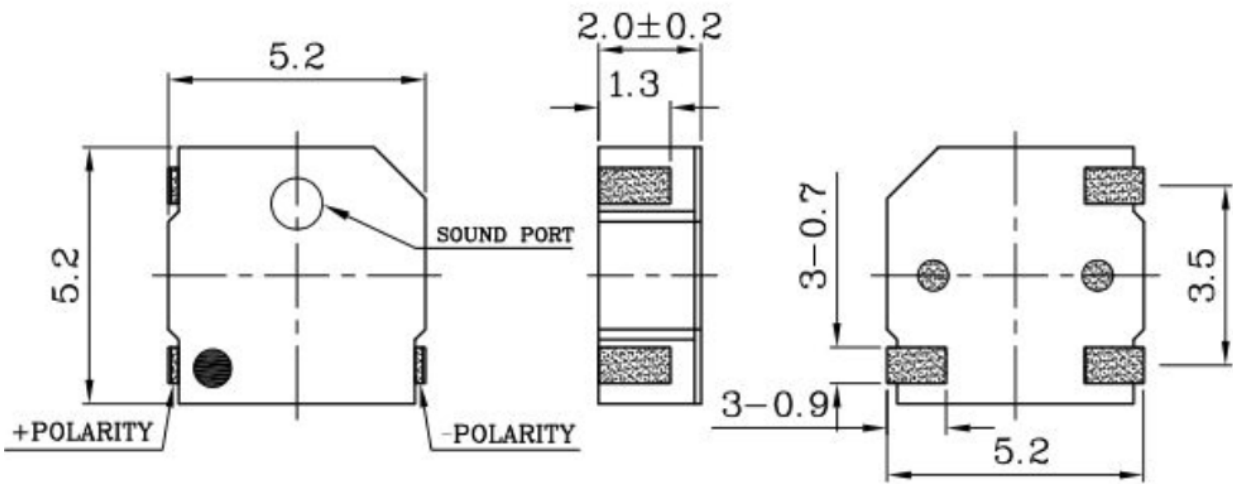
This specification applies piezoelectric diaphragm, DVZ-050020F-0304.

2. Specification

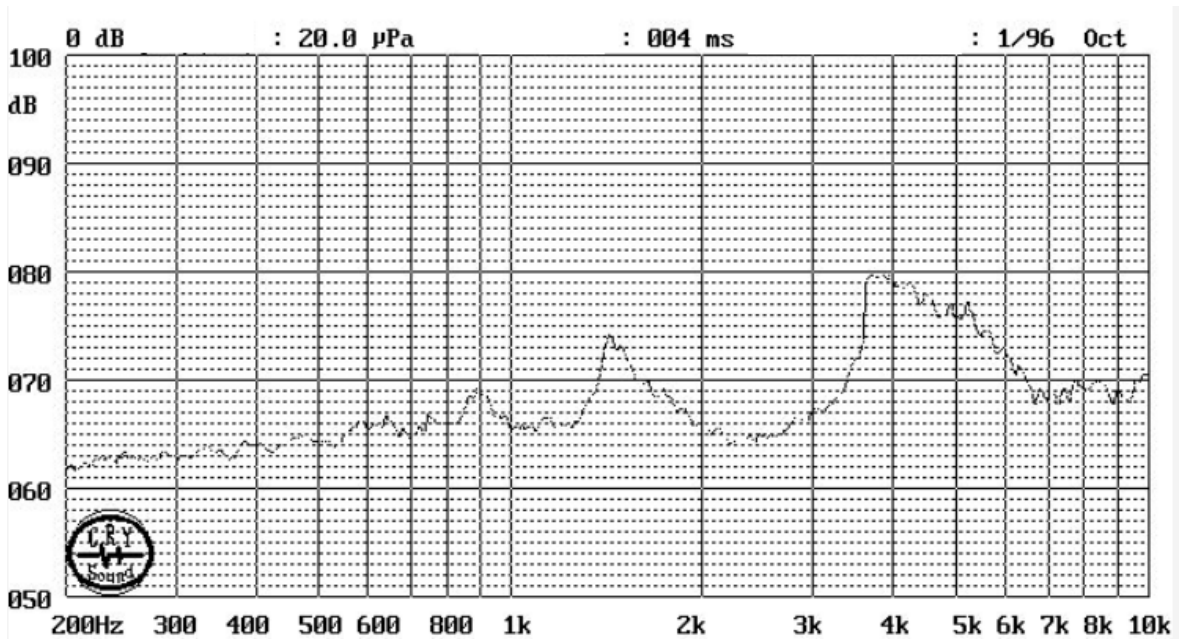
	Item	Unit	Specification	Condition
1	Rated voltage	Vo-p	3.0	
2	Operating voltage	Vo-p	2.0-4.0	
3	Fundamental frequency	Hz	4000	
4	Coil resistance	Ω	12 \pm 3	
5	Max rated current	mA	110 Max.	
6	Min. sound pressure level	dB	75Min	At 10 cm
7	Dimension	mm	5.2*5.2*H2.0	See appearance drawing
8	Operating temperature	$^{\circ}$ C	-20 ~ +60	
9	Storage temperature	$^{\circ}$ C	-30 ~ +80	

3. Appearance drawing

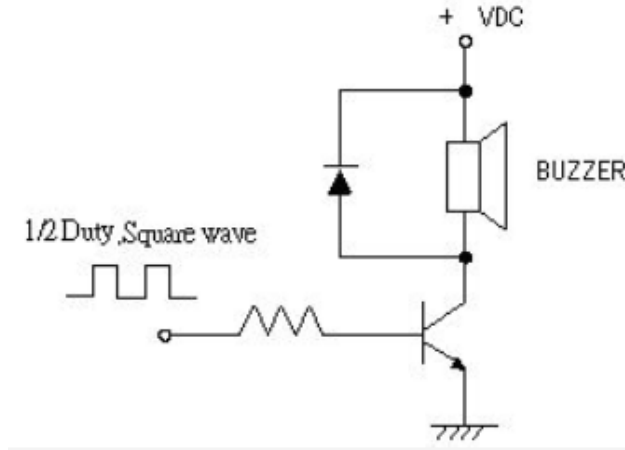
Model No: DVZ-052020F-0304 TOL: ± 0.5



4. Typical Frequency response curve



5. Recommend driving circuit



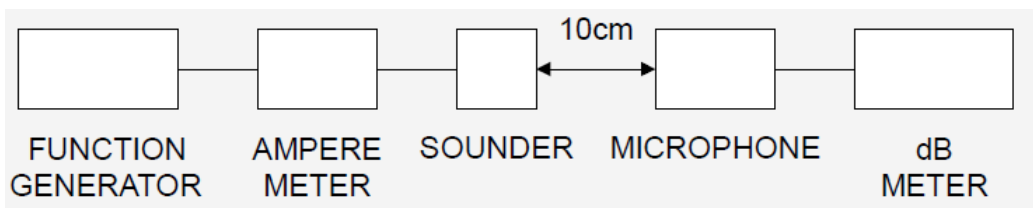
The base current I_b should high enough so that it saturates the collector current of the transistor with the CB load.

6. Testing method

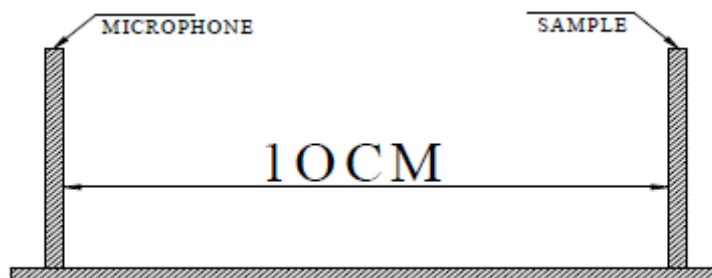
Standard measurement conditions: Temperature: $25 \pm 2^\circ\text{C}$ Humidity: 45-60%

Acoustic characteristics

The oscillation frequency, current consumption and sound pressure are measured by the measuring instruments shown below.



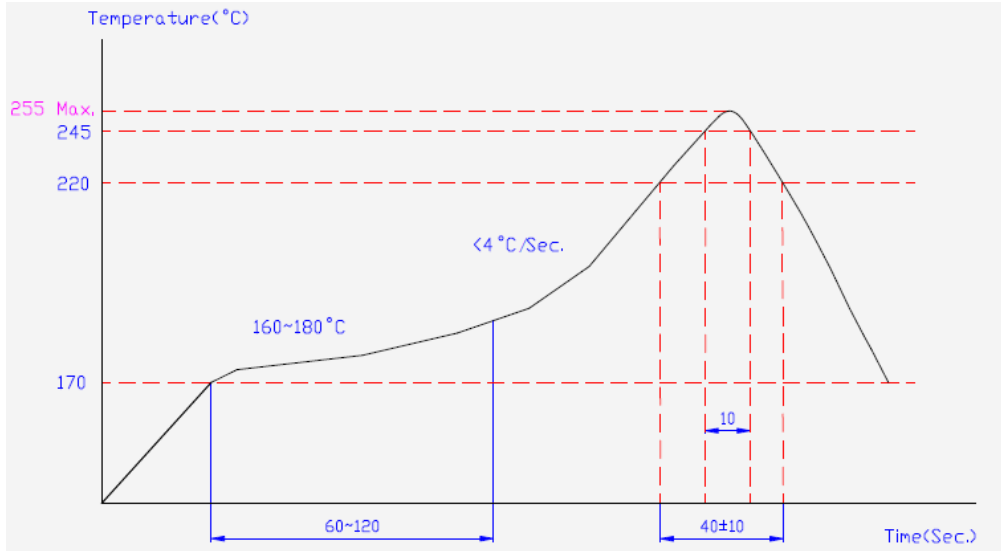
In the measuring test, buzzers are placed as follows:



7. Soldering condition

(1) Recommendable reflow soldering condition is as follows

Note: It is requested that reflow soldering should be executed after heat of product goes down to normal.



Heat resistant line

(Used when heat resistant reliability test is performed)

(2) Manual soldering: Manual soldering temperature 330 °C within 3 sec.

8. Reliability

Items	Method of test and measurements	Performance
Coldness withstanding	After 98 hours of being exposed to -30°C environment, should be returned to normal environment for 2 hours, then re-proceed to test.	No abnormality shall exist
Hotness withstanding	After 98 hours of being exposed to +80°C environment, should be returned to normal environment for 2 hours, then re-proceed to test.	No abnormality shall exist
Humidity withstanding	After 98 hours of being exposed to 40°C 95%RH environment in actual operation, should be returned to normal environment for 2 hours, then re-proceed to test.	No abnormality shall exist
Durability	Testing after 1,000 hours actual continuous operation. (at standard measurement conditions)	No abnormality shall exist
Drop withstanding	A natural drop from 75cm high down to the ground.	No abnormality shall exist
Vibration withstanding	Vibration of 2,000 cycles per minute, 2mm amplitude, applied in X, Y and Z directions for 30 minutes each.	No abnormality shall exist



NOTES
