


Address:
BLOCK 1, DEHUINA INDUSTRIAL DISTRICT,
MINGZHI RD LONGHUA, SHENZHEN,
GUANGDONG, CHINA 518131

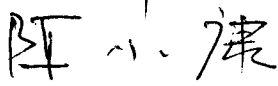
TEL: (86) 755-8192552 8190943
FAX: (86) 755-8192557
E-mail: szwwiner@public.szptt.net.cn
HOME PAGE: www.globalsources.com/hornmic.co

CUSTOMER: Digi-Key Corporation

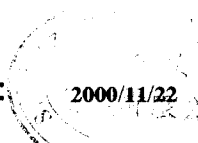
APPROVE SHEET

| PRODUCT NAME | TYPE | DIMENSION | |
|-------------------------------------|------------|--------------|--|
| Electret Condensér Microphone | EM9752N-51 | Ø9.7×5.2(mm) | |

APPROVED :  DATE: 2000.11.25

CHECKED BY:  DATE: 2000.11.25

ISSUED BY: 陳為波 DATE: 2000/11/22



APPROVED BY

DATE:

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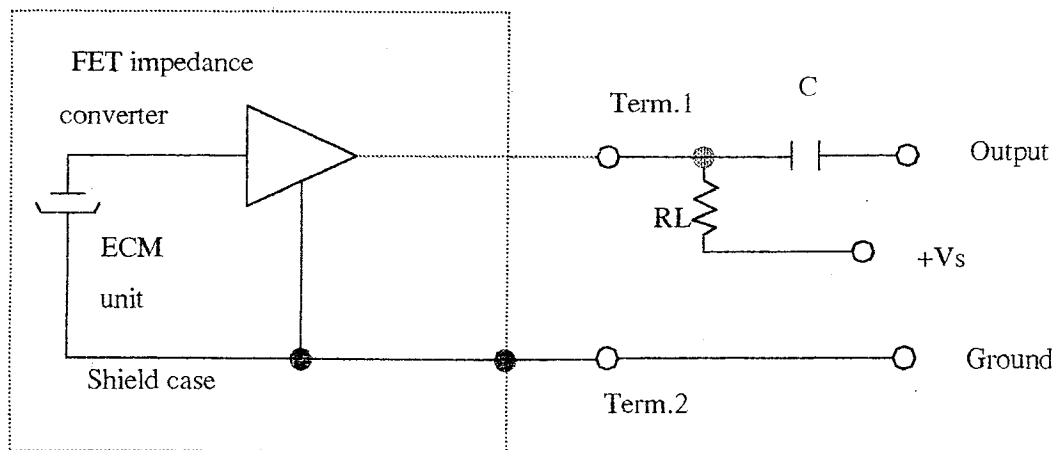
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SPECIFICATION

| Item | Symbol | Test conditions | Min | Standard | Max | Unit |
|-----------------------|-----------------|--|-----|----------|-----|-----------------|
| Sensitivity | S | f=1KHz. Pin=1pa | -55 | -51 | -47 | dB 0dB=1V/pa |
| Directivity | Noise canceling | | | | | |
| Impedance | Zout | | | | 680 | Ω |
| Current consumption | I | f=1KHz. Pin=1pa | | | 500 | μ A |
| Sensitivity reduction | Δ S | f=1KHz. Pin=1pa. $V_s=1.5 \rightarrow 1V$ | | | -3 | dB |
| S/N ratio | S/N(A) | f=1KHz. Pin=1pa. A=curve | 58 | | | dB |

Measurement Circuit (Test Condition $V_s=1.5V$ $R_L=680\Omega$)

$T_a=20^\circ C$ R.H=65%)

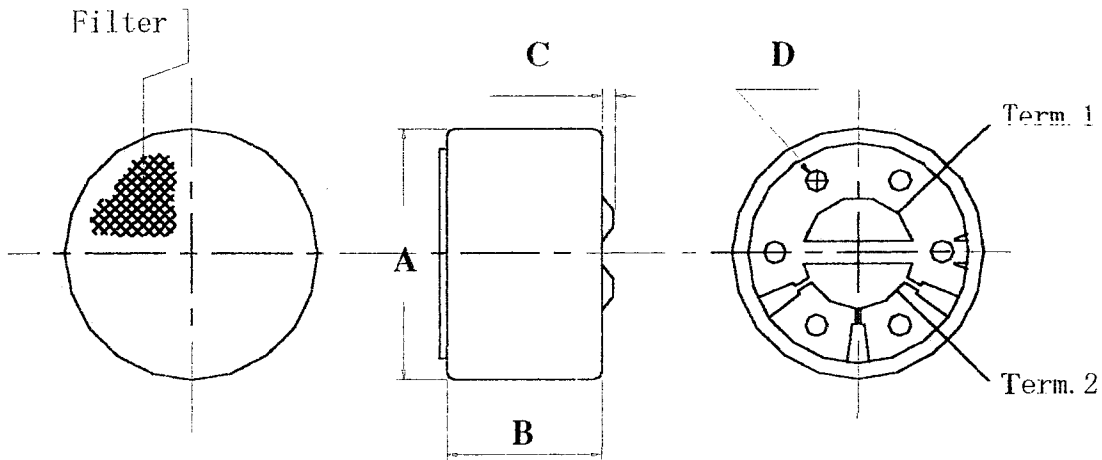


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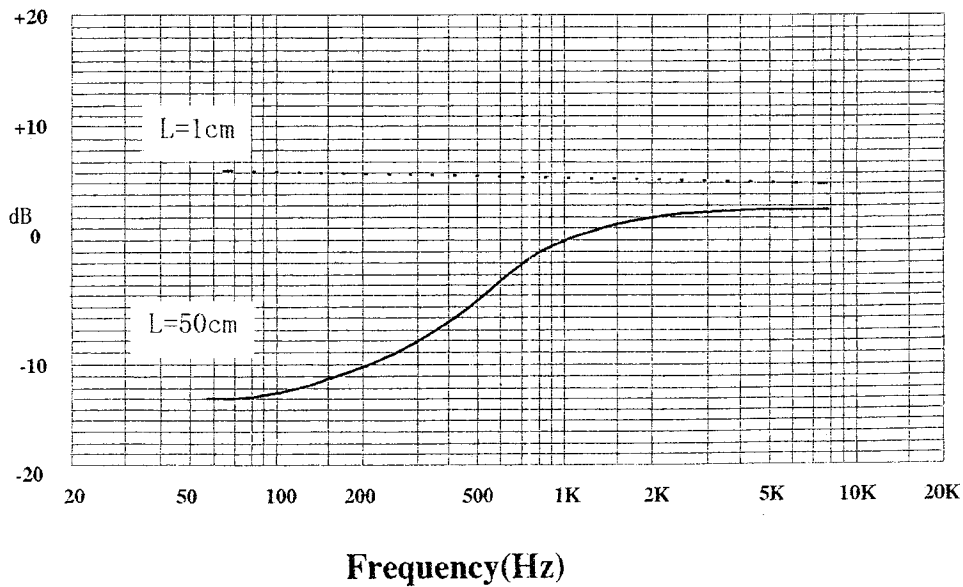
Dimensional Drawing

unit: mm



| PART | MIN | TYPE | MAX | REMARK |
|------|------|------|------|--------|
| A | Ø9.6 | Ø9.7 | Ø9.8 | |
| B | 5.0 | 5.2 | 5.4 | |
| C | - | - | 0.7 | |
| D | Ø0.8 | - | Ø1.2 | |

Typical Frequency Response Curve



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Ambient condition

(1) Operating condition

Ambient temperature: $-10^{\circ}\text{C} \sim +45^{\circ}\text{C}$

Relative humidity: $\leq 85\%$

(2) Storage condition

Ambient temperature: $-20^{\circ}\text{C} \sim +60^{\circ}\text{C}$

Relative humidity: 45%

Reliability Test

1) Vibration Test

To be no interference in operation after vibration of full amplitude 2mm for 30 minutes at three axis, the sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.

2) Drop test

To be no interference in operation after dropped to concrete floor each time from 1 meter height of three directions in state of packing, the sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.

3) High Temperature Storage:

To be no interference in operation after high temperature test $70^{\circ}\text{C} \pm 3^{\circ}\text{C}$ for 48 hours. The sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity.

4) Isotherm & Iso-humidity Storage

To be no interference in operation after storage test at temperature $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and relative humidity ($93\% \pm 2\sim 3\%$) for 48 hours, the sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity, the test is performed at temperature 20°C after operation for 2 hours.

5) Low Temperature Storage

To be no interference in operation after test at temperature $-20^{\circ}\text{C} \pm 3^{\circ}\text{C}$ for 4 hours, the sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity

6) Temperature Cycle Test

After exposure at $55 \pm 2^{\circ}\text{C}$ for 1 hour, at $20 \pm 2^{\circ}\text{C}$ for 1 hour, at $-10 \pm 2^{\circ}\text{C}$ for 1 hour, at $20 \pm 2^{\circ}\text{C}$ for 1 hour, with 5 cycles. Change of sensitivity within $\pm 3\text{dB}$ from initial measuring should be done after 2 hours exposed to $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$.

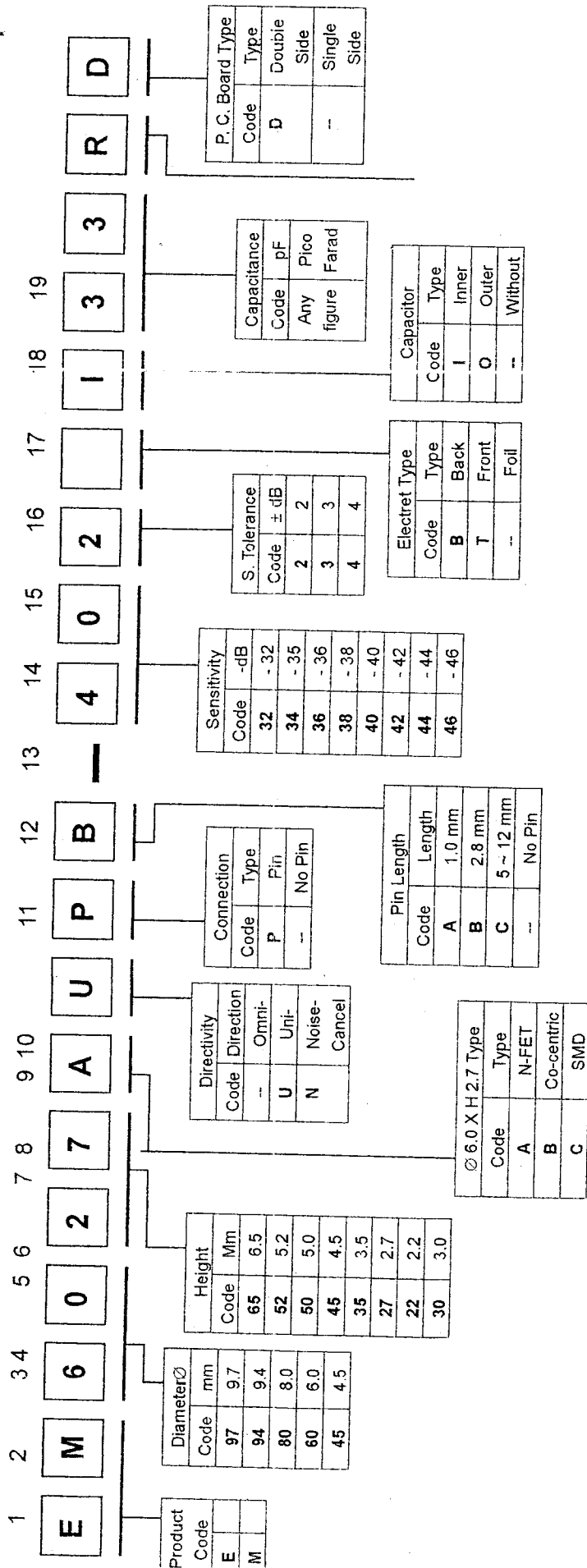
7) Collision Test

After collided with the acceleration $100 \pm 10\text{m/s}$, at the vertical & horizontal directions for 1000 ± 10 times. at the state of packing. Change of sensitivity within $\pm 3\text{dB}$ from initial.

HORN Shenzhen Horn Industrial Co., Ltd.

Explanation of Part Number

Explanation of Part Number



| Resistor | |
|----------|---------|
| Code | Type |
| R | With |
| -- | Without |

SHENZHEN HORN INDUSTRIAL CO.,LTD.

PACKING LIST OF CONDENSER MICROPHONES

| MODEL NO | DIMENSION (mm) | DIRECTIVITY | INNER PACKING (PCS) | MIDDLE PACKING (PCS) | CARTOON (PCS) | GROSS WEIGHT (Kg) | NET WEIGHT (Kg) |
|----------|----------------|------------------|---------------------|----------------------|---------------|-------------------|-----------------|
| EM9765 | 9.7*6.5 | Omni directional | 100 | 1,000 | 10,000 | 10 | 9.5 |
| M9765P | 9.7*6.5 | Omni directional | N/G | 400 | 4,000 | 5 | 4.5 |
| M9752U | 9.7*5.2 | Unidirectional | 100 | 1,000 | 10,000 | 9.5 | 9 |
| N9752N | 9.7*5.2 | Noise Cancelling | 100 | 1,000 | 10,000 | 9.5 | 9 |
| 3M9745 | 9.7*4.5 | Omni directional | 100 | 1,000 | 10,000 | 9 | 8.5 |
| M9745P | 9.7*4.5 | Omni directional | N/G | 400 | 4,000 | 3.5 | 3 |
| 3M9465 | 9.4*6.5 | Omni directional | 100 | 1,000 | 10,000 | 9.5 | 9 |
| M9465P | 9.4*6.5 | Omni directional | N/G | 400 | 4,000 | 4.5 | 4 |
| M8050U | 8.0*5.0 | Unidirectional | 50 | 1,000 | 15,000 | 10 | 9.5 |
| 3M6050 | 6.0*5.0 | Omni directional | 100 | 2,000 | 30,000 | 10.5 | 10 |
| M6050P | 6.0*5.0 | Omni directional | 100 | 1,000 | 10,000 | 3.5 | 3 |
| M6050U | 6.0*5.0 | Unidirectional | 100 | 2,000 | 30,000 | 10.5 | 10 |
| M6050N | 6.0*5.0 | Noise Cancelling | 100 | 2,000 | 30,000 | 10.5 | 10 |
| M6035 | 6.0*3.5 | Omni directional | 100 | 2,000 | 30,000 | 9.5 | 9 |
| M6027 | 6.0*2.7 | Omni directional | 100 | 2,000 | 30,000 | 7.5 | 7 |
| I6027PA | 6.0*2.7 | Omni directional | 100 | 2,000 | 30,000 | 7.5 | 7 |
| M4530 | 4.5*3.0 | Omni directional | 100 | 2,000 | 30,000 | 6.5 | 6 |