

Address:
BLOCK 1, DEHUINA INDUSTRIAL DISTRICT,
MINGZHI RD LONGHUA, SHENZHEN,
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HOME PAGE: www.globalsources.com/hornmic.co

CUSTOMER: Digi-Key Corporation

APPROVE SHEET

PRODUCT NAME	TYPE	DIMENSION	
Electret Condenser Microphone	EM6050P-44	Ø6.0×5.0(mm)	pin type

APPROVED :

李 军

DATE: 2000.11.25

CHECKED BY:

阿 小 康

DATE: 2001.11.25

ISSUED BY:

陳為波

DATE:



APPROVED BY:

DATE:

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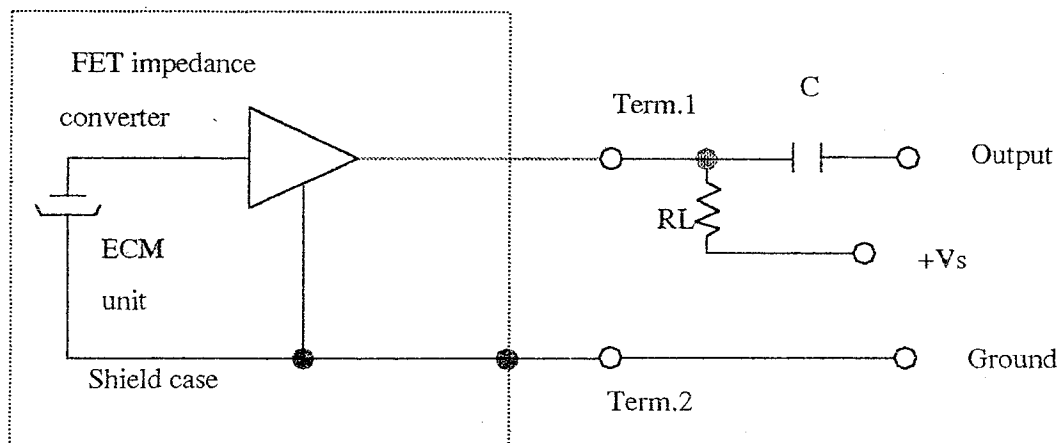
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SPECIFICATION

Item	Symbol	Test conditions	Min	Standard	Max	Unit
Sensitivity	S	f=1KHz. Pin=1ubar	-47	-44	-41	dB 0dB=1V/Pa
Directivity	Omnidirectional					
Impedance	Zout				2.2	K Ω
Current consumption	I	f=1KHz. Pin=1ubar			500	uA
Sensitivity reduction	ΔS	f=1KHz. Pin=1ubar. Vs=4.5 $\rightarrow$ 1.5V			-3	dB
S/N ratio	S/N(A)	f=1KHz. Pin=1ubar. A=curve	40			dB

Measurement Circuit (Test Condition Vs=4.5V RL=2.2K Ω)

Ta=20 $^{\circ}$ C R.H=65%)

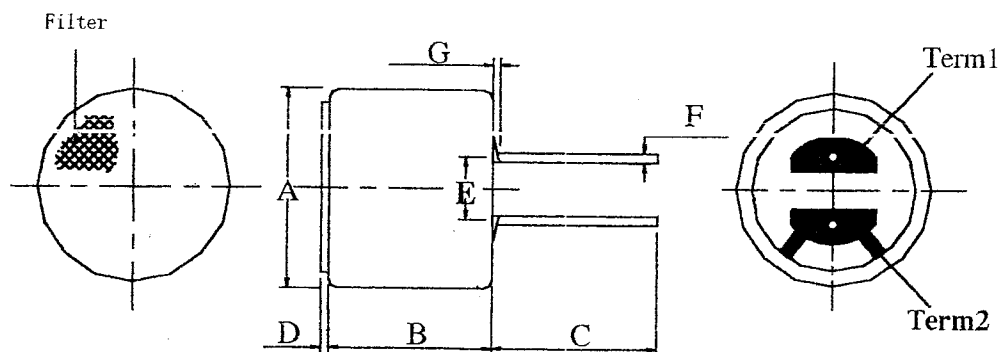


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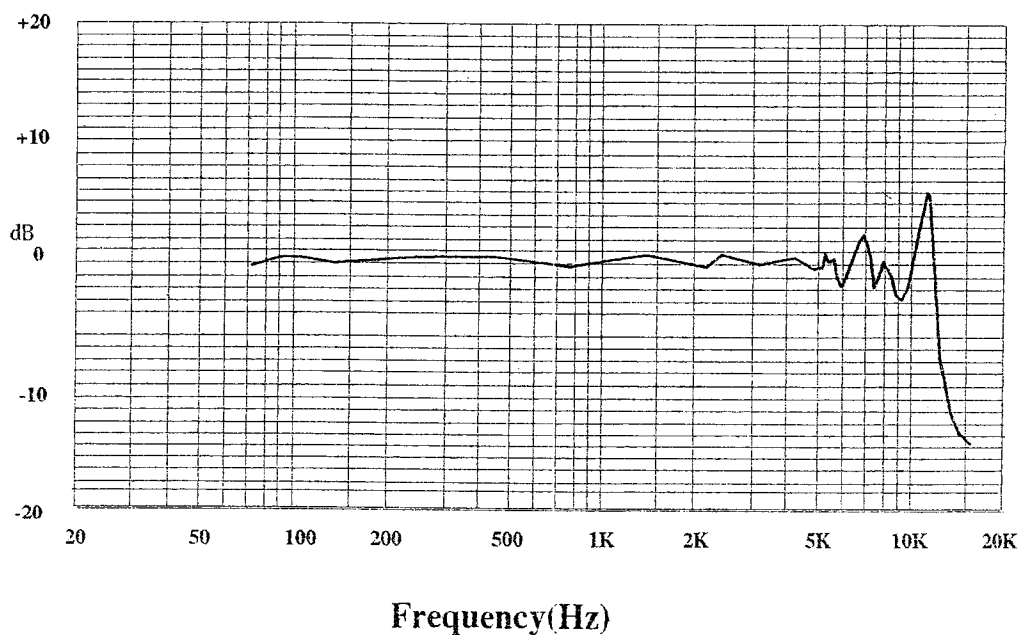
Dimensional Drawing

unit: mm



PART	MIN	TYPE	MAX	REMARK
A	Ø5.8	Ø6.0	Ø6.2	
B	4.8	5.0	5.2	
C	4	5	6	
D	-	-	0.2	
E	1.8	1.9	2	
F	-	-	0.7	
G		-	0.5	

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 48 hours, the sensitivity to be within $\pm 3\text{dB}$ from initial sensitivity

6) Temperature Cycle Test

After exposure at $55^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for 1 hour, at $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for 1 hour, at $-10^{\circ}\text{C} \pm 2^{\circ}\text{C}$ for 1 hour, at $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 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 $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$.

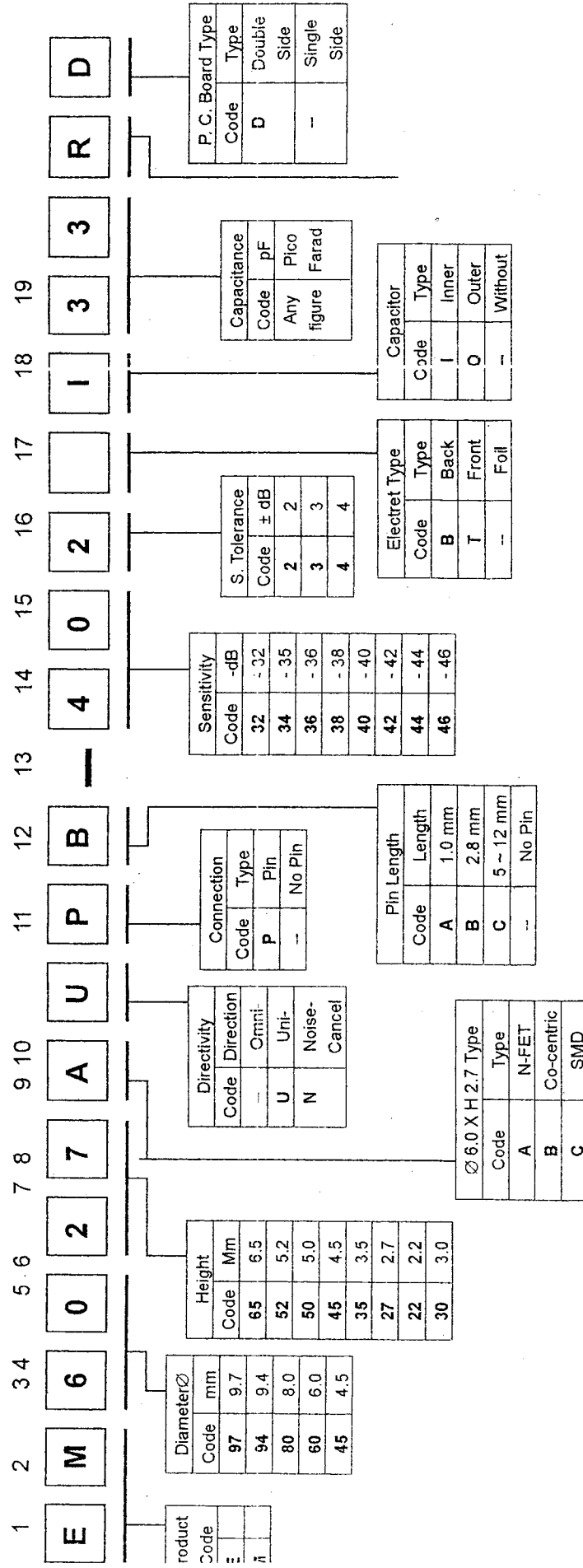
7) Collision Test

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)
M9765	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
M9745	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
M9465	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
M6050	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
M6027PA	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