

# Condenser Microphone SELECTION GUIDE

## LAUBE



how to order



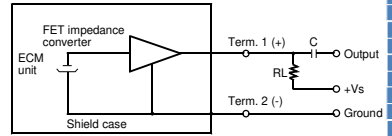
1. Directivity. C = omni, U = uni, N = noise cancelling, B = Omni Back Electret
2. Diameter with one decimal point (mm) e.g. 97 = 9.7
3. Height with the filter in one decimal point (mm) e.g. 67 = 6.7
4. Power Supply ( Vs ) \*fig. 1
5. Resistor Loading ( RL ) \*fig. 2
6. Sensitivity e.g. 42 = 42dB
7. Tolerance in sensitivity e.g. 2 = ±2
8. Pin, Lead or none

**IMPORTANT INFORMATION**  
 We start to use "pascal" indication from this volume. This is the recommendation if I.E.C. (International Electrotechnical Commission).  
 The relation between "pascal" and "µbar" is as follows. 1pa = 10µbar  
 So the sensitivity will increase 20dB with "pa" indication  
 Example: -60dB (0dB = 1V/µbar) = -40dB (0dB = 1V/pa)

(Vs) fig. 1		(RL) fig. 2
A. 1 V	G. 4 V	A. 680 Ω
B. 1.5 V	H. 4.5 V	B. 1 KΩ
C. 2 V	I. 5 V	C. 1.5 KΩ
D. 2.5 V	J. 5.5 V	D. 2.2 KΩ
E. 3 V	K. 6 V	E. 3 KΩ
F. 3.5 V		

(Vs) standard operation voltage (RL) external resistance

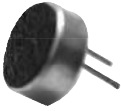
schematic diagram



Series	Directivity*	Diameter (mm)	Height (mm)	Power Supply (Vs)	External Resistor Loading (Ω)	Sensitivity (dB)	Terminal*	Page No.
CF4012	Omni	4.0	1.2	2.0	2200	-42	+/-3	S 52
C4015	Omni	4.0	1.5	2.0	2200	-45	+/- 3	P / S 52
C4530	Omni	4.5	3.0	2.0	2200	-44,-46,-50	+/- 3	S 52
CF5822	Omni	5.8	2.2	2.0	2200	-38,-44	+/- 3	P / S 53
C6012	Omni	6.0	1.2	2.0	2200	-42	+/- 3	S 53
CF6016	Omni	6.0	1.6	2.0	2200	-44	+/- 3	P / S 53
C6022	Omni	6.0	2.2	2.0	2200	-44,-46	+/- 3	P / S 54
C6027	Omni	6.0	2.7	2.0	2200	-38,-42,-46	+/- 3	P / S 54
C6030	Omni	6.0	3.0	2.0	2200	-42,-44,-46	+/- 3	S 54
C6035	Omni	6.0	3.5	2.0	2200	-42,-44,-46	+/- 3	P / S 55
C6052	Omni	6.0	5.2	2.0	2200	-38,-42,-46	+/- 3	P / S 55
C8052	Omni	8.0	5.2	1.5	2200	-42,-46	+/- 3	S 55
C9465	Omni	9.4	6.5	4.5	1000	-45	+/- 2	P / S 56
C9745	Omni	9.7	4.5	1.5 / 2.5	3000 / 2200	-40,-42,-44 / -40,-42,-44,-46	+/- 3	P / S 56
C9752	Omni	9.7	5.2	2.5	2200	-42	+/- 2	S 56
CF9745	Omni	9.7	4.5	1.5 / 2.5	3000 / 2200	-40,-42,-44 / -40,-42,-44,-46	+/- 3	P 57
C9767	Omni	9.7	6.7	1.5 / 4.5	1500 / 2200	-36,-38,-40,-42,-44 / -38,-42,-46	+/-3,+/-2	P / S 57
CF1055	Omni	10.0	5.5	1.5	2200	-38	+/- 3	S 57
U6030	Uni	6.0	3.0	2.0	2200	-46	+/- 4	S 58
U6035	Uni	6.0	3.5	2.0	2200	-46	+/- 4	S 58
U6052	Uni	6.0	5.2	2.0	2200	-50	+/- 4	S 58
U8052	Uni	8.0	5.2	2.0	2200	-46	+/- 4	S 59
U9752	Uni	9.7	5.2	1.5	680	-47	+/- 4	S 59
N4530	Noise	4.5	3.0	2.0	2200	-54	+/- 3	S 59
N6027	Noise	6.0	2.7	2.0	2200	-51	+/- 4	S 60
N6035	Noise	6.0	3.5	2.0	2200	-46	+/- 4	S 60
N6052	Noise	6.0	5.2	1.5	2200	-50	+/- 4	S 60
N9752	Noise	9.7	5.2	1.5	680	-54	+/- 4	S 61
B6022	Back Omni	6.0	2.2	3.0	2200	-46	+/- 4	S 61
B6027	Back Omni	6.0	2.7	3.0	2200	-46	+/- 4	S 61
B6035	Back Omni	6.0	3.5	3.0	2200	-46	+/- 4	S 62
B6052	Back Omni	6.0	5.2	3.0	2200	-46	+/- 4	S 62

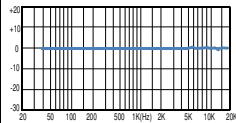
\* Omni - Omni Directional, Uni - Uni Directional, Noise - Noise Cancelling, Back Omni - Back Electret Omni Leadwire type is available on request

C6022



COLOUR	HOUSING	TERMINAL
SILVER	ALUMINUM	PIN / NIL

FREQUENCY RESPONSE CURVE



### ELECTRICAL SPECIFICATIONS

Model No.	C6022CD443D	C6022CD463D
Sensitivity (dB)	-44 +/- 3	-46 +/- 3
Directivity	OMNI	OMNI
Power Supply Vs (V)	2	2
Resistance Loading RL (Ω)	2.2K	2.2K
Max Current (mA)	0.5	0.5
Frequency Range (Hz)	50 - 16000	50 - 16000
Max. Operation Voltage (V)	10	10
Sensitivity Reduction within 1.5 V (dB)	-3	-3
S/N Ratio (dB)	> 60	> 60

### DIMENSION

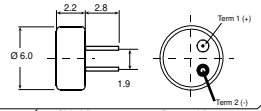
Top View



PIN

Side View

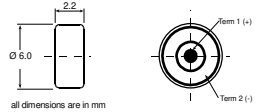
Bottom View



NIL

Side View

Bottom View



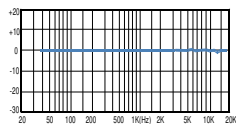
all dimensions are in mm

C6027



COLOUR	HOUSING	TERMINAL
SILVER	ALUMINUM	PIN / NIL

FREQUENCY RESPONSE CURVE



### ELECTRICAL SPECIFICATIONS

Model No.	C6027CD383	C6027CD423	C6027CD463
Sensitivity (dB)	-38 +/- 3	-42 +/- 3	-46 +/- 3
Directivity	OMNI	OMNI	OMNI
Power Supply Vs (V)	2	2	2
Resistance Loading RL (Ω)	2.2K	2.2K	2.2K
Max Current (mA)	0.5	0.5	0.5
Frequency Range (Hz)	50 - 16000	50 - 16000	50 - 16000
Max. Operation Voltage (V)	10	10	10
Sensitivity Reduction within 1.5 V (dB)	-3	-3	-3
S/N Ratio (dB)	> 60	> 60	> 60

### DIMENSION

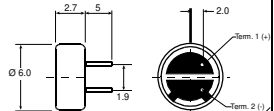
Top View



PIN

Side View

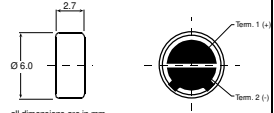
Bottom View



NIL

Side View

Bottom View



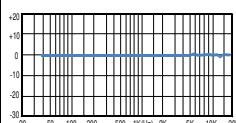
all dimensions are in mm

C6030



COLOUR	HOUSING	TERMINAL
SILVER	ALUMINUM	PIN / NIL

FREQUENCY RESPONSE CURVE



### ELECTRICAL SPECIFICATIONS

Model No.	C6030CD423	C6030CD443	C6030CD463
Sensitivity (dB)	-42 +/- 3	-44 +/- 3	-46 +/- 3
Directivity	OMNI	OMNI	OMNI
Power Supply Vs (V)	2	2	2
Resistance Loading RL (Ω)	2.2K	2.2K	2.2K
Max Current (mA)	0.5	0.5	0.5
Frequency Range (Hz)	50 - 16000	50 - 16000	50 - 16000
Max. Operation Voltage (V)	10	10	10
Sensitivity Reduction within 1.5 V (dB)	-3	-3	-3
S/N Ratio (dB)	> 60	> 60	> 60

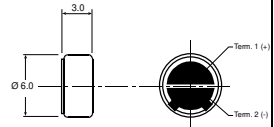
### DIMENSION

Top View



Side View

Bottom View



all dimensions are in mm