

date 08/05/2022

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MODEL: CMC-4012-40P | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

FEATURES

- omnidirectional
- low profile
- pin mount





SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
directivity	omnidirectional				
sensitivity (S)	f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa	-43	-40	-37	dB
standard operating voltage (Vs)			2		Vdc
max operating voltage				10	Vdc
output impedance (Zout)	f = 1 kHz, 1 Pa		2.2		kΩ
sensitivity reduction (ΔS-Vs)	f = 1 kHz, 1 Pa, Vs = 2.0 ~ 1.5 Vdc		-3		dB
frequency (f)		100		20,000	Hz
current consumption (IDSS)	Vs = 2.0 Vdc, RL = 2.2 kΩ			0.5	mA
signal to noise ratio (S/N)	f = 1 kHz, 1 Pa, A-weighted		58		dBA
dimensions	Ø4.0 x 1.2				mm
material	nickel silver				
terminal	pin type				
weight				0.15	g
operating temperature		-20		70	°C
storage temperature		-20		70	°C
RoHS	yes				

Notes:

 $2. All \ specifications \ measured \ at \ 5~35^{\circ}C, \ humidity \ at \ 45~85\%, \ under \ 86~106 \ kPa \ pressure, \ unless \ otherwise \ noted.$

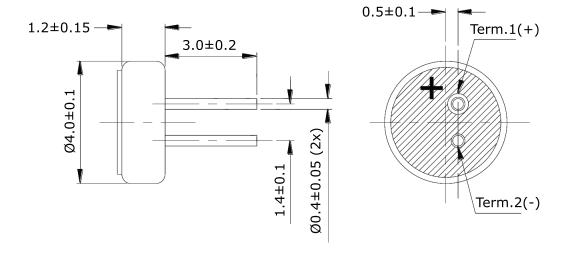
SOLDERABILITY

parameter	conditions/description	min	typ	max	units
hand soldering	for 2 ± 0.5 seconds	270	280	290	°C

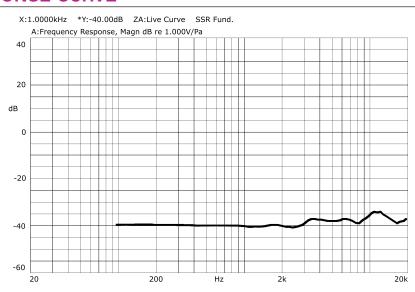
^{1.} We use the "Pascal [Pa]" indication of sensitivity as per the recomendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1V/Pa)

MECHANICAL DRAWING

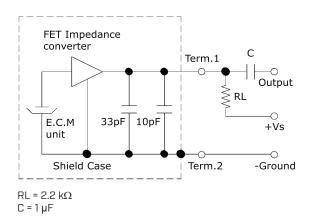
units: mm



FREQUENCY RESPONSE CURVE



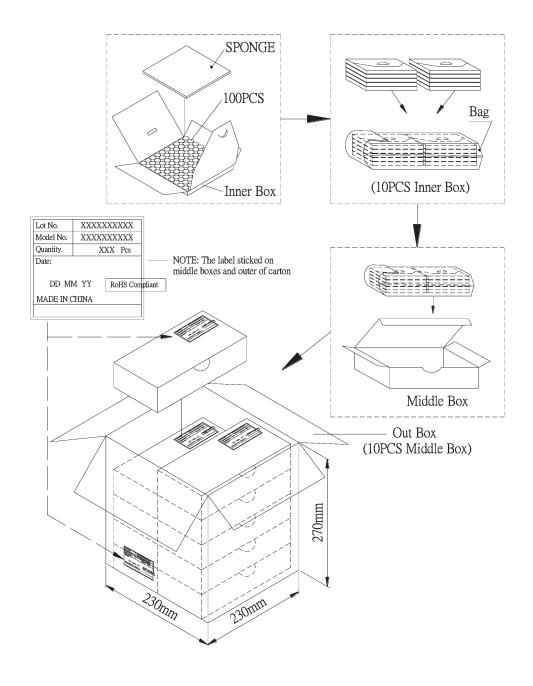
MEASUREMENT CIRCUIT



PACKAGING

units: mm

Inner Box Size: $100 \times 100 \times 8$ mm Middle Box Size: $205 \times 106 \times 52$ mm Outer Box Size: $230 \times 230 \times 270$ mm Inner Box QTY: 100 pcs per box Middle Box QTY: 1,000 per box Outer Box QTY: 10,000 per box



Additional Resources: Product Page | 3D Model | PCB Footprint

CUI DEVICES | MODEL: CMC-4012-40P | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

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REVISION HISTORY

rev.	description	date
1.0	initial release	11/04/2016
1.01	brand update	01/09/2020
1.02	logo, datasheet style update	08/05/2022

The revision history provided is for informational purposes only and is believed to be accurate.



CUI Devices offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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