

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

date 09/11/2024

page 1 of 4

# 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:

# **SOLDERABILITY**

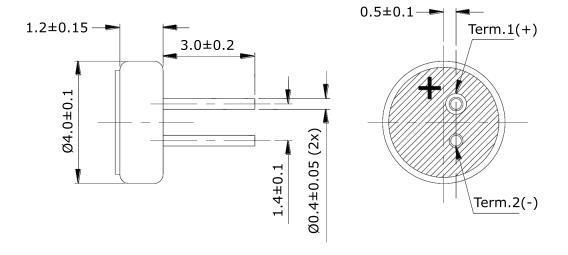
parameter	conditions/description	min	typ	max	units
hand soldering	for 2 ± 0.5 seconds	270	280	290	°C

<sup>1.</sup> 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]

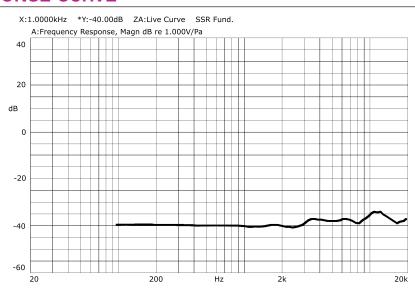
 $<sup>2.</sup> All \ specifications \ measured \ at \ 5~35°C, \ humidity \ at \ 45~85\%, \ under \ 86~106 \ kPa \ pressure, \ unless \ otherwise \ noted.$ 

## **MECHANICAL DRAWING**

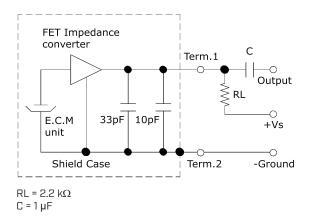
units: mm



# FREQUENCY RESPONSE CURVE



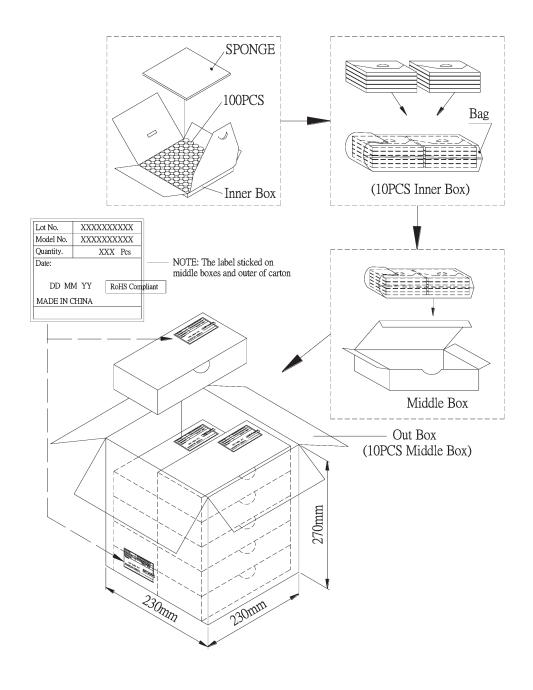
## **MEASUREMENT CIRCUIT**



## **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

#### **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	
1.03	CUI Devices rebranded to Same Sky	09/11/2024	

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



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

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.