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# MODEL: CMC-6050-40T | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

#### **FEATURES**

- ominidirectional
- 6.0 mm diameter
- terminal 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 ( $\Delta S$ -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 k $\Omega$			0.5	mA
signal to noise ratio (S/N)	f = 1 kHz, 1 Pa, A-weighted		60		dBA
dimensions	Ø6.0 x 5.0				mm
material	copper (gold plating)				
terminal	solder pads				
weight				0.37	g
operating temperature		-20		70	°C
storage temperature		-20		70	°C
RoHS	yes				

Notes:

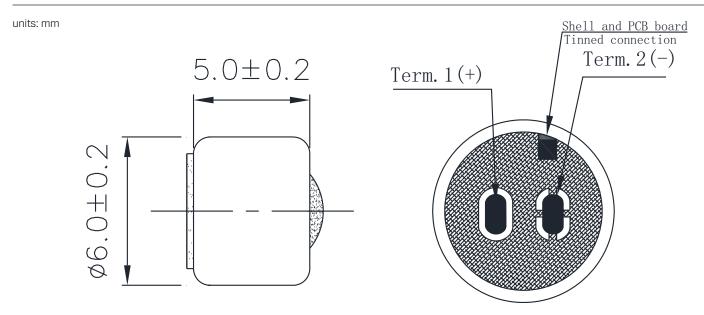
 $2. All \ specifications \ measured \ at \ 5~35^{\circ}C, \ humidity \ at \ 45~85\%, \ under \ 86~106 \ kPa \ pressure, \ unless \ otherwise \ noted.$ 

#### **SOLDERABILITY**

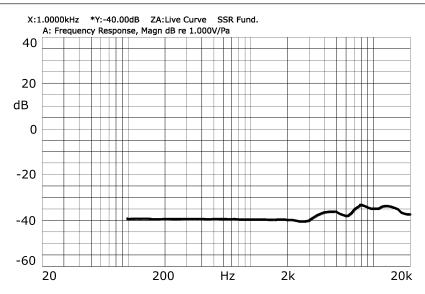
parameter	conditions/description	min	typ	max	units
hand soldering	for 2 ± 0.5 seconds	310	320	330	°C

<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)

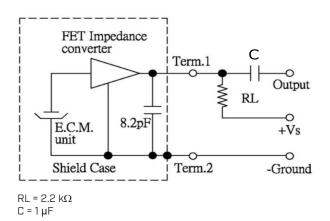
## **MECHANICAL DRAWING**



## FREQUENCY RESPONSE CURVE



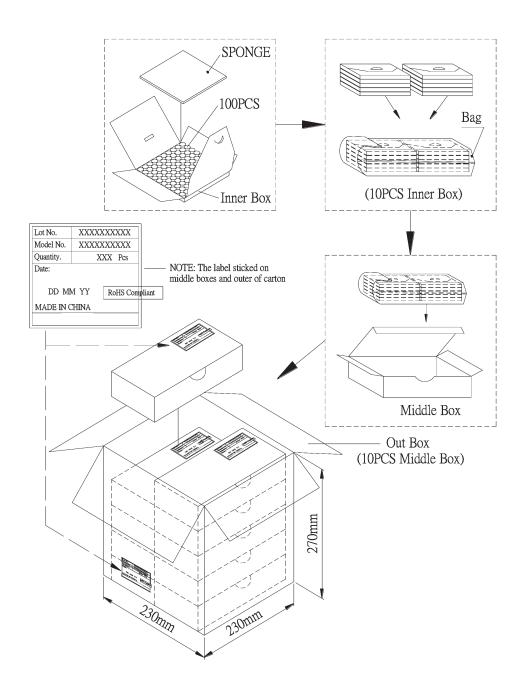
# **MEASUREMENT CIRCUIT**



## **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 pcs per box Outer Box QTY: 10,000 pcs per box



#### **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	changed PCB	05/01/2024	

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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