# **CUI** DEVICES

**date** 01/09/2020

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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	5)		2		Vdc
max operating voltage				10	Vdc
output impedance (Zout)	f = 1 kHz, 1 Pa		2.2		kΩ
sensitivity reduction (ΔS-Vs)	$f = 1 \text{ kHz}, 1 \text{ Pa, Vs} = 2.0 \sim 1.5 \text{ Vdc}$		-3		dB
frequency (f)		100		20,000	Hz
current consumption (IDSS)	$Vs = 2.0 \text{ Vdc}, \text{ RL} = 2.2 \text{ k}\Omega$			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				
terminal	solder pads				
weight				0.37	g
operating temperature		-20		70	°C
storage temperature		-20		70	°C
RoHS	ves				

Notes:

### **SOLDERABILITY**

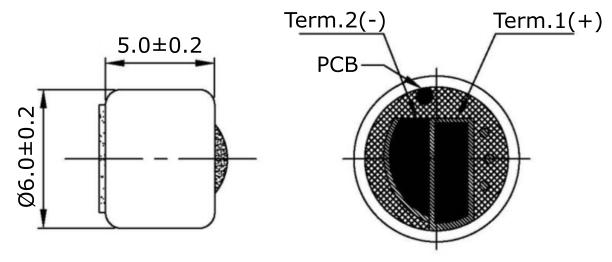
parameter	conditions/description	min	typ	max	units
hand soldering	for $2 \pm 0.5$ seconds	270	280	290	°C

<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

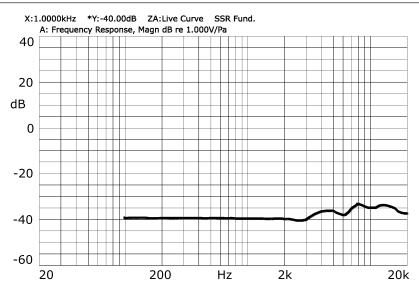
<sup>20</sup> dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa) 2. All specifications measured at  $5\sim35^{\circ}$ C, humidity at  $45\sim85^{\circ}$ , under  $86\sim106$  kPa pressure, unless otherwise noted.

# **MECHANICAL DRAWING**

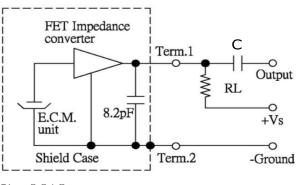




# **FREQUENCY RESPONSE CURVE**



# **MEASUREMENT CIRCUIT**

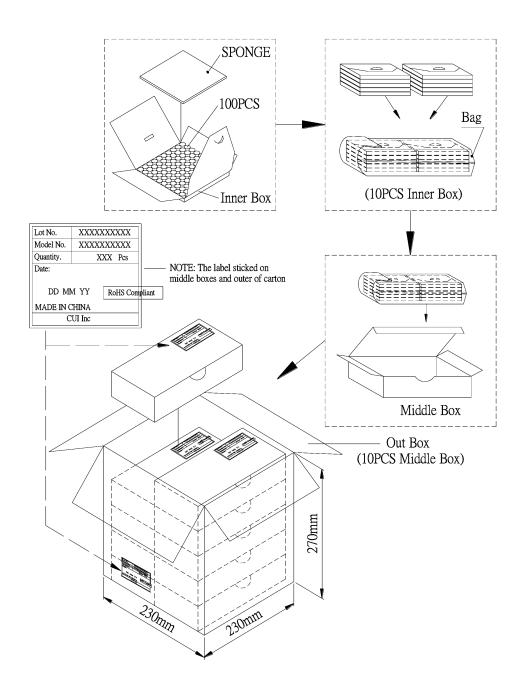


 $RL = 2.2 k\Omega$  $C = 1 \mu F$ 

#### **PACKAGING**

units: mm

Inner Box Size: 100 x 100 x 8 mm Middle Box Size: 205 x 106 x 52 mm Outer Box Size: 230 x 230 x 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



Additional Resources: Product Page | 3D Model

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### **REVISION HISTORY**

rev.	description	date
1.0	initial release	11/04/2016
1.01	brand update	01/09/2020

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

# **CUI** DEVICES

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

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CMC-6050-40T