

**MODEL:** CMC-6027-24T | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

**FEATURES**

- omnidirectional
- high signal to noise ratio
- -24 dB sensitivity rating


**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
directivity	omnidirectional				
sensitivity [S]	f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa	-27	-24	-21	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		70		dBa
total harmonic distortion [THD]	at 94 dB SPL			1	%
acoustic overload point [AOP]				115	dB SPL
dimensions	Ø6.0 x 2.7				mm
material	Al				
terminal	solder pads				
weight				0.2	g
operating temperature		-20		70	°C
storage temperature		-20		70	°C
RoHS	yes				

Notes: 1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation 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 [1 V/Pa]

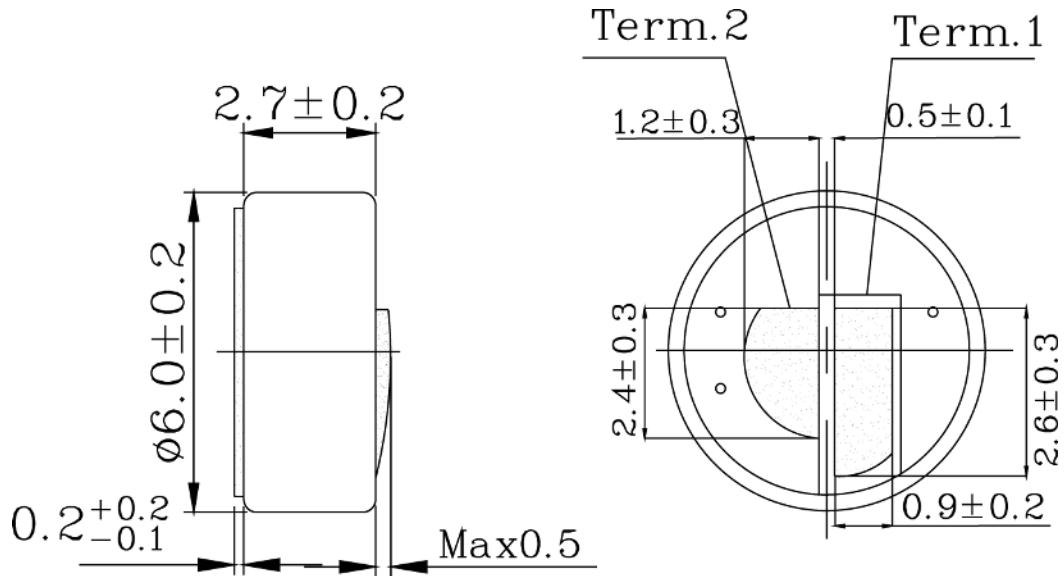
2. All specifications measured at 5-35°C, humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

**SOLDERABILITY**

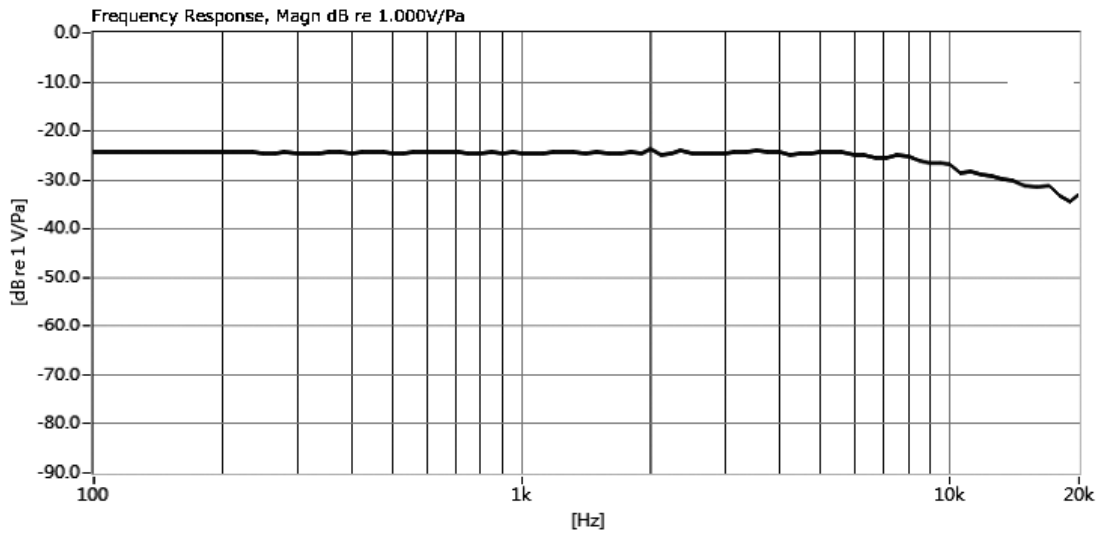
parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 2 seconds	310	320	330	°C

## MECHANICAL DRAWING

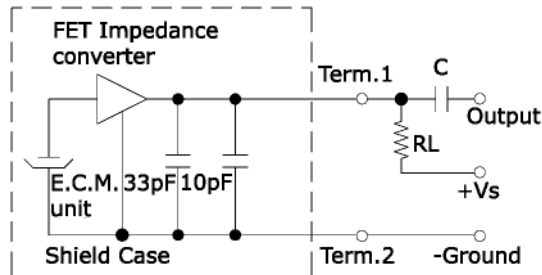
units: mm



## FREQUENCY RESPONSE CURVE



## MEASUREMENT CIRCUIT

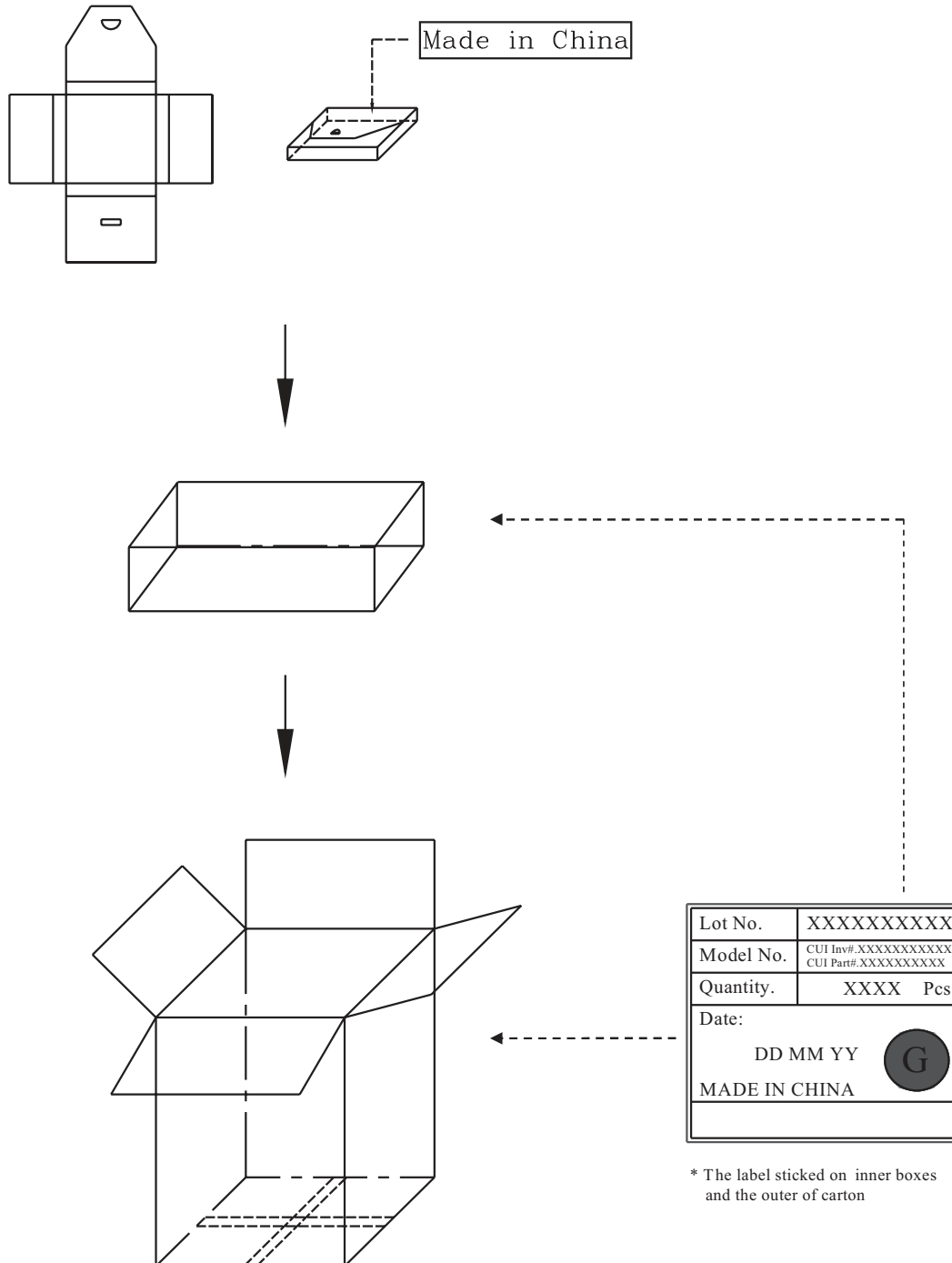


$RL = 2.2 \text{ k}\Omega$   
 $C = 1 \text{ }\mu\text{F}$

## PACKAGING

units: mm

Inner Box Size: 62 x 62 x 3 mm  
 Middle Box Size: 125 x 65 x 28 mm  
 Outer Box Size: 210 x 210 x 280 mm  
 Inner Box QTY: 100 pcs per box  
 Middle Box QTY: 1,000 pcs per box  
 Outer Box QTY: 24,000 pcs per box



\* The label stucked on inner boxes and the outer of carton

## REVISION HISTORY

rev.	description	date
1.0	initial release	11/07/2016
1.01	updated packaging	06/19/2017
1.02	added dimensions to mechanical drawing	12/11/2018
1.03	brand update	01/09/2020
1.04	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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