

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 [I0SS]	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 [1V/Pa]

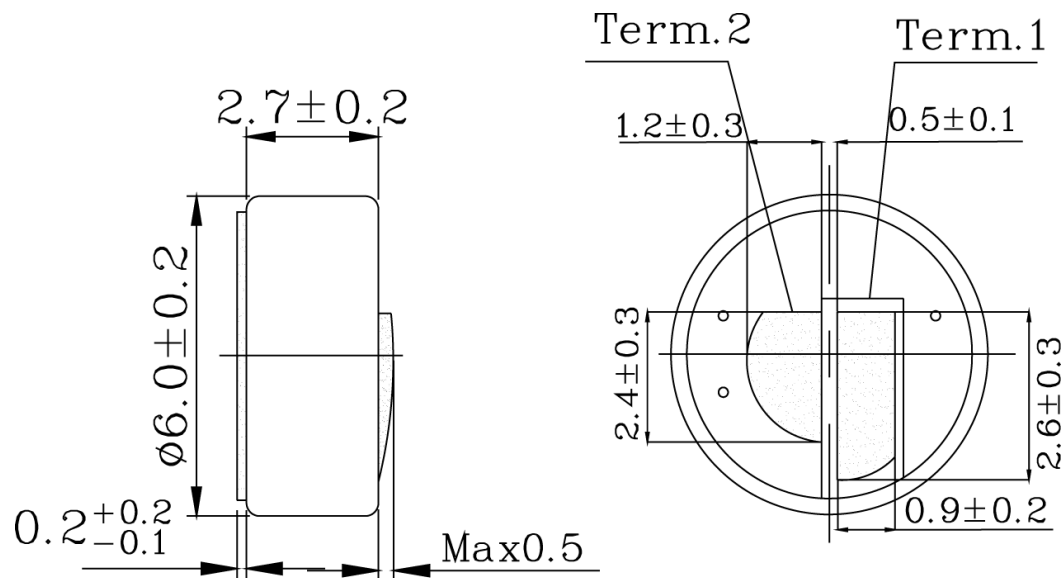
2. All specifications measured at 5-35°C, humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

SOLDERABILITY

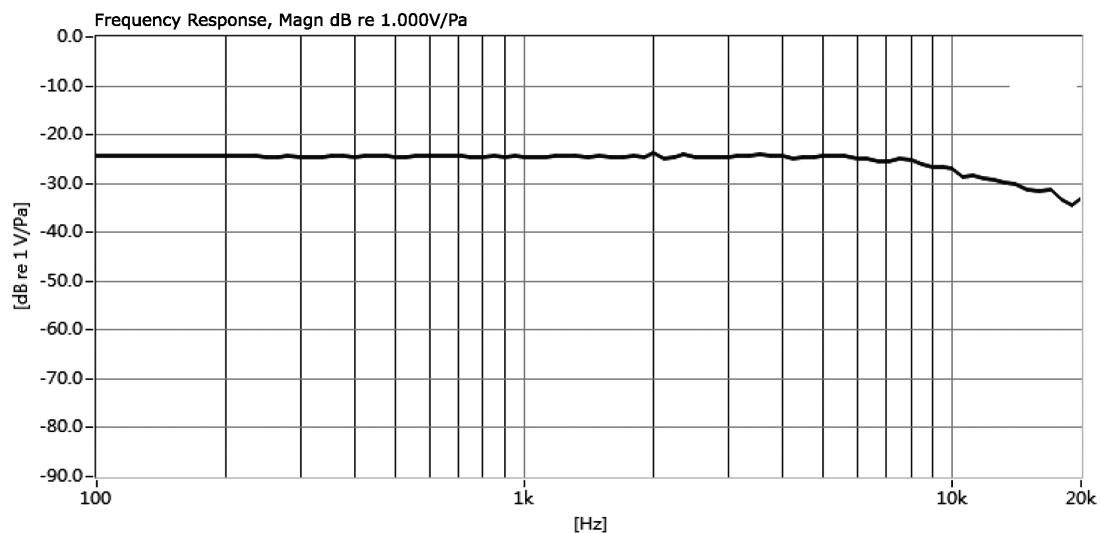
parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 2 seconds	310	320	330	°C

MECHANICAL DRAWING

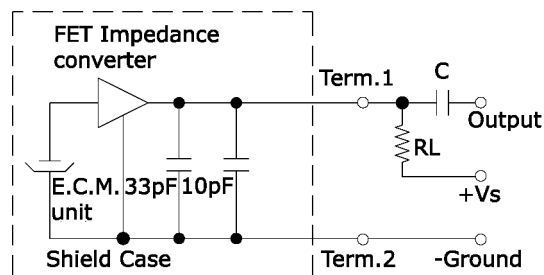
units: mm



FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT

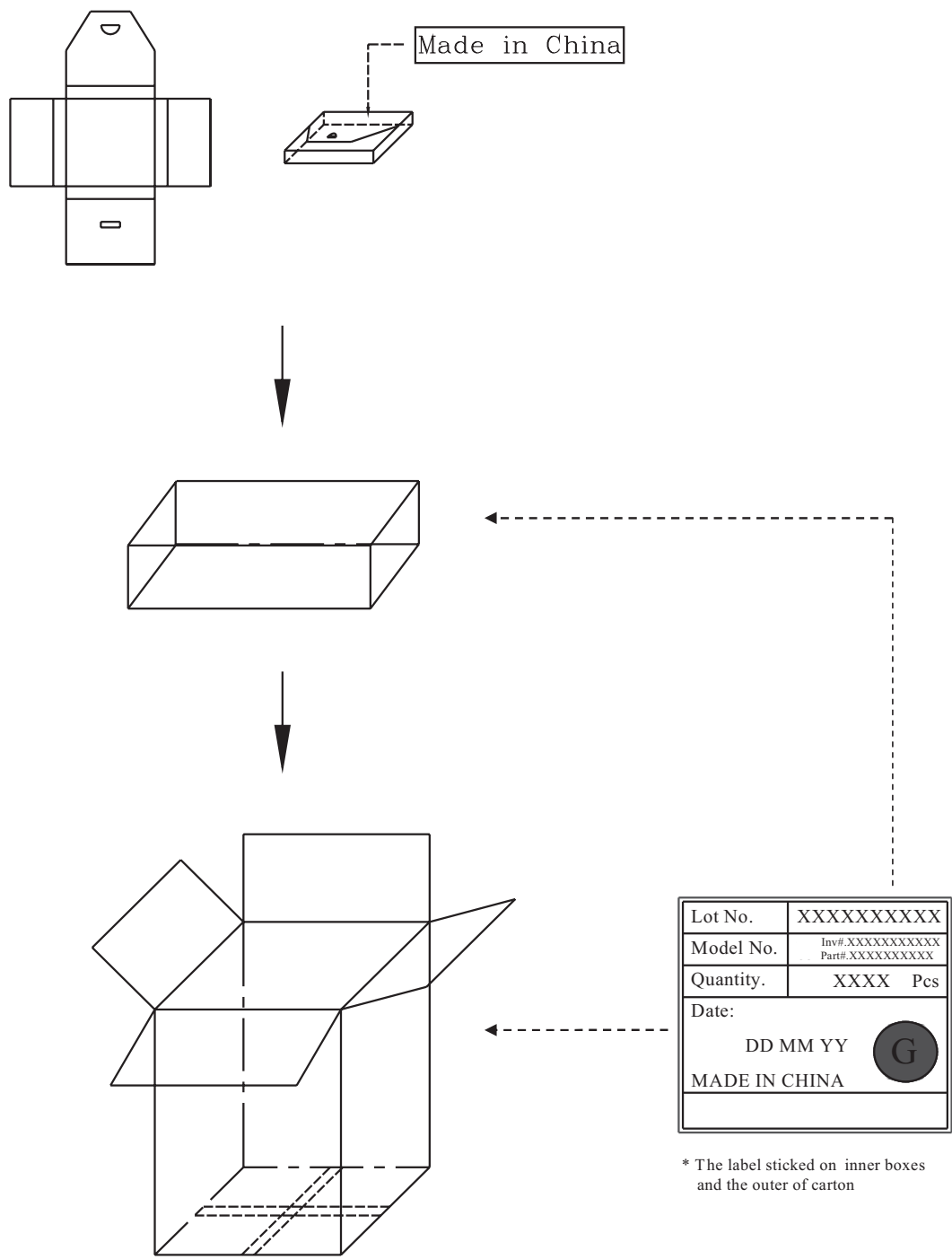


$R_L = 2.2 \text{ k}\Omega$
 $C = 1 \text{ }\mu\text{F}$

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



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
1.05	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.

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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.

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