CUI DEVICES

date 01/09/2020

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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				

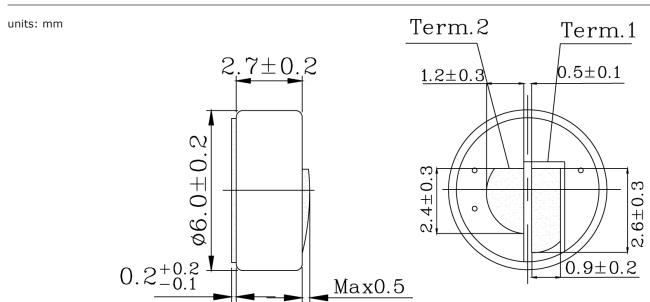
Notes:

1. We use the "Pascal (Pa)" indication of sensitivity as per the 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) 2. All specifications measured at 5~35°C, humidity at 45~85%, under 86~106 kPa pressure, unless otherwise noted.

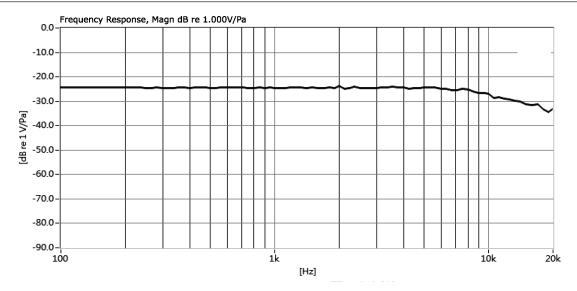
SOLDERABILITY

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

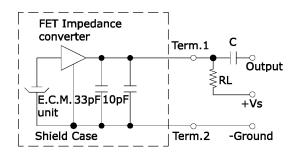
MECHANICAL DRAWING



FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT

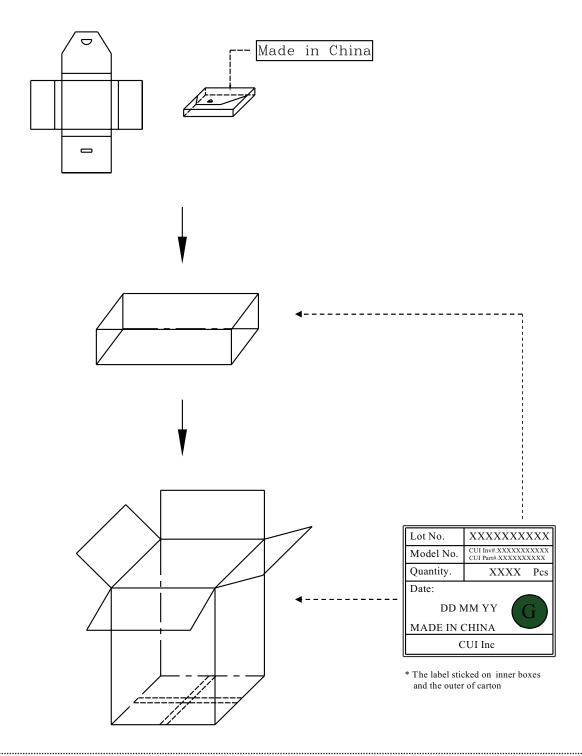


 $RL = 2.2 \ k\Omega$ $C = 1 \ \mu F$

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



Additional Resources: Product Page | 3D Model

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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	

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.

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

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