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				

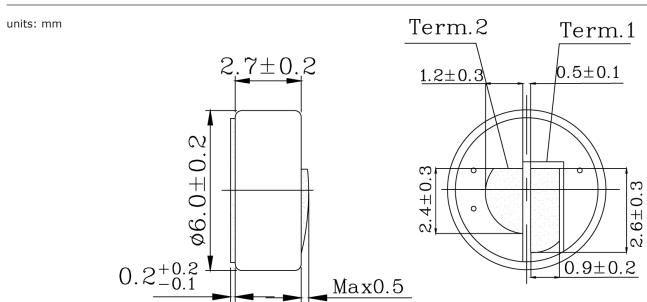
Notes:

SOLDERABILITY

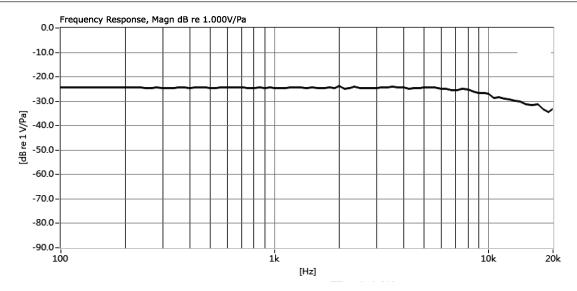
parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 2 seconds	310	320	330	°C

^{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.

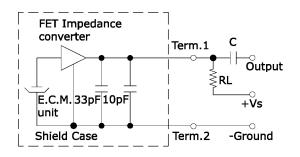
MECHANICAL DRAWING



FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT

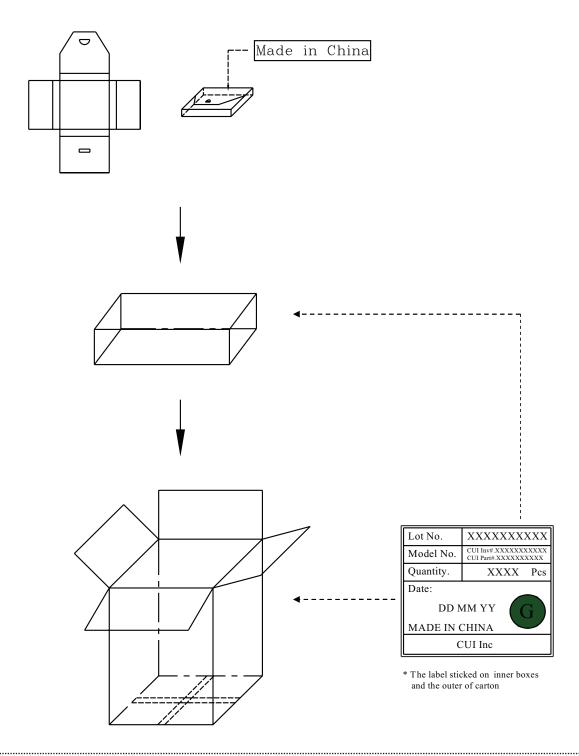


 $RL = 2.2 \ k\Omega$ $C = 1 \ \mu F$

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.

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