CUI DEVICES

date 12/07/2021

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MODEL: CMC-9745-37T3 | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

FEATURES

- unidirectional
- high signal to noise ratio
- terminal mount





SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
directivity	unidirectional		-7.6		
sensitivity (S)	f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa	-40	-37	-34	dB
standard operating voltage (Vs			1.5		Vdc
max operating voltage				9	Vdc
output impedance (Zout)	f = 1 kHz, 1 Pa	1.4	2.0	2.6	kΩ
sensitivity reduction (ΔS-Vs)	f = 1 kHz, 1 Pa, Vs = 1.5 ~ 1.0 Vdc		-3		dB
frequency (f)		100		12,000	Hz
current consumption (IDSS)	Vs = 1.5 Vdc, RL = 2.0 kΩ			0.4	mA
signal to noise ratio (S/N)	f = 1 kHz, 1 Pa, A-weighted		72		dBA
dimensions	Ø9.7 x 4.5				mm
material	Al				
terminal	solder pads				
weight				0.8	g
operating temperature		-20		70	°C
storage temperature		-20		70	°C
RoHS	yes	·		·	

Notes:

SOLDERABILITY

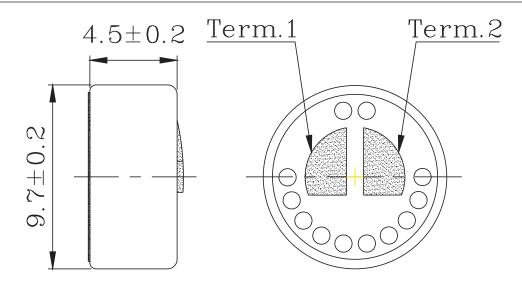
parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 2 seconds	310	320	330	°C

^{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

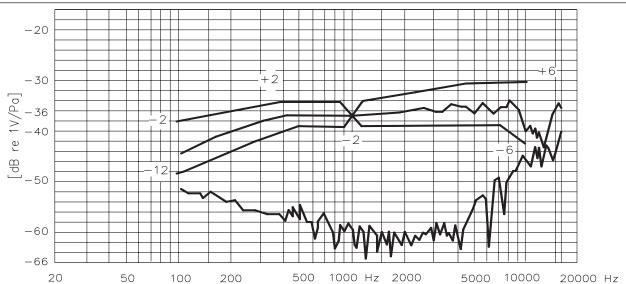
²⁰ dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa) 2. All specifications measured at $5\sim35^{\circ}$ C, humidity at $45\sim85^{\circ}$, under $86\sim106$ kPa pressure, unless otherwise noted.

MECHANICAL DRAWING

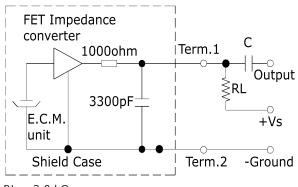
units: mm tolerance: ±0.2 mm



FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT

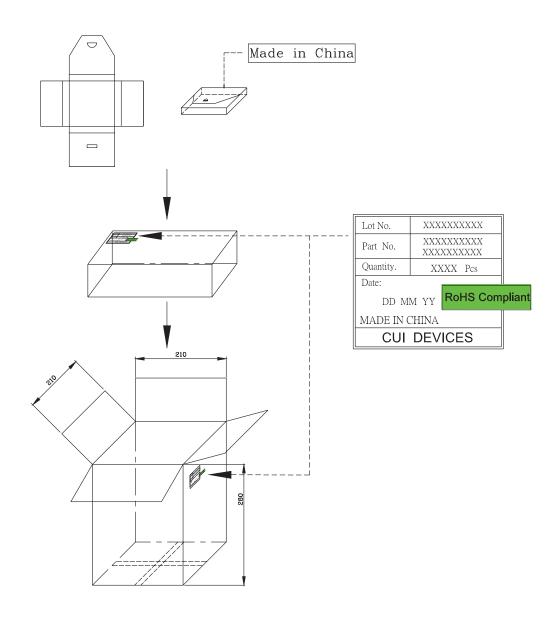


 $RL = 2.0 \text{ k}\Omega$ $C = 1 \mu F$

PACKAGING

units: mm

Inner Box Size: 100 x 100 x 7 mm Middle Box Size: 205 x 105 x 50 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: 10,000 pcs per box



Additional Resources: Product Page | 3D Model

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REVISION HISTORY

rev.	description	date
1.0	initial release	11/07/2016
1.01	brand update	01/17/2020
1.02	updated drawing	12/07/2021

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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