

date 08/05/2022

page 1 of 4

MODEL: CMC-9745-37T2 | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

FEATURES

- unidirectional
- high signal to noise ratio
- terminal mount





SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
directivity	unidirectional				
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 k Ω			0.4	mA
signal to noise ratio (S/N)	f = 1 kHz, 1 Pa, A-weighted		69		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:

 $2. All \ specifications \ measured \ at \ 5~35^{\circ}C, \ humidity \ at \ 45~85\%, \ under \ 86~106 \ kPa \ pressure, \ unless \ otherwise \ noted.$

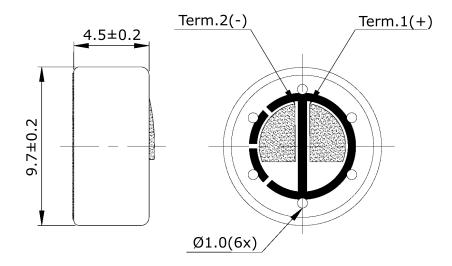
SOLDERABILITY

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

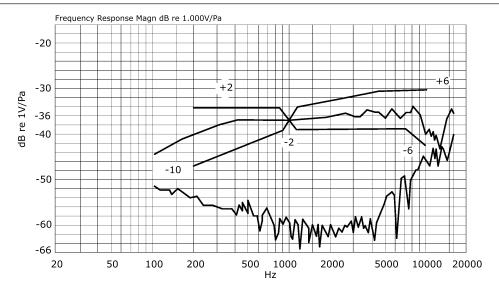
^{1.} We use the "Pascal [Pa]" indication of sensitivity as per the recomendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1V/Pa)

MECHANICAL DRAWING

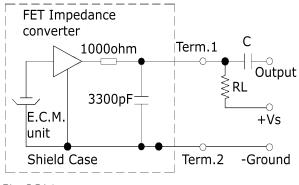
units: mm tolerance: ±0.2 mm



FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT

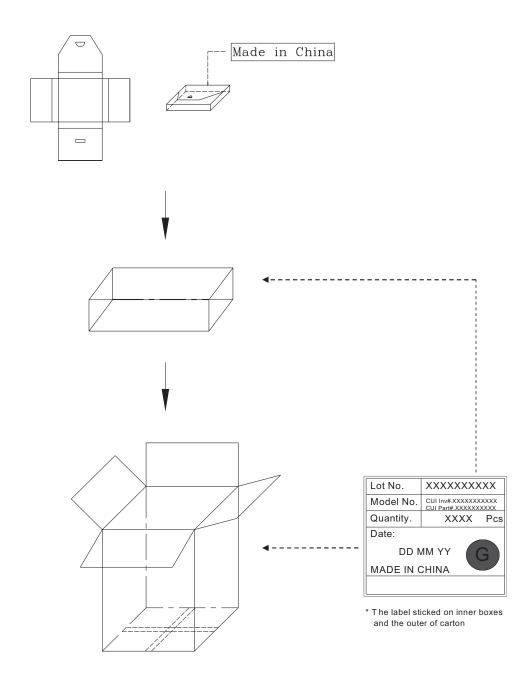


RL = 2.0 k Ω C = 1 μ F

PACKAGING

units: mm

Inner Box Size: $100 \times 100 \times 7$ mm Middle Box Size: $205 \times 105 \times 54$ mm Outer Box Size: $210 \times 210 \times 280$ 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

REVISION HISTORY

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

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.

CUI Devices 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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

CUI Devices:

CMC-9745-37T2