

date 11/28/2016

page 1 of 4

MODEL: CMC-9745-L100 | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

FEATURES

- unidirectional
- high signal to noise ratio
- 100 mm lead wires





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 kΩ			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	wire leads				
weight				1	g
operating temperature		-20		70	°C
storage temperature		-20		70	°C
RoHS	2011/65/EU				

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

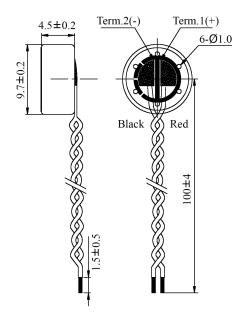
²⁰ dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa) 2. All specifications measured at $5\sim35^{\circ}$ C, humidity at $45\sim85^{\circ}$, under $86\sim106$ kPa pressure, unless otherwise noted.

MECHANICAL DRAWING

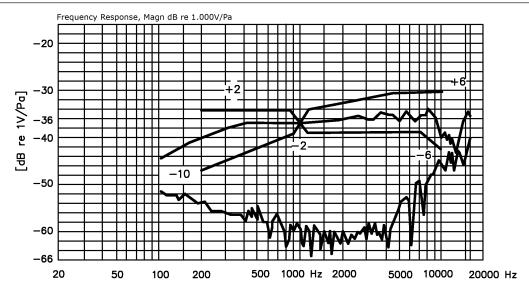
units: mm

tolerance: ±0.2 mm

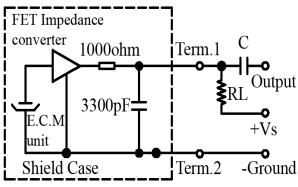
wire: UL1571 LF 30 AWG



FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT



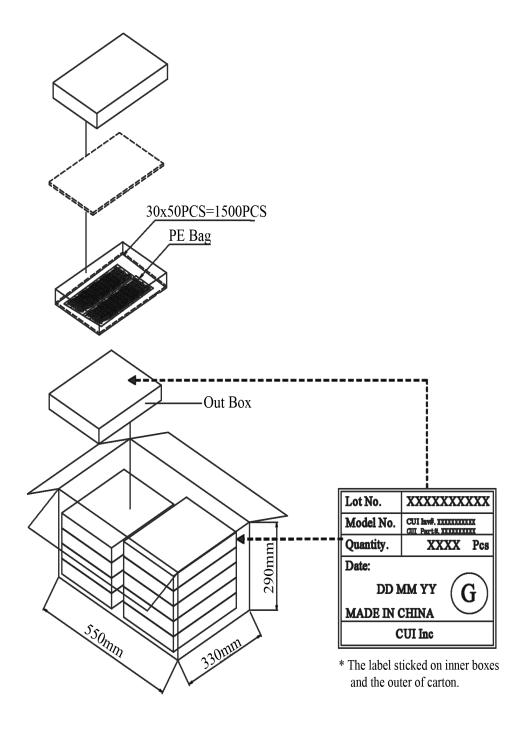
 $RL = 2.0 k\Omega$

 $C = 1 \mu F$

PACKAGING

units: mm

Outer Box Size: 310 x 248 x 49 mm Carton Box Size: 550 x 330 x 290 mm Outer Box QTY: 1,500 pcs per box Carton Box QTY: 15,000 pcs per box



REVISION HISTORY

rev.	description	date
1.0	initial release	11/28/2016

The revision history provided is for informational purposes only and is believed to be accurate.



Headquarters 20050 SW 112th Ave. Tualatin, OR 97062 **800.275.4899**

Fax 503.612.2383 cui.com techsupport@cui.com

CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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

CUI 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.