**CUI** DEVICES

**date** 01/17/2020

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 k $\Omega$			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	yes				

Notes:

#### **SOLDERABILITY**

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

<sup>1.</sup> 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

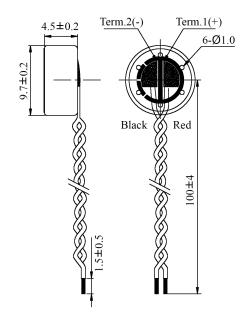
<sup>20</sup> dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa) 2. All specifications measured at  $5\sim35^{\circ}$ C, humidity at  $45\sim85^{\circ}$ , under  $86\sim106$  kPa pressure, unless otherwise noted.

#### **MECHANICAL DRAWING**

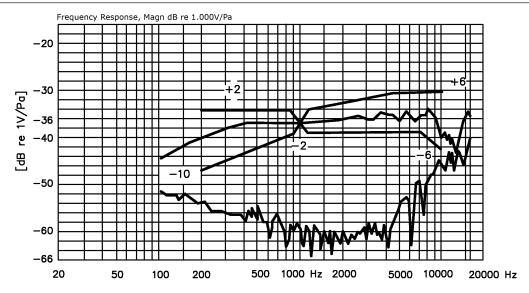
units: mm

tolerance: ±0.2 mm

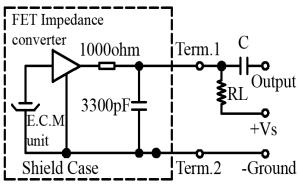
wire: UL1571 LF 30 AWG



### **FREQUENCY RESPONSE CURVE**



#### **MEASUREMENT CIRCUIT**



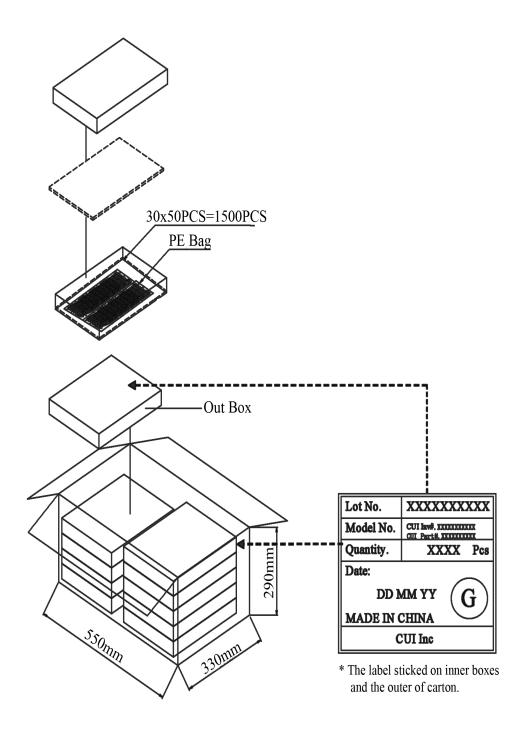
 $RL = 2.0 k\Omega$ 

 $C = 1 \mu F$ 

#### **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



Additional Resources: Product Page | 3D Model

CUI Devices | MODEL: CMC-9745-L100 | DESCRIPTION: ELECTRET CONDENSER MICROPHONE date 01/17/2020 | page 4 of 4

#### **REVISION HISTORY**

rev.	description	date
1.0	initial release	11/28/2016
1.01	brand update	01/17/2020

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.

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-L100