Additional Resources: Product Page | 3D Model | PCB Footprint

# **CUI** DEVICES

**date** 01/16/2020

page 1 of 5

MODEL: CMEJ-0415-42-P | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

#### **FEATURES**

- omnidirectional
- low profile
- through hole





#### **ELECTRICAL**

parameter	conditions/description	min	typ	max	units
directivity	omnidirectional				
sensitivity (S)	at 1 kHz (0 dB = 1 V/Pa)	-45	-42	-39	dB
supply voltage (VDD)		1.0	2.0	10	V
current consumption	$V_{DD} = 2.0 \text{ V, RL} = 2.2 \text{ k}\Omega$			0.5	mA
sensitivity reduction	V <sub>DD</sub> = 2.0 ∼ 1.5 V			3	dB
frequency (f)		100		10,000	Hz
signal to noise ratio (S/N)	at 1 kHz, Pin = 1 Pa (A-weighted)		60		dBA
total harmonic distortion (THD)	at 94 dB SPL, 1 kHz at 115 dB SPL, 1 kHz			1 3	% %
acoustic overload point (AOP)	at 1 kHz			115	dB SPL
output impedance (Zout)	at 1 kHz			2.2	kΩ

Notes: 1. All specifications measured at  $20\pm2^{\circ}$ C, humidity at  $60\sim70\%$ , unless otherwise noted.

### **ENVIRONMENTAL**

parameter	conditions/description	min	typ	max	units
operating temperature		-40		70	°C
storage temperature		-40		85	°C
operating humidity	non-condensing	30		85	%
storage humidity	non-condensing	30		75	%
hand soldering	for 1~3 seconds	340	350	360	°C
RoHS	yes				

## **MECHANICAL**

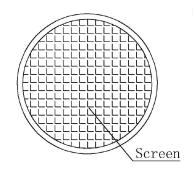
parameter	conditions/description	min	typ	max	units
dimensions	Ø4.0 x 1.5				mm
acoustic port	top				
terminals	pins				
weight			0.08		g

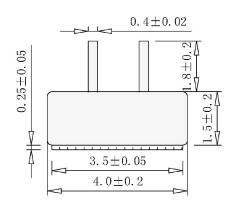
## **MECHANICAL DRAWING**

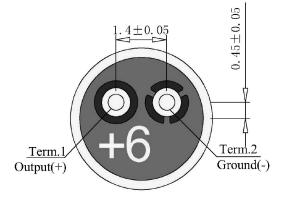
units: mm

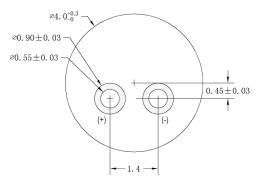
tolerance: ±0.2 mm

TERMINAL CONNECTIONS			
TERM.	FUNCTION		
1	Output (+)		
2	GND (-)		



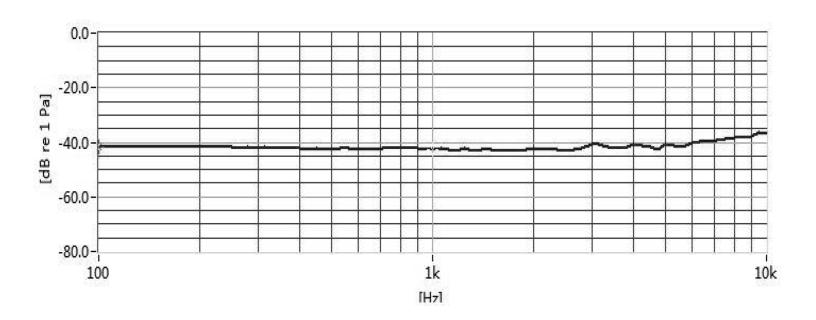




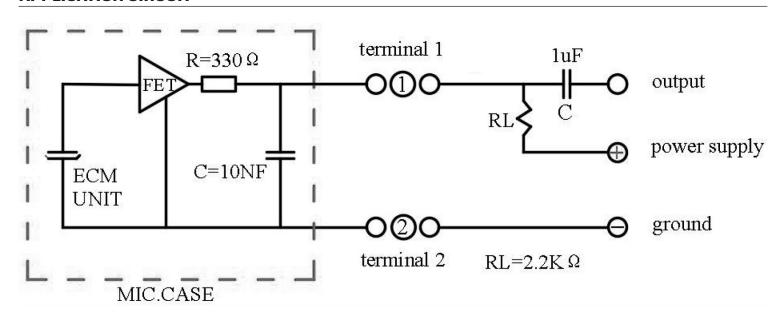


Recommended PCB Layout Top View

# **FREQUENCY RESPONSE CURVE**

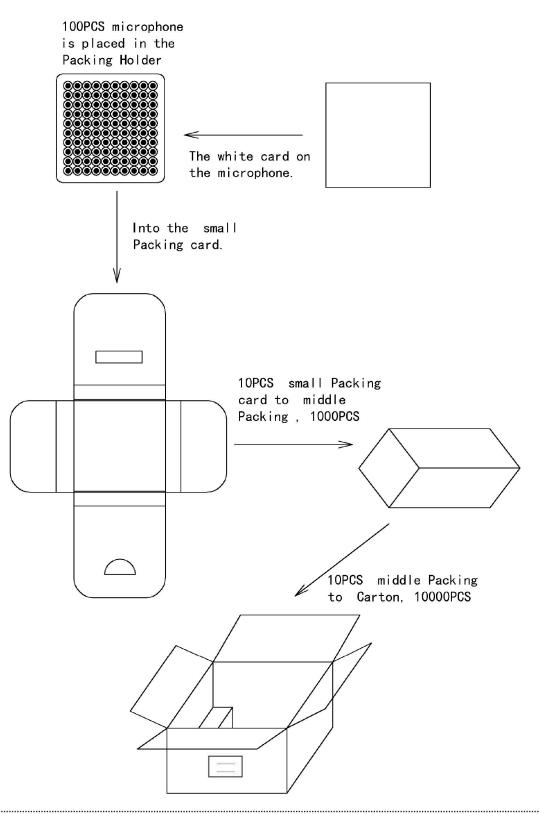


## **APPLICATION CIRCUIT**



### **PACKAGING**

Carton QTY: 10,000 pcs



Additional Resources: Product Page | 3D Model | PCB Footprint

CUI Devices | MODEL: CMEJ-0415-42-P | DESCRIPTION: ELECTRET CONDENSER MICROPHONE | date 01/16/2020 | page 5 of 5

### **REVISION HISTORY**

rev.	description	date
1.0	initial release	06/05/2019
1.01	brand update	01/16/2020

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.

## **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Microphones category:

Click to view products by CUI Devices manufacturer:

Other Similar products are found below:

BCM4013OLFC-42-JST-ZHR-2 TO38-30702-B20 SPM04C-38/1186-T/R BCM4013OSBC-42 LF TOW-1242P-R BCM9745-44 BCM9765
BCM9767P LD-MC-0905P LD-MC-6035 LD-MC-9765 PMOF-9745S-42UQ ROM-2235L-HD-R CMC-4015-130T CMC-6050-40T CMC-6035-130T CMC-6015-47P BCM9745P-44 BCM9767-42 254-ECM644-RO LD-MC-4011 LD-MC-6027 LD-MC-6035P LD-MC-6035W LD-MC-9765P LD-MC-9765W FG-23629-D65 PNR-23539-000 254-FP270-RO BCM9765P-44 CMC-5042PF-AC CMC-6010-42L100 CMC-9745-L100 CMC-3015-44T CMC-4015-25T CMC-6013-38T CMC-6022-37L100 CMC-6027-24T CMC-6027-32T GMI4522P-2C-30db GMI4522P-2C-52db GMI6027P-2C66DB GMA3526H10-B26 GMA4030H11-F26 GMI4015-32DB GMI4015-40DB GMI4015P-36DB GMI4015P-54DB