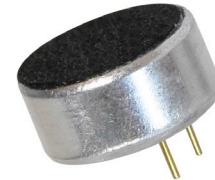


**MODEL:** CMEJ-9745-37-P | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE**FEATURES**

- omnidirectional
- 9.7 mm diameter
- through hole

**ELECTRICAL**

parameter	conditions/description	min	typ	max	units
directivity	omnidirectional				
sensitivity (S)	at 1 kHz (0 dB = 1 V/Pa)	-40	-37	-34	dB
supply voltage (V _{DD})		1.0	2.0	10	V
current consumption	V _{DD} = 2.0 V, R _L = 2.2 k Ω			0.5	mA
sensitivity reduction	V _{DD} = 2.0 ~ 1.5 V			3	dB
frequency (f)		100		10,000	Hz
signal to noise ratio (S/N)	at 1 kHz, P _{in} = 1 Pa (A-weighted)		60		dBA
total harmonic distortion (THD)	at 94 dB SPL, 1 kHz			1	%
	at 115 dB SPL, 1 kHz			3	%
acoustic overload point (AOP)	at 1 kHz			115	dB SPL
output impedance (Z _{out})	at 1 kHz			2.2	k Ω

Notes: 1. All specifications measured at 20 $\pm$ 2°C, humidity at 60~70%, 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				

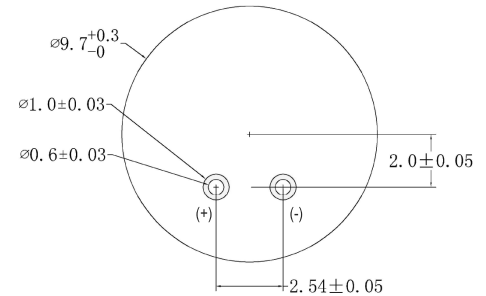
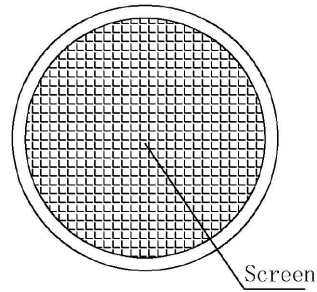
MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	Ø9.7 x 4.5				mm
acoustic port	top				
terminals	pins				
weight			0.73		g

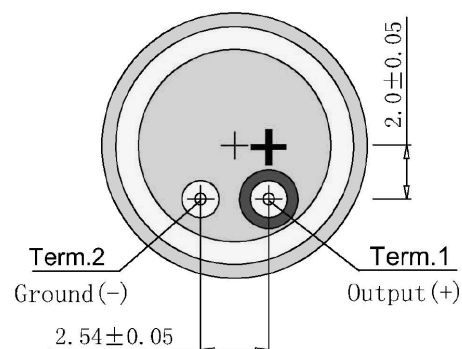
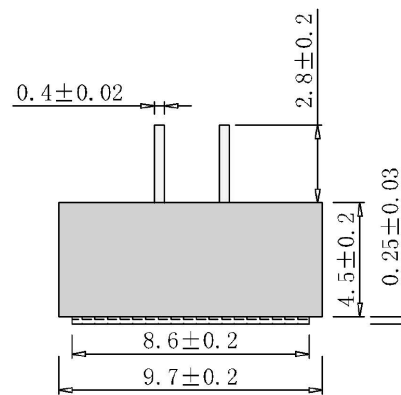
MECHANICAL DRAWING

units: mm
tolerance: ± 0.2 mm

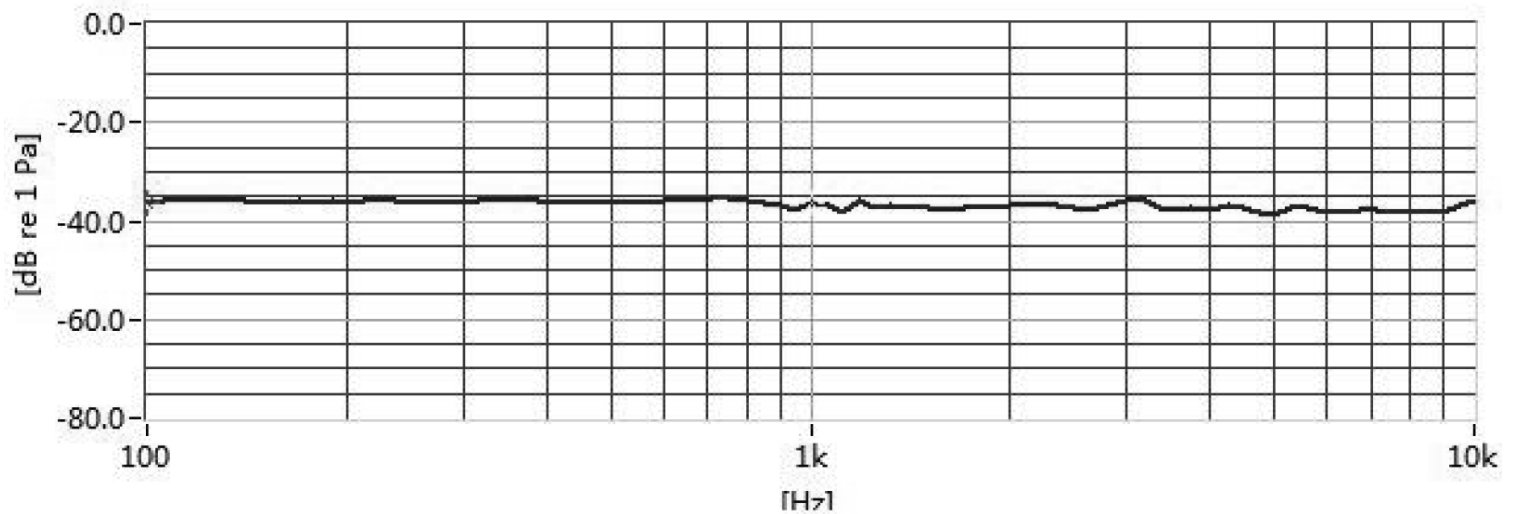
TERMINAL CONNECTIONS	
TERM.	FUNCTION
1	Output (+)
2	GND (-)



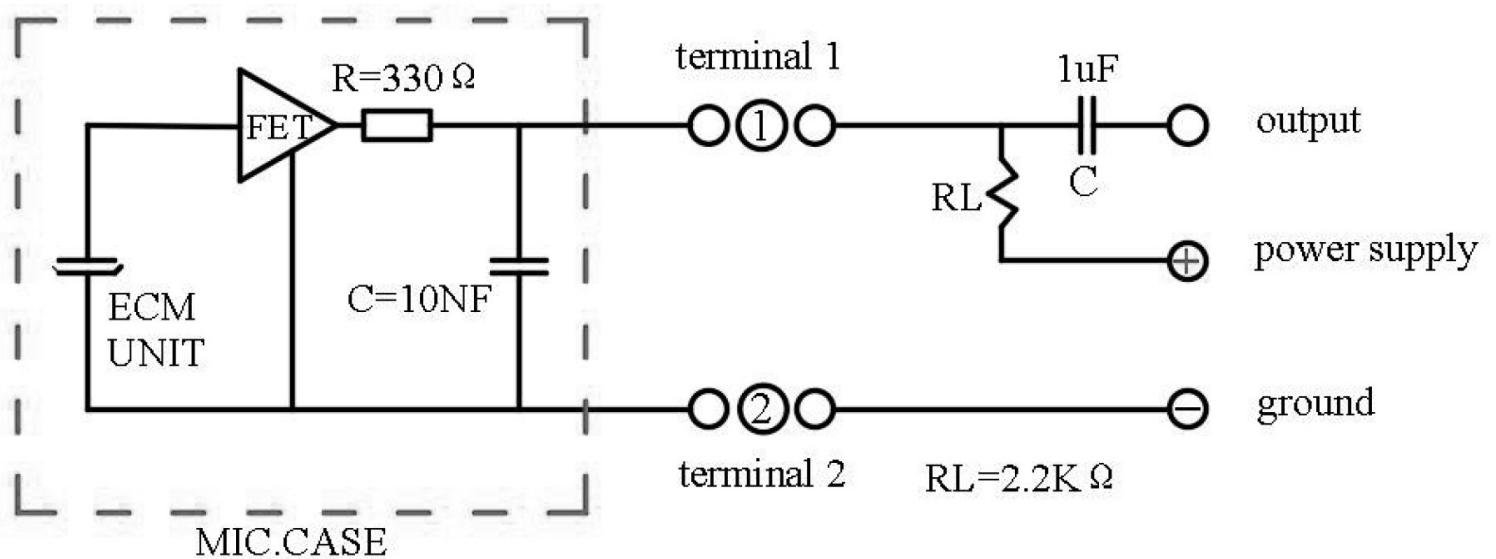
Recommended PCB Layout
Top View



FREQUENCY RESPONSE CURVE

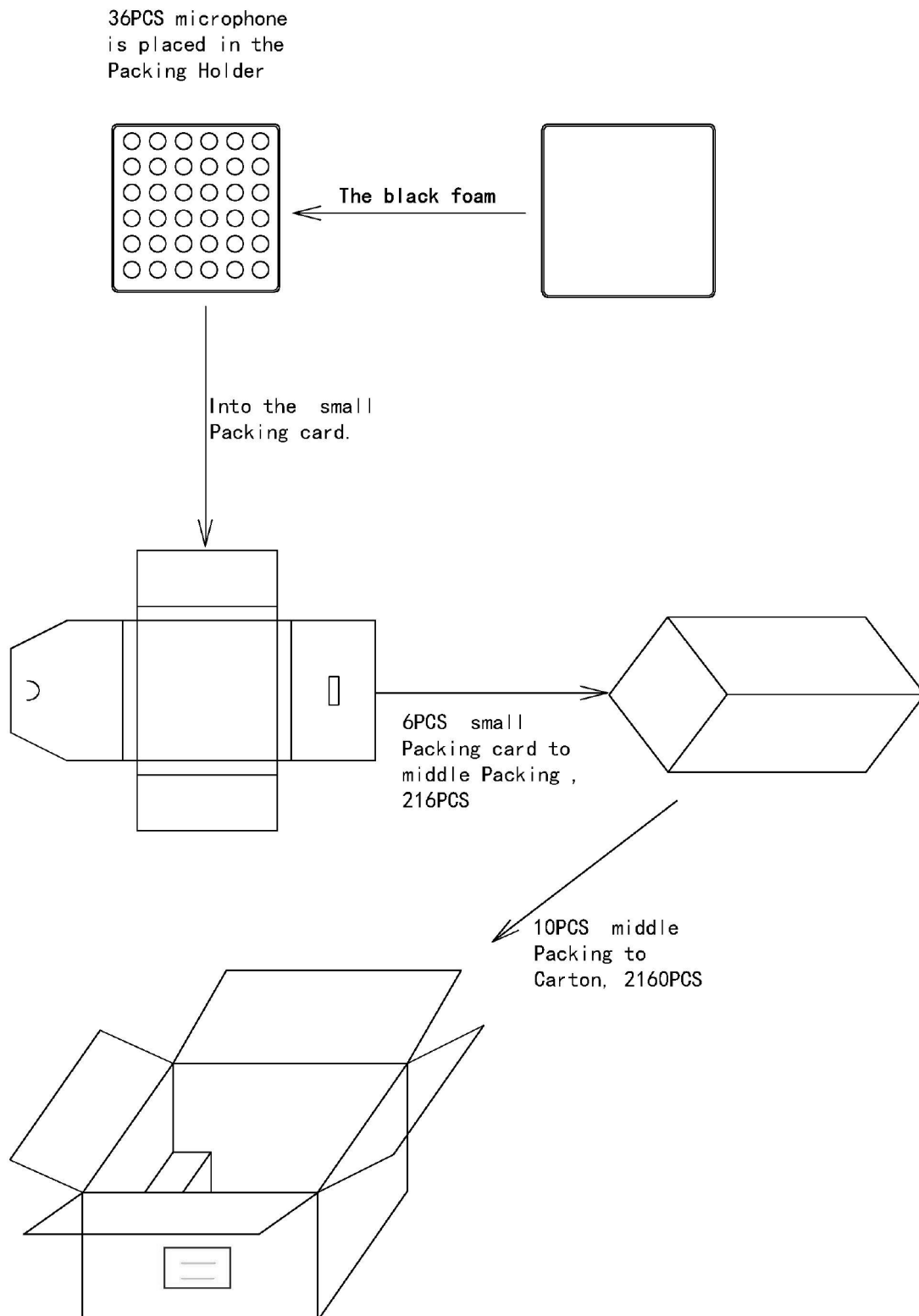


APPLICATION CIRCUIT



PACKAGING

Carton QTY: 2,160 pcs



REVISION HISTORY

rev.	description	date
1.0	initial release	06/05/2019

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

**CUI INC[®]**

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.

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