


**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 (V <sub>DD</sub> )		1.0	2.0	10	V
current consumption	V <sub>DD</sub> = 2.0 V, R <sub>L</sub> = 2.2 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, P <sub>in</sub> = 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 (Z <sub>out</sub> )	at 1 kHz			2.2	k $\Omega$

Notes: 1. All specifications measured at 20 $\pm$ 2 $^{\circ}$ C, humidity at 60~70%, unless otherwise noted.

**ENVIRONMENTAL**

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

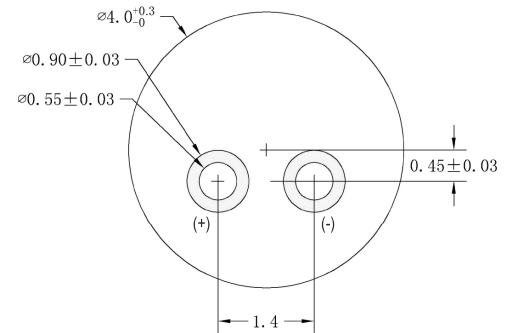
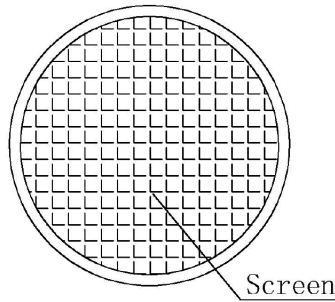
## MECHANICAL

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

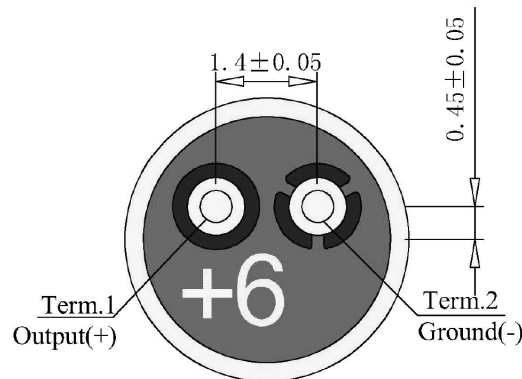
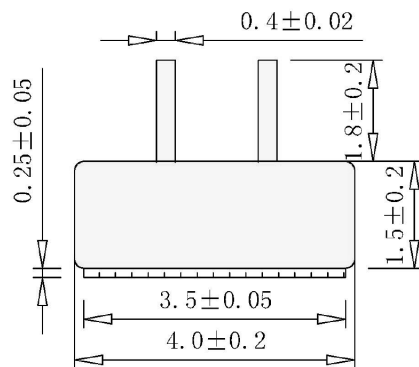
## MECHANICAL DRAWING

units: mm  
tolerance: ±0.2 mm

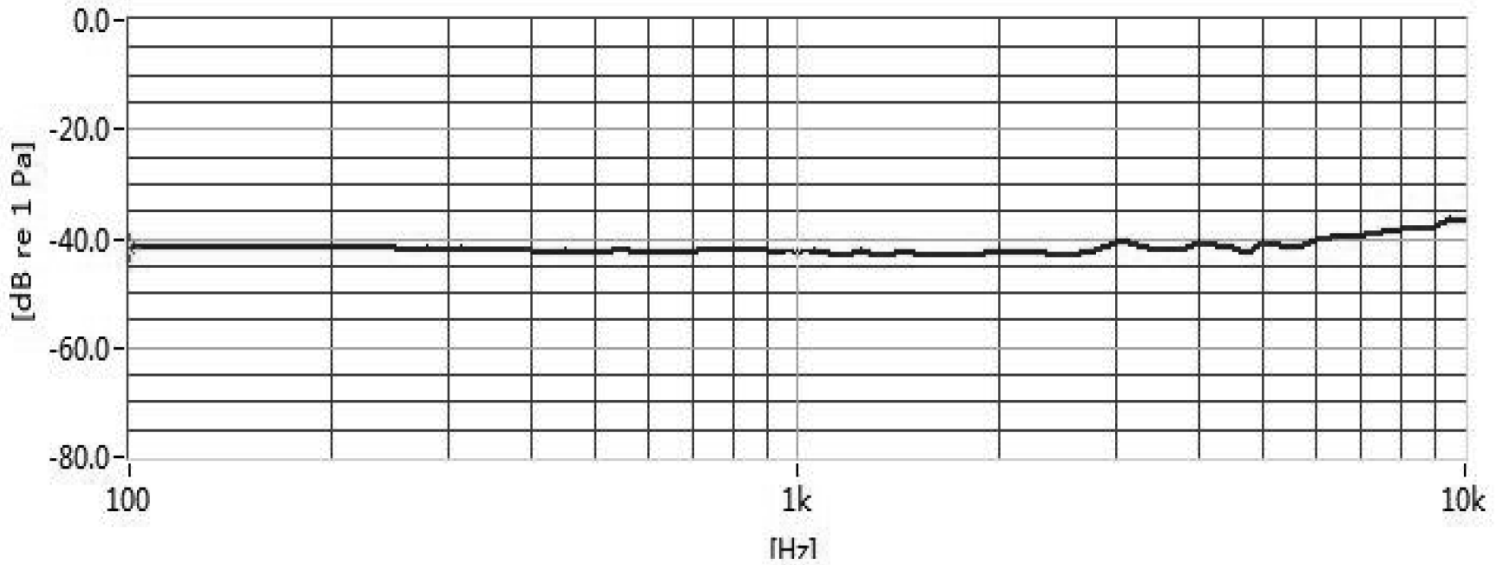
TERMINAL CONNECTIONS	
TERM.	FUNCTION
1	Output (+)
2	GND (-)



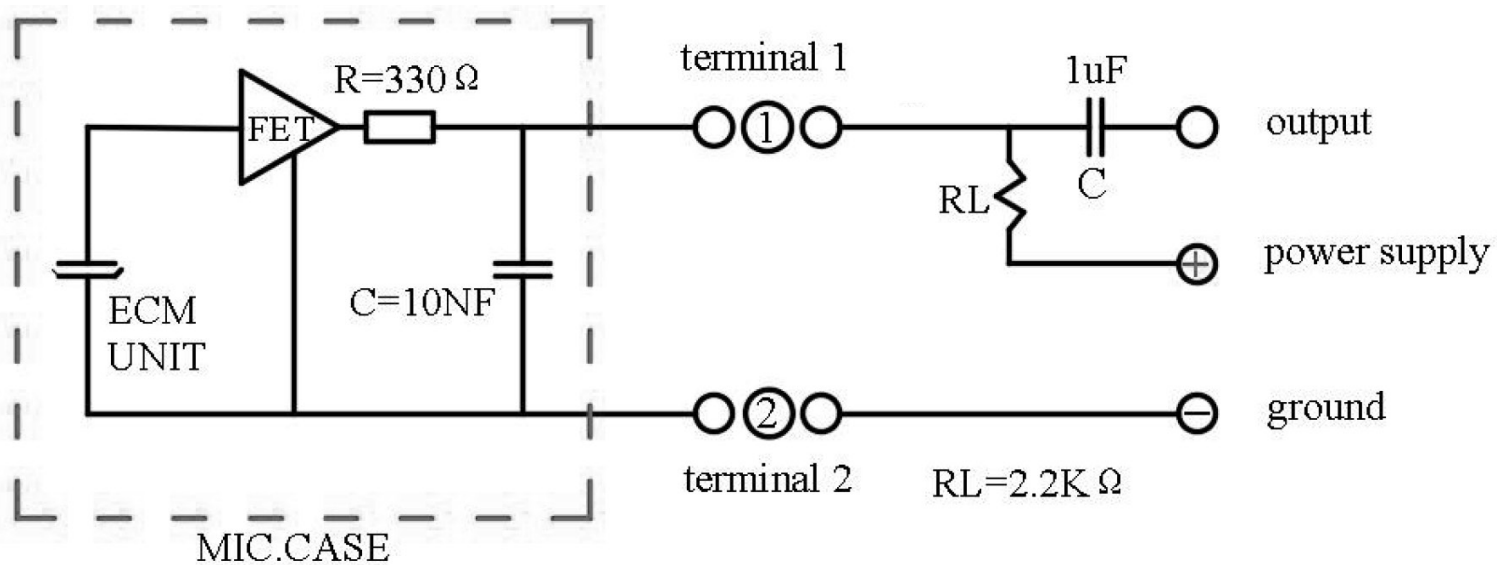
Recommended PCB Layout  
Top View



## FREQUENCY RESPONSE CURVE

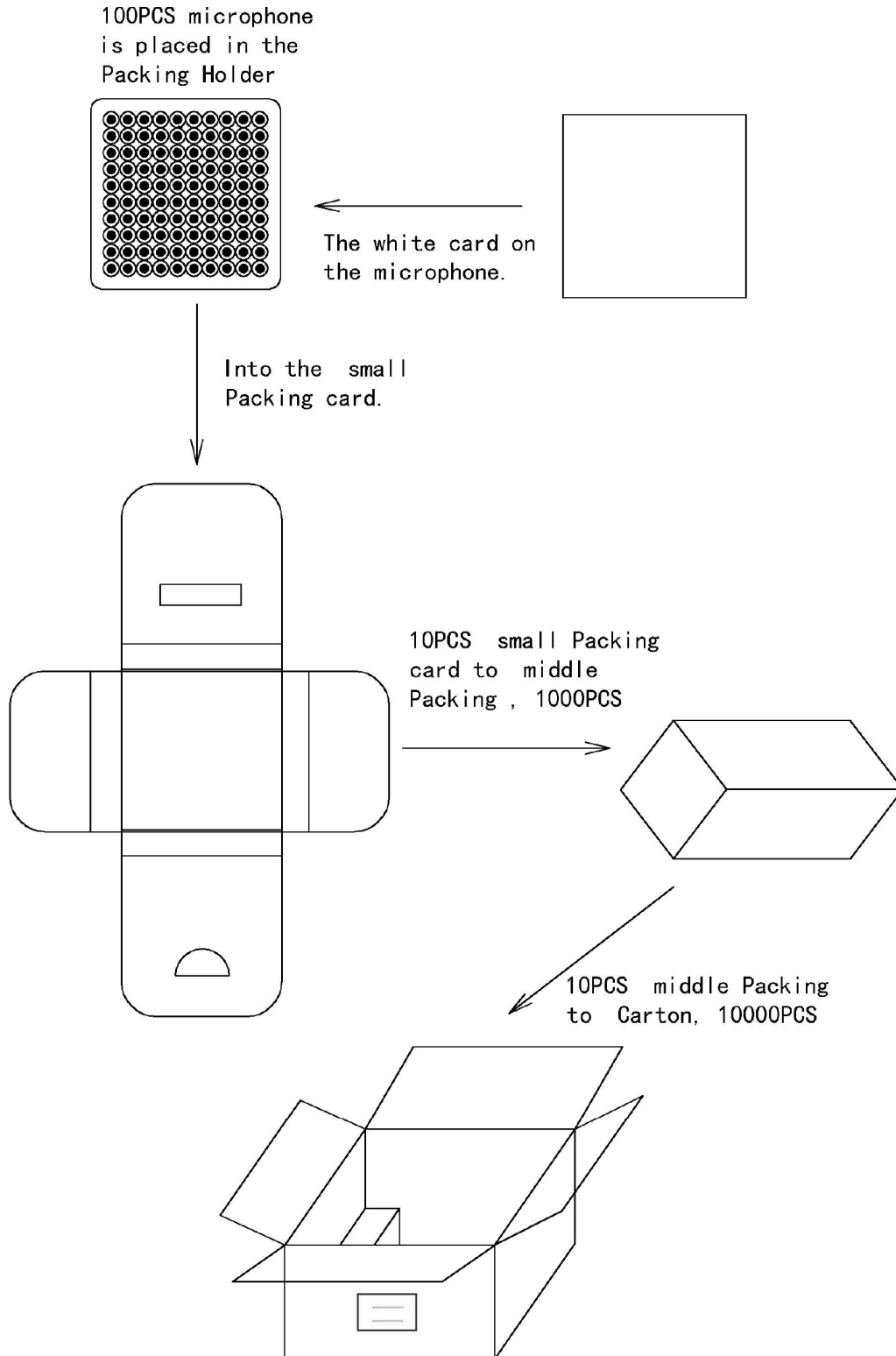


## APPLICATION CIRCUIT



## PACKAGING

Carton QTY: 10,000 pcs



## REVISION HISTORY

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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.



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

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