

**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		dB <sub>A</sub>
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°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				

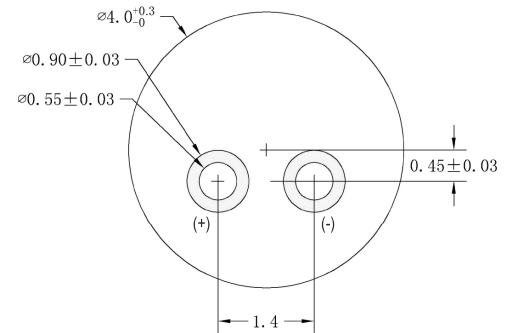
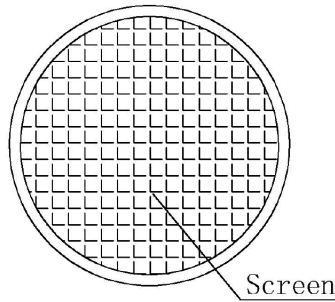
## MECHANICAL

parameter	conditions/description	min	typ	max	units
dimensions	∅4.0 x 1.5				mm
acoustic port	top				
terminals	pins				
weight			0.08		g

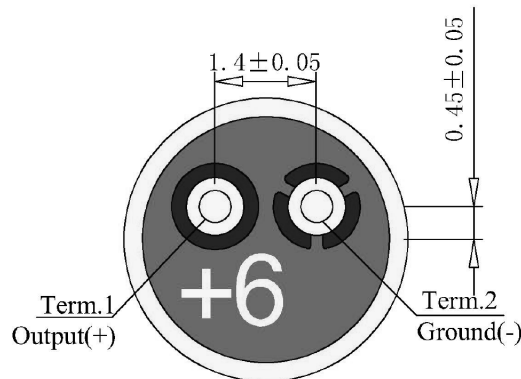
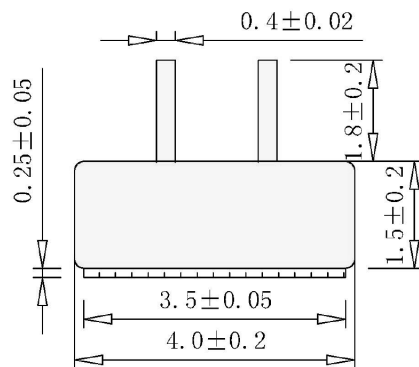
## MECHANICAL DRAWING

units: mm  
tolerance: ±0.2 mm

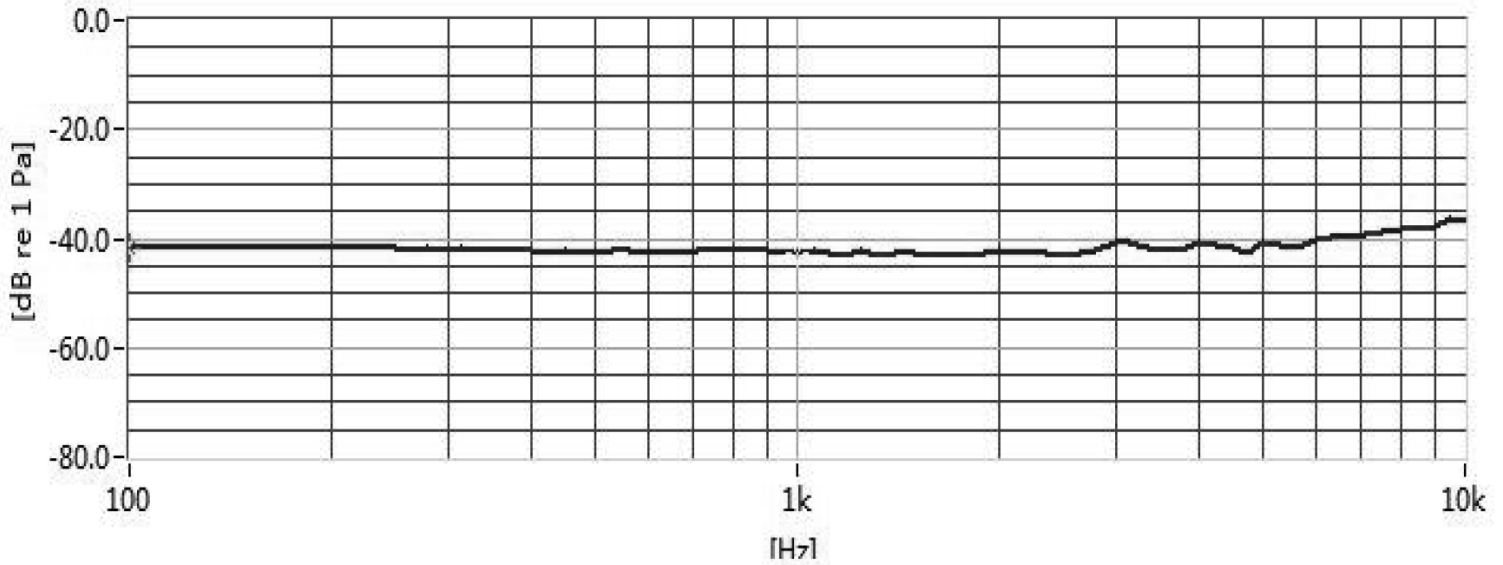
TERMINAL CONNECTIONS	
TERM.	FUNCTION
1	Output (+)
2	GND (-)



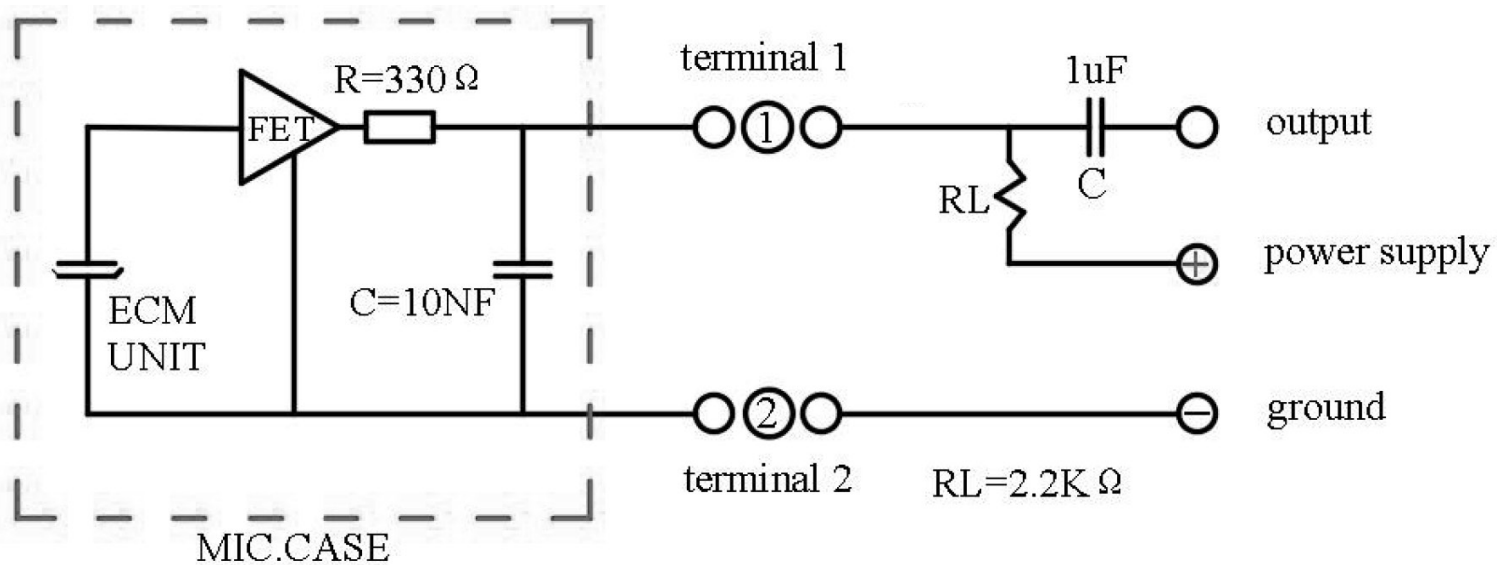
Recommended PCB Layout  
Top View



## FREQUENCY RESPONSE CURVE

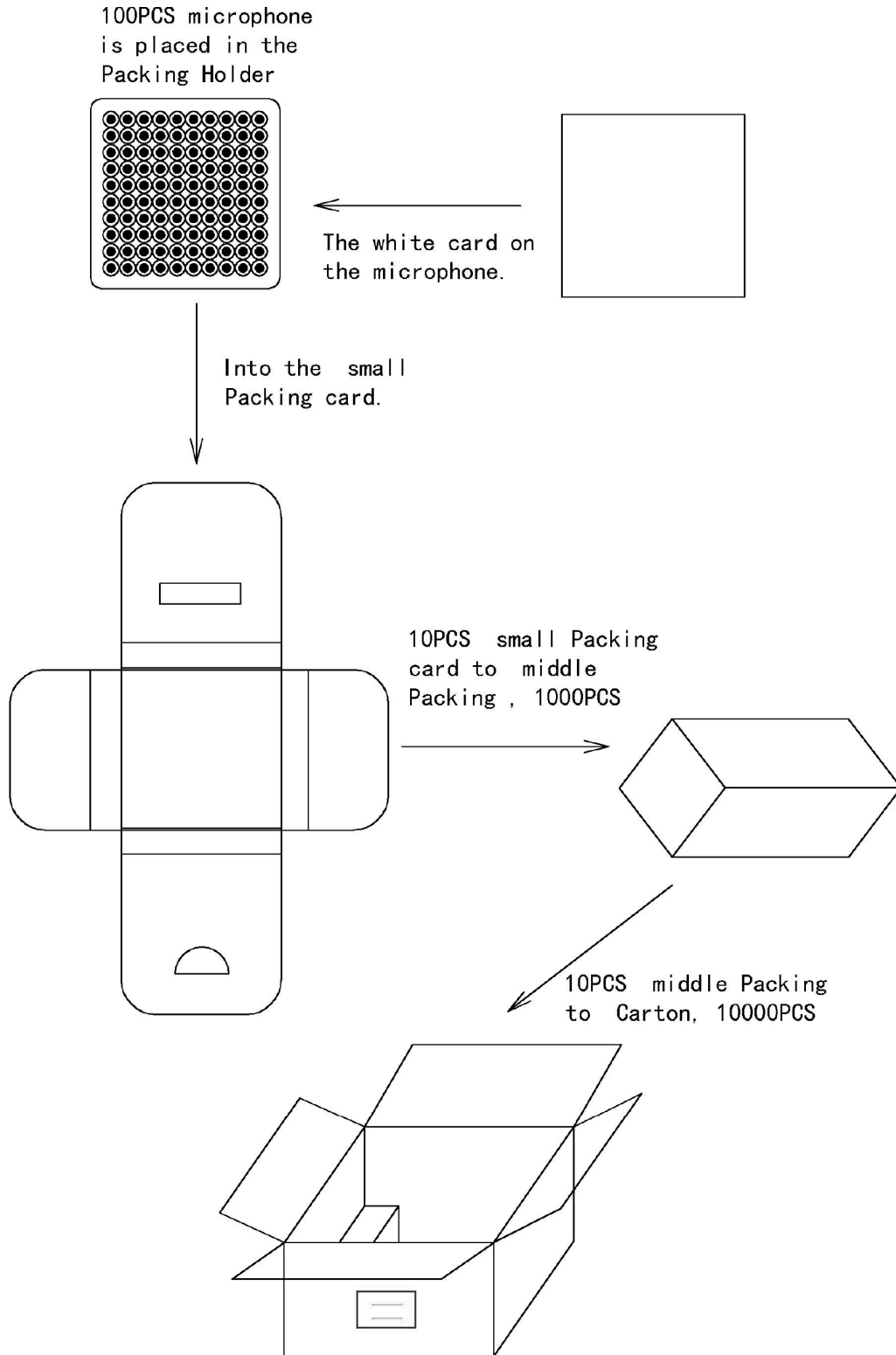


## APPLICATION CIRCUIT



## PACKAGING

Carton QTY: 10,000 pcs



## REVISION HISTORY

rev.	description	date
1.0	initial release	06/05/2019
1.01	brand update	01/16/2020
1.02	logo, datasheet style update	08/05/2022

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



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