

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 _{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		dB _A
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 _{out}]	at 1 kHz			2.2	k Ω

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				

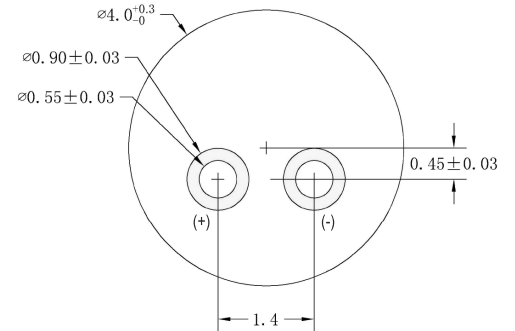
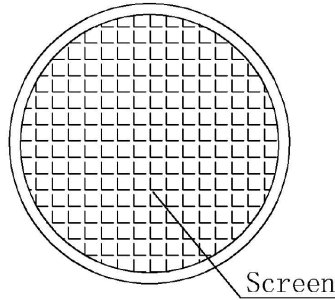
MECHANICAL

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

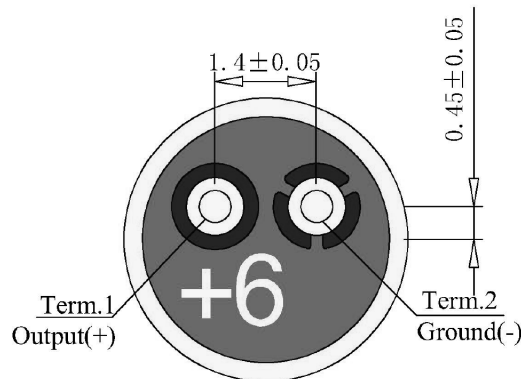
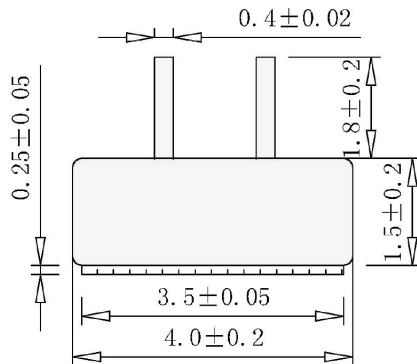
MECHANICAL DRAWING

units: mm
tolerance: ±0.2 mm

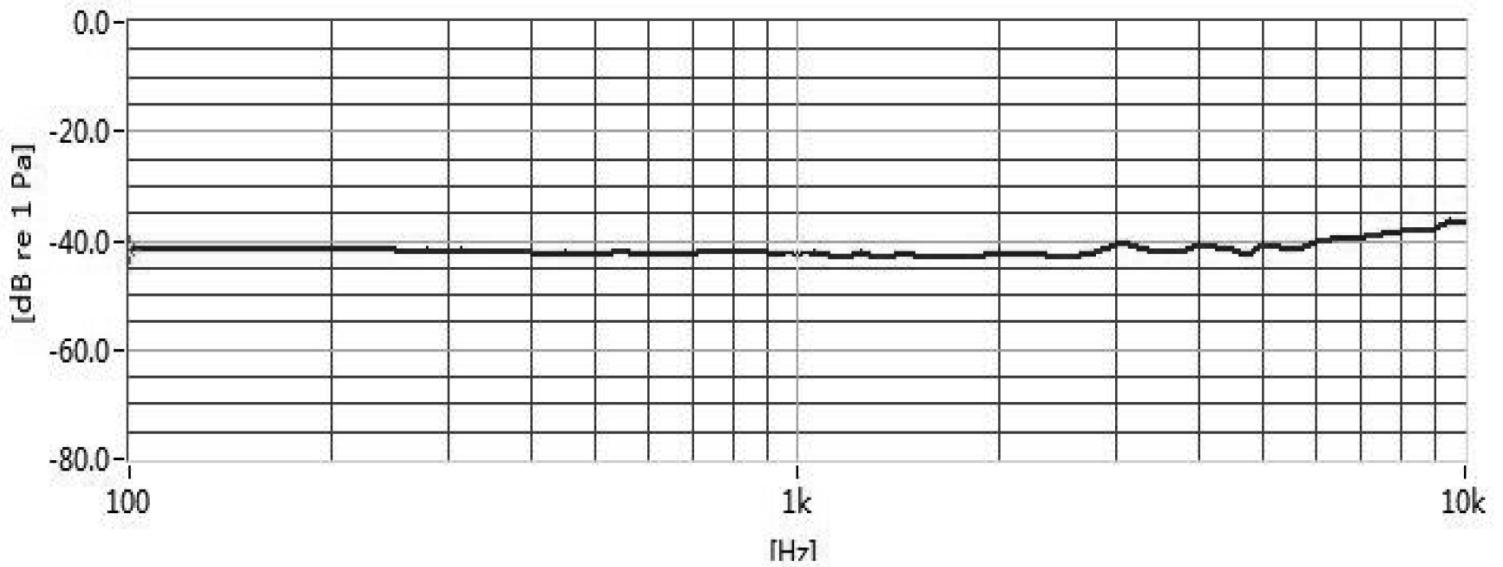
TERMINAL CONNECTIONS	
TERM.	FUNCTION
1	Output (+)
2	GND (-)



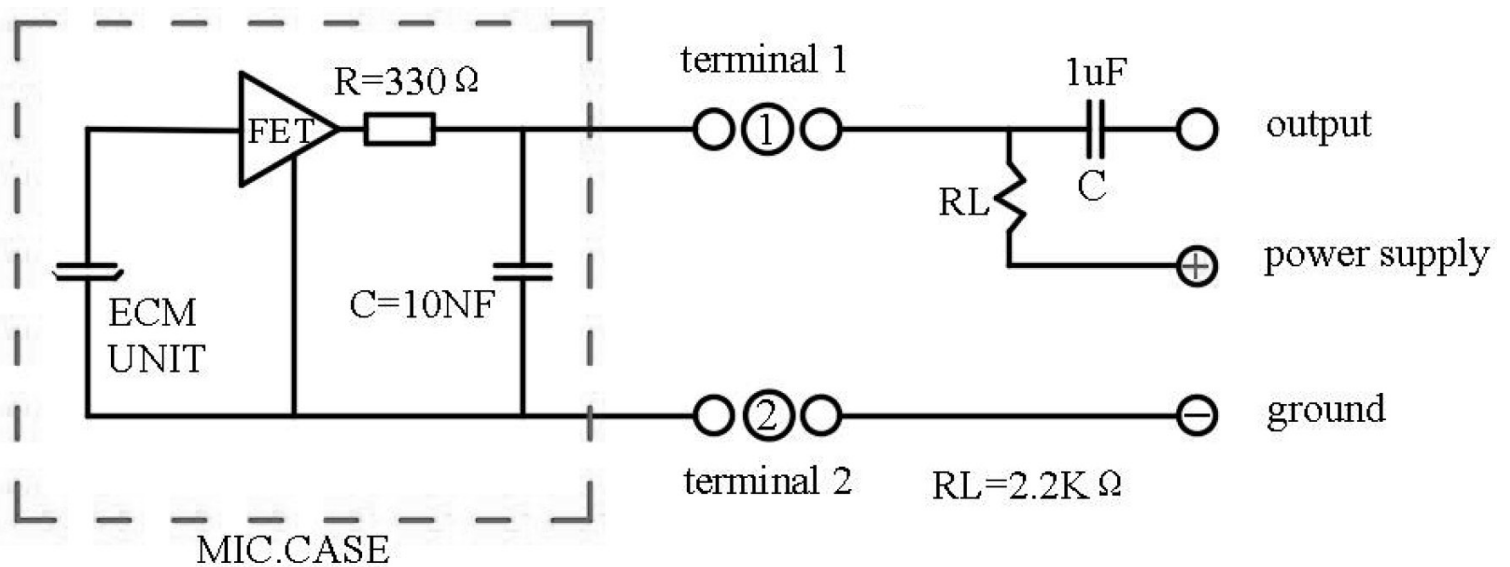
Recommended PCB Layout
Top View



FREQUENCY RESPONSE CURVE

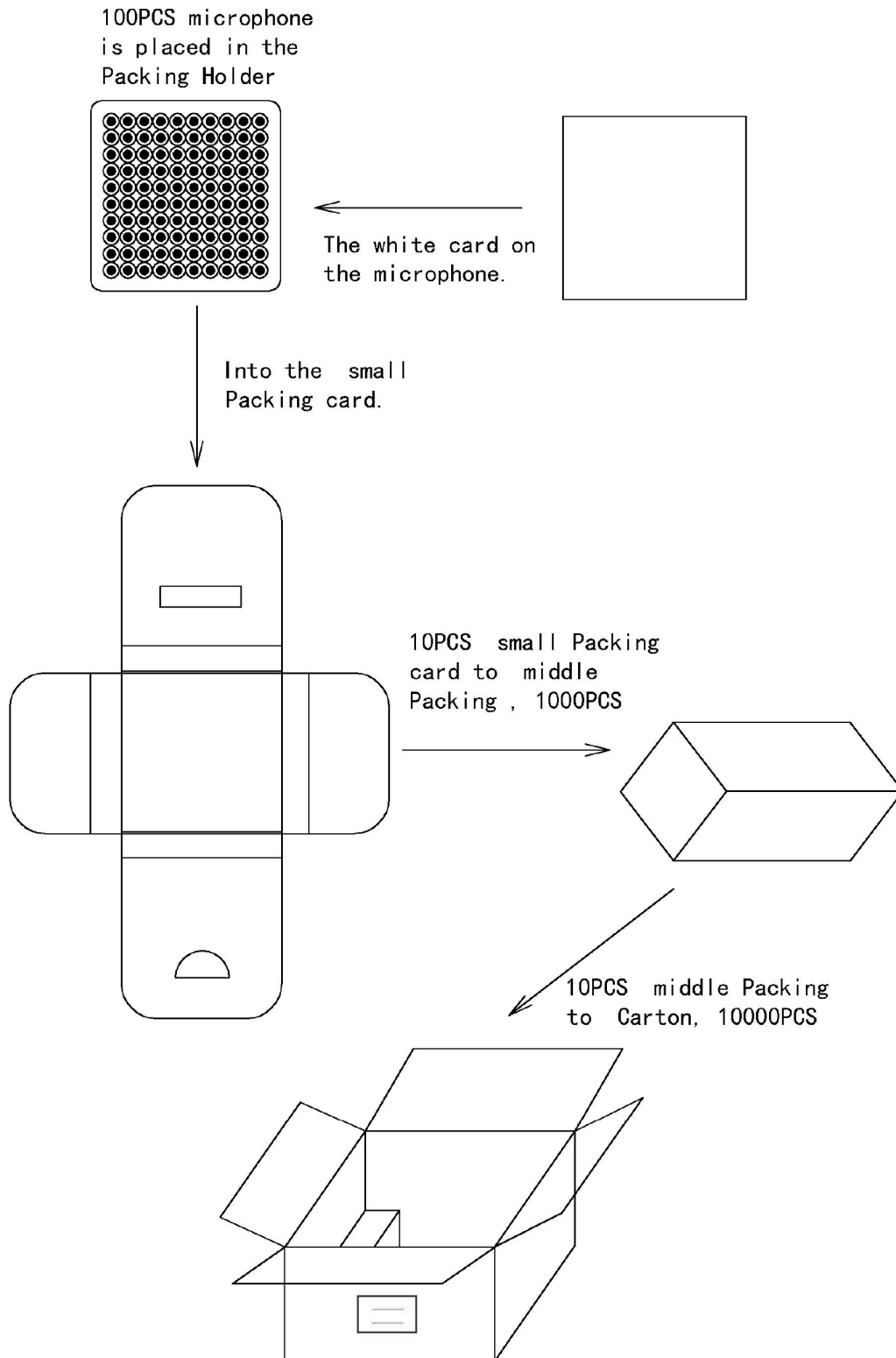


APPLICATION CIRCUIT



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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