

**MODEL:** CMC-5042PF-AC | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

**FEATURES**

- omnidirectional
- 6.0 mm diameter
- solder pins


**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
directivity	omnidirectional				
sensitivity [S]	f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa	-45	-42	-39	dB
standard operating voltage [Vs]			2		Vdc
max operating voltage				10	Vdc
output impedance [Zout]	f = 1 kHz, 1 Pa		2.2		kΩ
sensitivity reduction [ΔS-Vs]	f = 1 kHz, 1 Pa, Vs = 2.0 ~ 1.5 Vdc		-3		dB
frequency [f]		100		20,000	Hz
current consumption [IDSS]	Vs = 2.0 Vdc, RL = 2.2 kΩ			0.5	mA
signal to noise ratio [S/N]	f = 1 kHz, 1 Pa, A-weighted		56		dBa
dimensions	∅6.0 x 5.0				mm
material	AL				
terminal	solder pins [gold plating]				
weight				0.30	g
operating temperature		-20		70	°C
storage temperature		-20		70	°C
RoHS	yes				

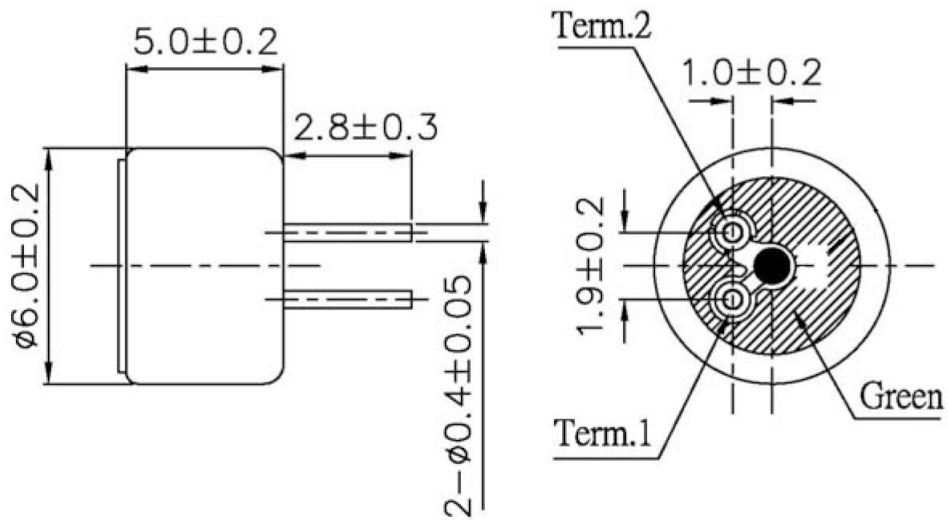
Notes: 1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa)  
 2. All specifications measured at 5-35°C, humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

**SOLDERABILITY**

parameter	conditions/description	min	typ	max	units
hand soldering	for 2 ± 0.5 seconds	270	280	290	°C

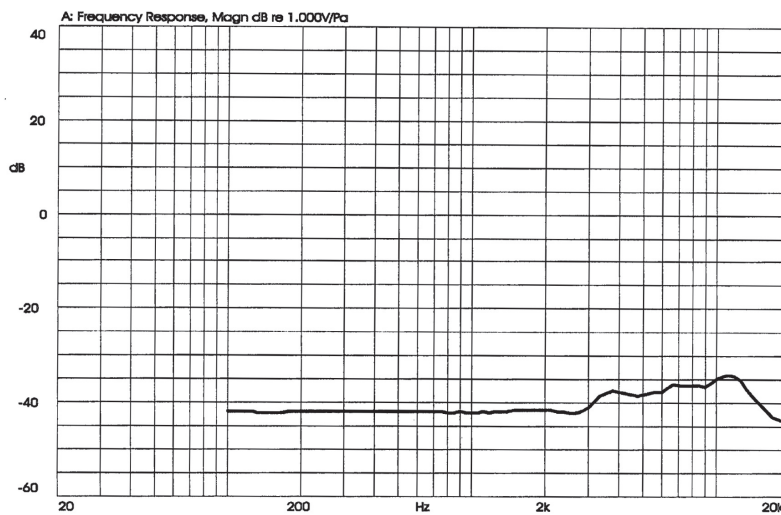
## MECHANICAL DRAWING

units: mm

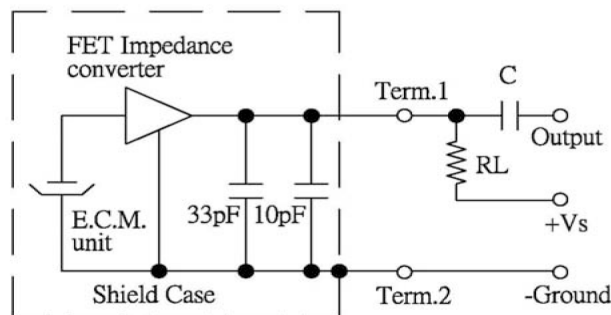


## FREQUENCY RESPONSE CURVE

X1.0000kHz \*Y:-42.00dB ZA:Live Curve SSR Fund.



## APPLICATION CIRCUIT

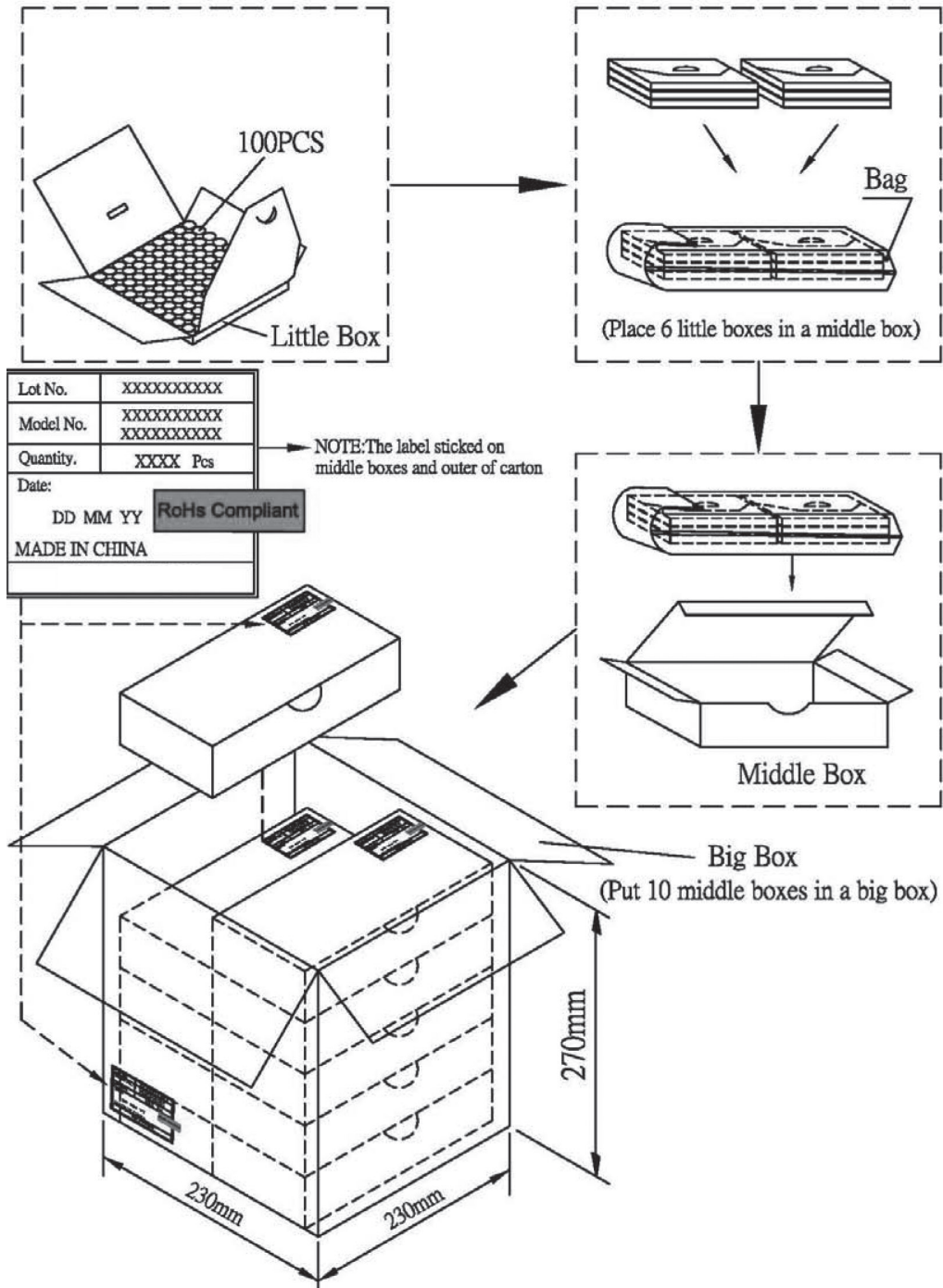


RL = 2.2 kΩ  
C = 1 μF

## PACKAGING

units: mm

Inner Box Size: 100 x 100 x 11 mm  
 Outer Box Size: 230 x 230 x 270 mm  
 Inner Box QTY: 100 pcs per box  
 Outer Box QTY: 6,000 pcs per box



## REVISION HISTORY

rev.	description	date
1.0	initial release	06/01/2008
1.01	brand update	04/24/2020
1.02	shortened pin length, added capacitors	10/15/2021
1.03	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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