

**MODEL:** CMC-9745-130T | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

**FEATURES**

- high AOP of 130 dB
- omnidirectional
- 9.7 mm diameter
- solder terminals
- IP67 rated


**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		60		dBa
acoustic overload point [AOP]	at 1 kHz, THD <10%			130	dB SPL
total harmonic distortion	at 1 kHz, 94 dB SPL			1	%
dimensions	Ø9.7 x 4.5				mm
material	Al				
terminal	solder pads				
weight				0.80	g
operating temperature		-20		70	°C
storage temperature		-20		70	°C
RoHS	yes				
IP level	IP67 [IEC standard 529 edition 2.0 (1989)]				

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)

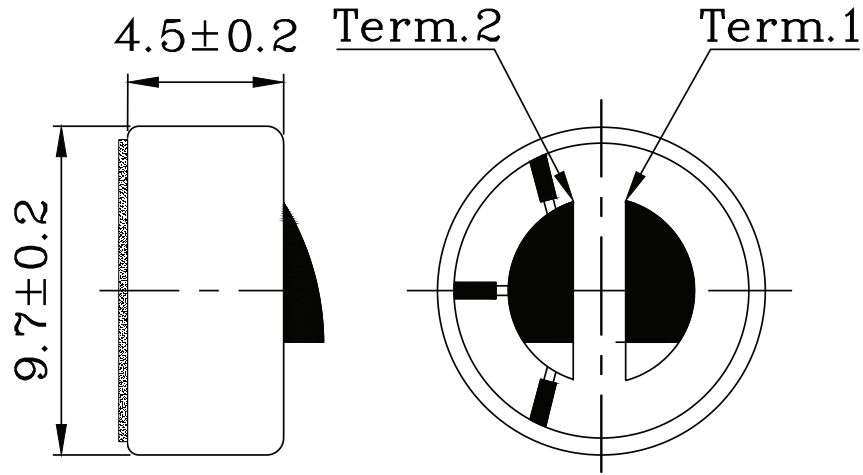
2. All specifications measured at 5-35°C, humidity at 45-85%, under 86-106 kPa pressure, unless otherwise noted.

**SOLDERABILITY**

parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 2 seconds	340	350	360	°C

## MECHANICAL DRAWING

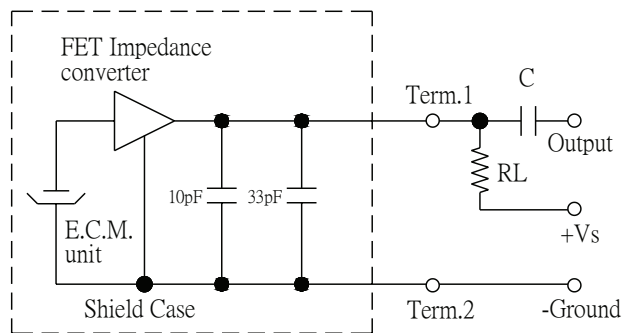
units: mm  
tolerance:  $\pm 0.20$  mm



## FREQUENCY RESPONSE CURVE



## MEASUREMENT CIRCUIT

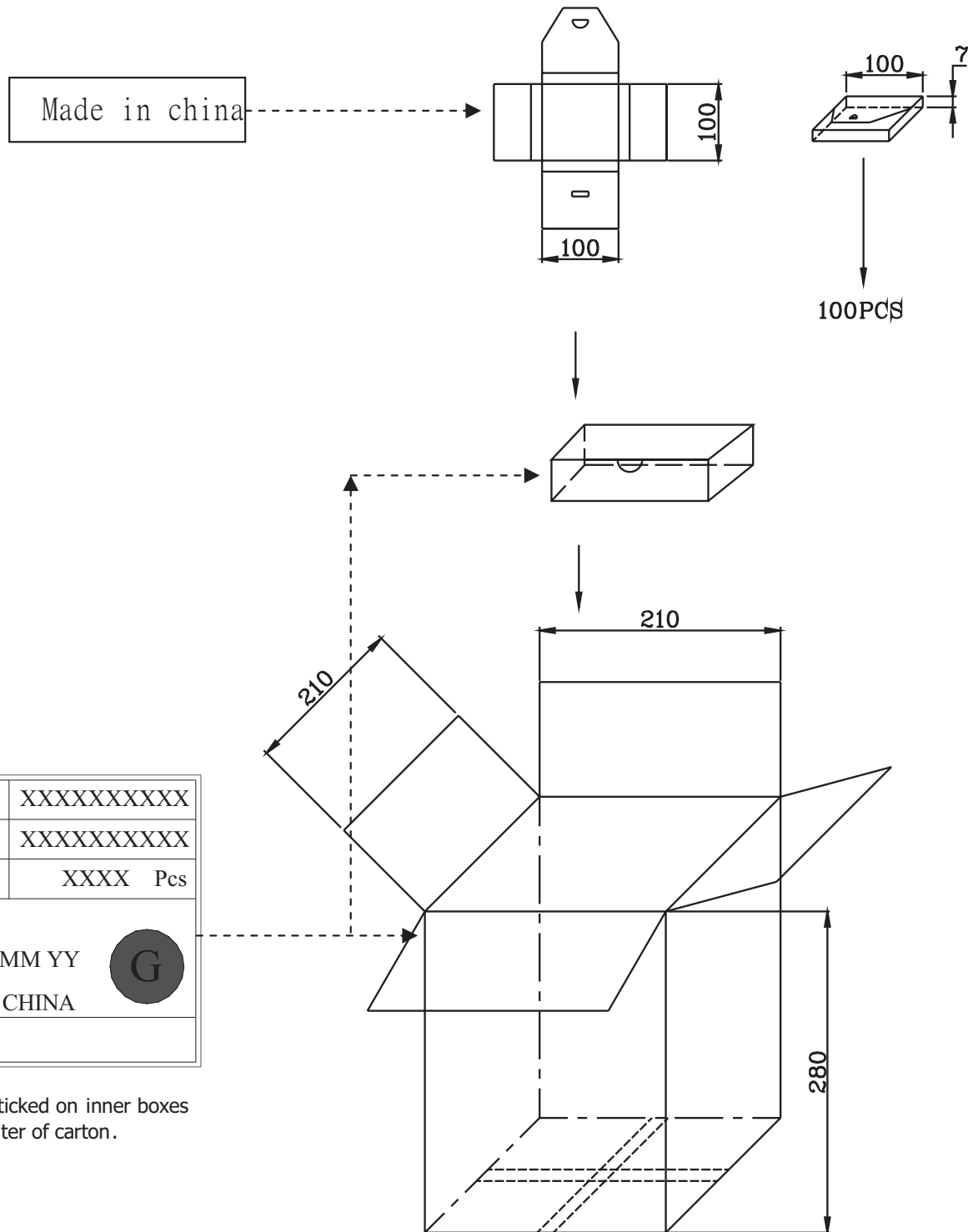


$RL = 2.2 \text{ k}\Omega$   
 $C = 1 \text{ }\mu\text{F}$

## PACKAGING

units: mm

Inner Box Size: 100 x 100 x 7 mm  
 Middle Box Size: 205 x 105 x 54 mm  
 Carton Size: 210 x 210 x 280 mm  
 Inner Box QTY: 100 pcs  
 Middle Box QTY: 1,000 pcs  
 Carton QTY: 10,000 pcs per carton



\* The label stuck on inner boxes and the outer of carton.

## REVISION HISTORY

rev.	description	date
1.0	initial release	09/29/2017
1.01	updated datasheet	03/14/2019
1.02	brand update	01/15/2020
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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