

**MODEL:** CMC-4013-2-SMT-TR | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

**FEATURES**

- omnidirectional
- low profile
- surface mount
- tape and reel packaging


**SPECIFICATIONS**

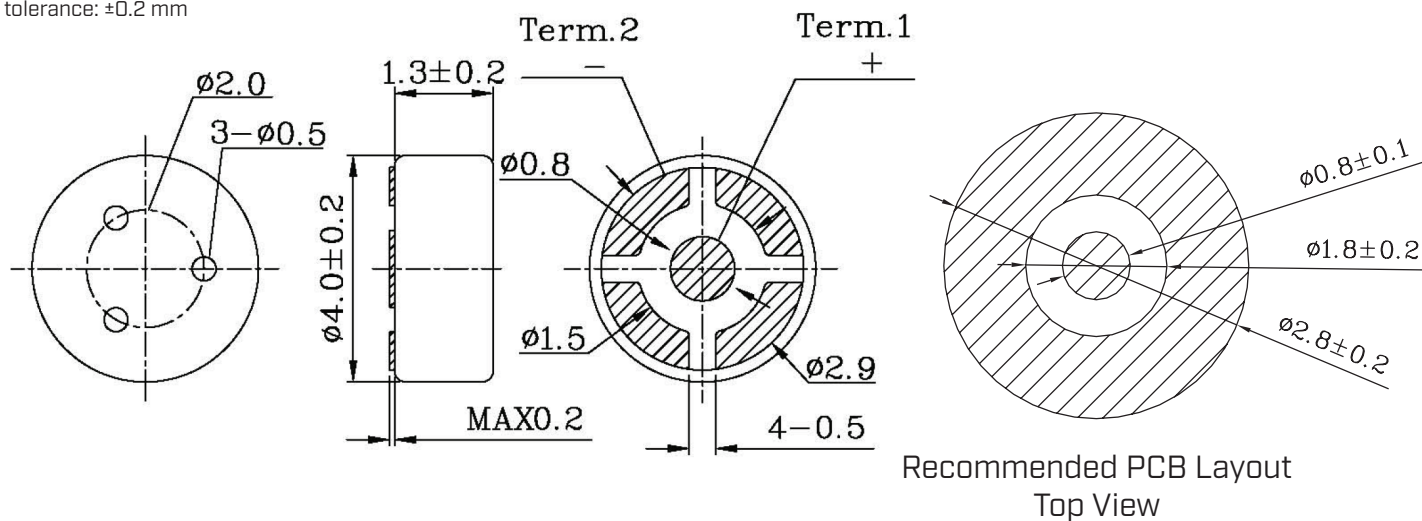
parameter	conditions/description	min	typ	max	units
directivity	omnidirectional				
sensitivity [S]	f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa	-45	-42	-39	dB
standard operating voltage [Vs]			2		Vdc
max operating voltage				10	Vdc
output impedance [Zout]	f = 1 kHz, 1 Pa		2.2		k $\Omega$
sensitivity reduction [ $\Delta$ S-Vs]	f = 1 kHz, 1 Pa, Vs = 3.0 ~ 2.0 Vdc		-3		dB
frequency [f]		20		20,000	Hz
current consumption [IDSS]	Vs = 2.0 Vdc, RL = 2.2 k $\Omega$			0.5	mA
signal to noise ratio [S/N]	f = 1 kHz, 1 Pa, A-weighted		58		dBa
acoustic overload point [ADP]	THD<3%			105	dB SPL
dimensions	$\varnothing$ 4.0 x 1.3				mm
material	zinc white copper				
terminal	SMT type				
weight				0.065	g
operating temperature		-20		70	$^{\circ}$ C
storage temperature		-20		70	$^{\circ}$ C
RoHS	yes				

Notes:

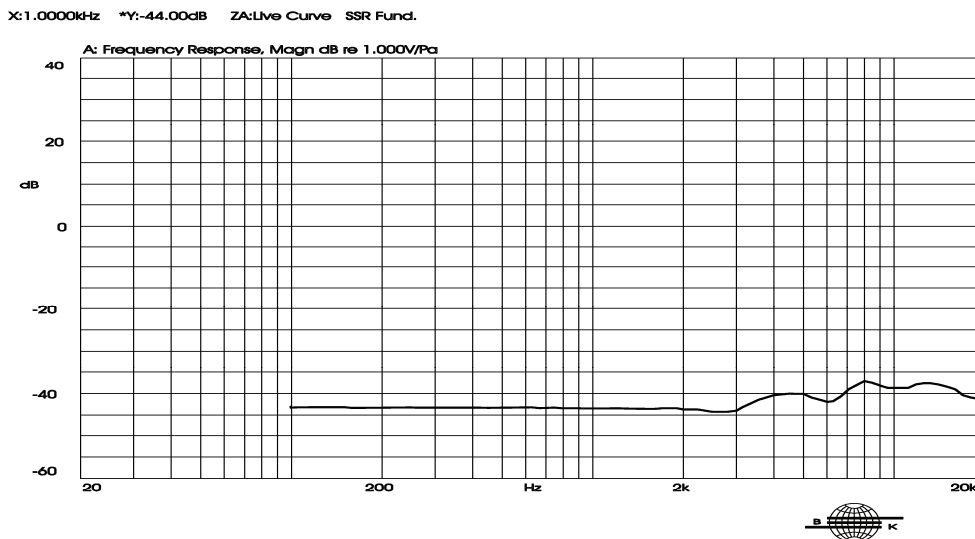
1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB [0 dB = 1 V/ubar] = -40 dB [1 V/Pa]
2. All specifications measured at 5-35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

## MECHANICAL DRAWING

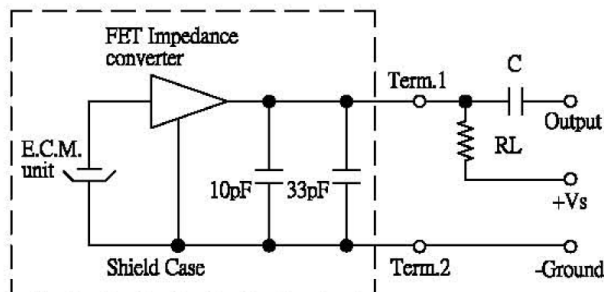
units: mm  
tolerance: ±0.2 mm



## FREQUENCY RESPONSE CURVE



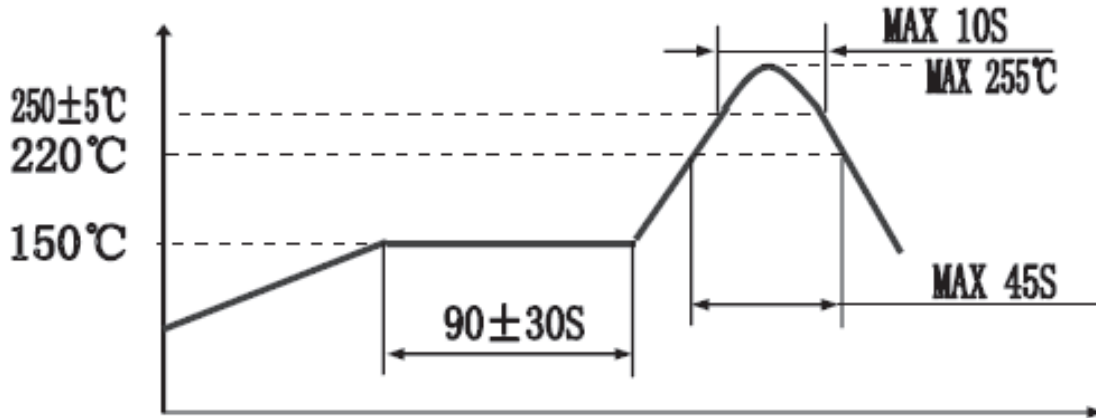
## MEASUREMENT CIRCUIT



RL = 2.2 kΩ

## SOLDERABILITY

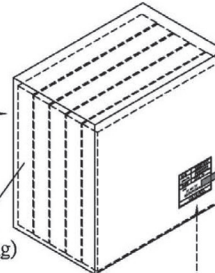
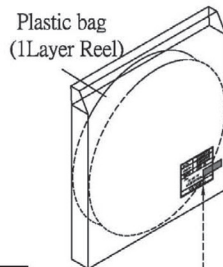
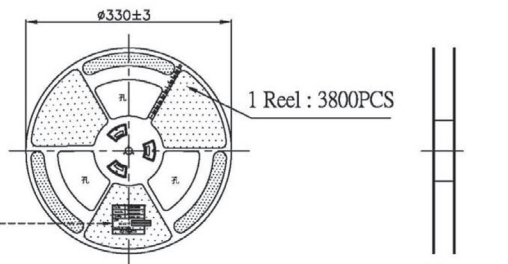
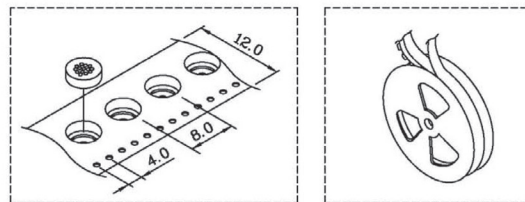
parameter	conditions/description	min	typ	max	units
reflow soldering	see reflow soldering profile	245	250	255	°C



## PACKAGING

units: mm

Reel Size: Ø330 mm  
 Inner Bag Size: 340 x 340 x 30 mm  
 Carton Box Size: 340 x 170 x 340 mm  
 Reel QTY: 3,800 pcs per reel  
 Inner Bag QTY: 3,800 pcs per box  
 Carton Box QTY: 19,000 pcs per carton



Lot No.	XXXXXXXXXX
Model No.	XXXXXXXXXX
Quantity	XXXX Pcs
Date:	DD MM YY
	RoHS Compliant
	MADE IN CHINA

## REVISION HISTORY

rev.	description	date
1.0	initial release	04/23/2021
1.01	updated packaging	08/05/2021
1.02	logo, datasheet style update	08/05/2022

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



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

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