

**MODEL:** CMI-5247TF-K | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE**FEATURES**

- unidirectional
- 9.7 mm diameter
- solder pads

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
directivity	unidirectional				
sensitivity [S]	f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa	-50	-47	-44	dB
standard operating voltage [Vs]			1.5		Vdc
max operating voltage				10	Vdc
output impedance [Zout]	f = 1 kHz, 1 Pa		680		$\Omega$
sensitivity reduction [ $\Delta S-V_s$ ]	f = 1 kHz, 1 Pa, $V_s = 2.0 \sim 1.5$ Vdc		-3		dB
frequency [f]		70		20,000	Hz
current consumption [I <sub>0SS</sub> ]	$V_s = 1.5$ Vdc, $R_L = 680 \Omega$			0.5	mA
signal to noise ratio [S/N]	f = 1 kHz, 1 Pa, A-weighted		60		dBA
dimensions	$\varnothing 9.7 \times 5.2$				mm
material	AL				
terminal	solder pads				
weight				0.72	g
operating temperature		-20		70	°C
storage temperature		-20		70	°C
RoHS	yes				

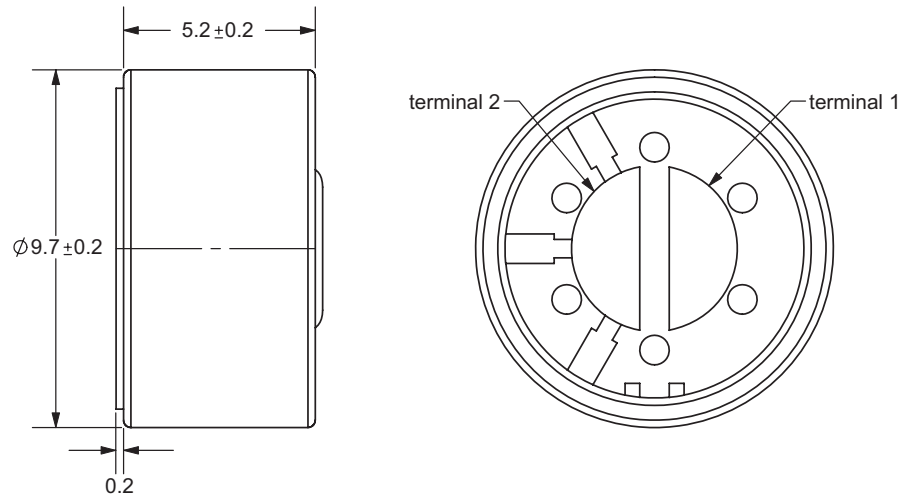
Notes: 1. We use the "Pascal [Pa]" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa)  
2. All specifications measured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

**SOLDERABILITY**

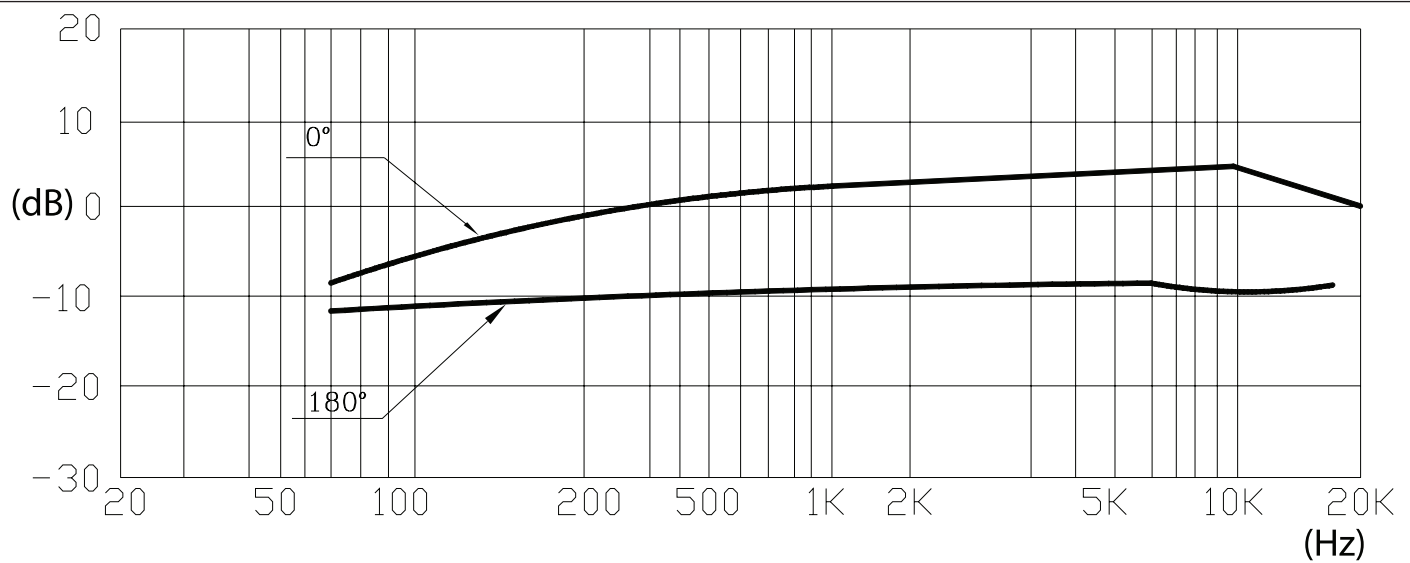
parameter	conditions/description	min	typ	max	units
hand soldering	for $2 \pm 0.5$ seconds	310	320	330	°C

## MECHANICAL DRAWING

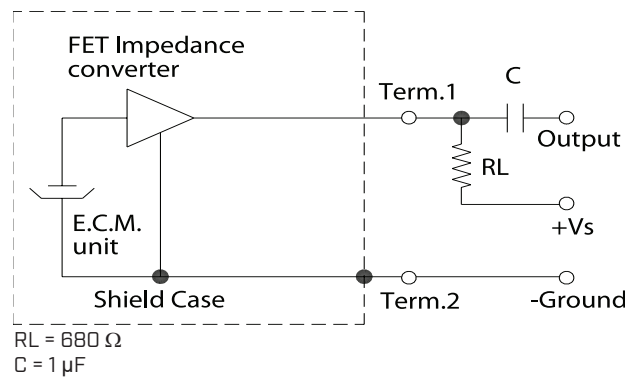
units: mm



## FREQUENCY RESPONSE CURVE



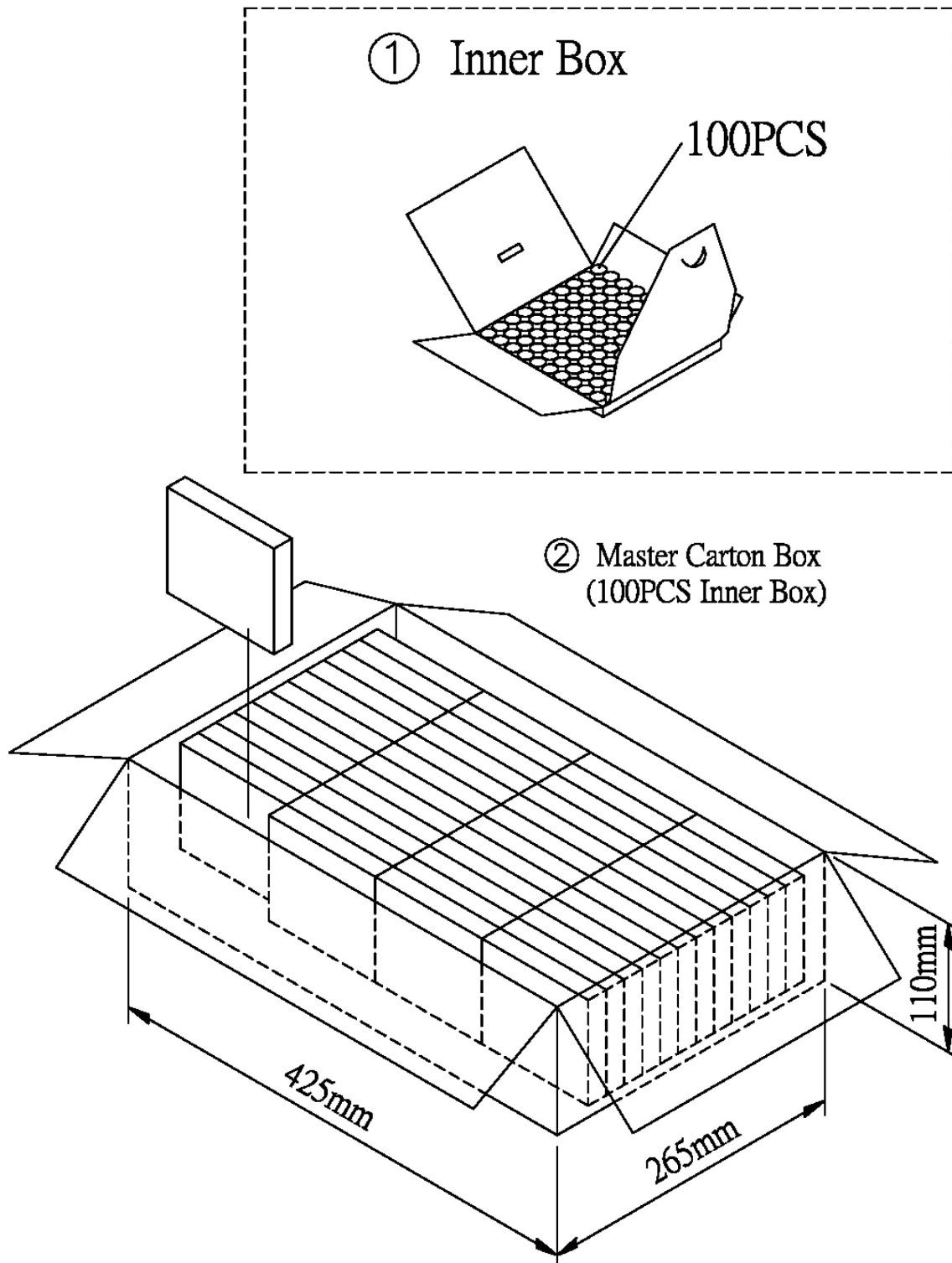
## APPLICATION CIRCUIT



## PACKAGING

units: mm

Inner Box Size: 100 x 100 x 18 mm  
Outer Box Size: 425 x 265 x 110 mm  
Inner Box QTY: 100 pcs per box  
Outer Box QTY: 10,000 pcs per box



## REVISION HISTORY

rev.	description	date
1.0	initial release	06/01/2008
1.01	brand update	04/24/2020
1.02	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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