

date 08/05/2022

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MODEL: CMC-9745-L100 | DESCRIPTION: ELECTRET CONDENSER MICROPHONE

FEATURES

- unidirectional
- high signal to noise ratio
- 100 mm lead wires





SPECIFICATIONS

parameter	conditions/description	min	typ	max	units
directivity	unidirectional				
sensitivity (S)	f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa	-40	-37	-34	dB
standard operating voltage (Vs)			1.5		Vdc
max operating voltage				9	Vdc
output impedance (Zout)	f = 1 kHz, 1 Pa	1.4	2.0	2.6	kΩ
sensitivity reduction (ΔS-Vs)	f = 1 kHz, 1 Pa, Vs = 1.5 ~ 1.0 Vdc		-3		dB
frequency (f)		100		12,000	Hz
current consumption (IDSS)	Vs = 1.5 Vdc, RL = 2.0 k Ω			0.4	mA
signal to noise ratio (S/N)	f = 1 kHz, 1 Pa, A-weighted		69		dBA
dimensions	Ø9.7 x 4.5				mm
material	Al				
terminal	wire leads				
weight				1	g
operating temperature		-20		70	°C
storage temperature		-20		70	°C
RoHS	yes				

Notes:

 $2. All \ specifications \ measured \ at \ 5~35^{\circ}C, \ humidity \ at \ 45~85\%, \ under \ 86~106 \ kPa \ pressure, \ unless \ otherwise \ noted.$

SOLDERABILITY

parameter	conditions/description	min	typ	max	units
hand soldering	for maximum 2 seconds	310	320	330	°C

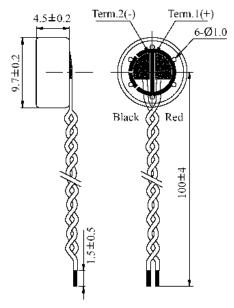
^{1.} We use the "Pascal [Pa]" indication of sensitivity as per the recomendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1V/Pa)

MECHANICAL DRAWING

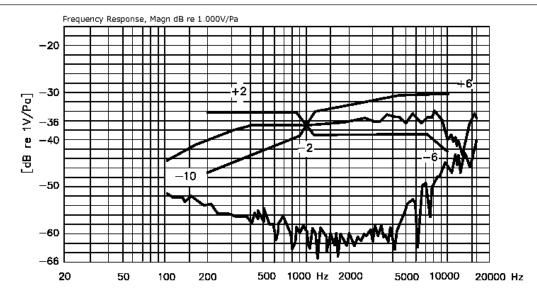
units: mm

tolerance: ±0.2 mm

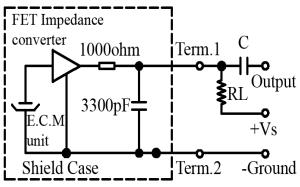
wire: UL1571 LF 30 AWG



FREQUENCY RESPONSE CURVE



MEASUREMENT CIRCUIT

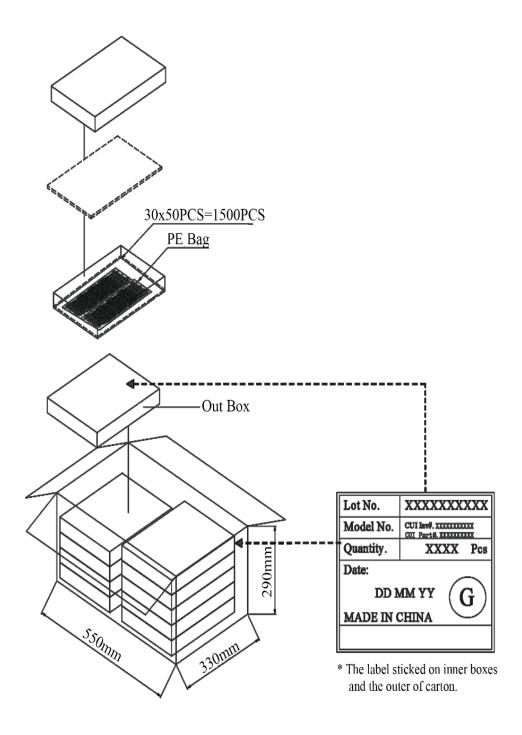


RL = $2.0 \text{ k}\Omega$ C = $1 \mu\text{F}$

PACKAGING

units: mm

Outer Box Size: 310 x 248 x 49 mm Carton Box Size: 550 x 330 x 290 mm Outer Box QTY: 1,500 pcs per box Carton Box QTY: 15,000 pcs per box



REVISION HISTORY

rev.	description	date
1.0	initial release	11/28/2016
1.01	brand update	01/17/2020
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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