# **CUI** DEVICES

**date** 05/12/2020

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MODEL: CEB-20D64 | DESCRIPTION: PIEZOELECTRIC DIAPHRAGM

#### **FEATURES**

- piezo element with feedback wire
- 30 Vp-p max operating voltage
- 6,500 Hz rated frequency





### **SPECIFICATIONS**

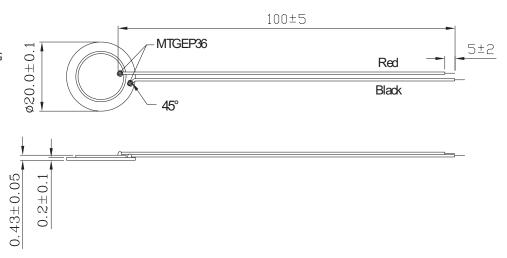
parameter	conditions/description	min	typ	max	units
operating voltage				30	Vp-p
resonant frequency	only for piezo element without wire	6,000	6,500	7,000	Hz
resonant impedance	only for piezo element without wire			350	Ω
electrostatic capacity	at 120 Hz/1 V	9,100	13,000	16,900	pF
dc resistance	for 1 second	20			MΩ
dimensions	Ø20 x 0.43				mm
weight				1.5	g
material	brass				
terminal	wire leads				
operating temperature		-20		70	°C
storage temperature		-30		80	°C
RoHS	yes				

Notes: 1. All specifications measured at  $5\sim35^{\circ}$ C, humidity at  $45\sim85\%$ , under  $86\sim106$ kPa pressure, unless otherwise noted.

## **MECHANICAL DRAWING**

units: mm tolerance: ±0.5 mm

wire: UL1571 32 AWG

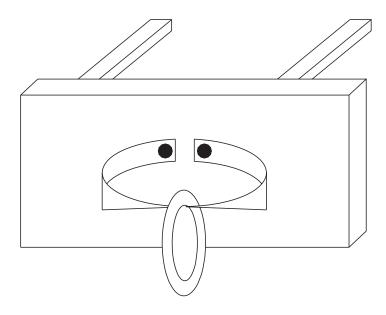


### **MEASURING METHOD**

#### **Resonant Frequency / Resonant Impedance**

The piezo electric diaphragm shall be clamped at a node point as shown in the following figure to be free from any mechanical stress, and measured its resonant frequency and resonant impedance by using vector impedance analyzer or equivalent.

When the input frequency is swept within 2 kHz to 8 kHz, the resonant frequency is defined as the frequency where the impedance shows the minimum value, and this impedance shall be the resonant impedance.



#### **Static Capacitance**

The electrostatic capacitance shall be measured at 120 Hz by using LCR meter HP4194A(H.P.) or equivalent. This part shall be clamped in the same way as the measurement of resonant frequency and resonant impedance as mentioned above.

Additional Resources: Product Page | 3D Model

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### **REVISION HISTORY**

rev.	description	date
1.0	initial release	07/28/2006
1.01	brand update	05/12/2020

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

## **CUI** DEVICES

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

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