same sky

Additional Resources: Product Page | 3D Model

date 09/11/2024

page 1 of 3

# MODEL: CEB-20FD64 | DESCRIPTION: PIEZOELECTRIC DIAPHRAGM

#### **FEATURES**

- · piezo element with feedback wire
- 30 Vp-p max operating voltage
- 6,400 Hz rated frequency





### **SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
operating voltage				30	Vp-p
resonant frequency	only for piezo element without wire	5,900	6,400	6,900	Hz
resonant impedance	only for piezo element without wire			400	Ω
electrostatic capacity	at 1000 Hz/1 V	7,000	10,000	13,000	pF
dc resistance	for 1 second	20			МΩ
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				

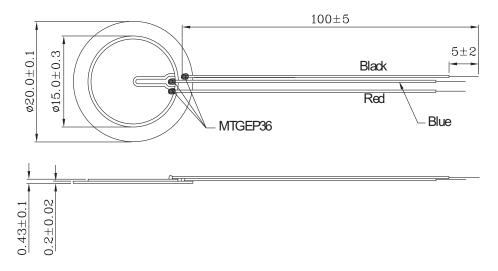
Notes: 1. All specifications measured at 5~35°C, humidity at 45~85%, under 86~106kPa pressure, unless otherwise noted.

# **MECHANICAL DRAWING**

units: mm tolerance: ±0.5 mm

wire: UL1571 32 AWG

WIRE CONNECTIONS				
Color	Function			
Red	+terminal (M)			
Black	-terminal (G)			
Blue	feedback (F)			

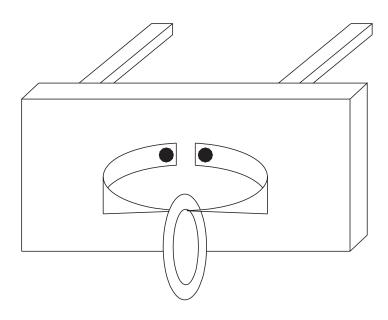


## **MEASURING METHOD**

#### 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 100 Hz to 9 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 1.0 kHz 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

### **REVISION HISTORY**

rev.	description	date
1.0	initial release	06/25/2007
1.01	brand update	05/13/2020
1.02	logo, datasheet style update	08/05/2022
1.03	CUI Devices rebranded to Same Sky	09/11/2024

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



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

Same Sky reserves the right to make changes to the product at any time without notice. Information provided by Same Sky is believed to be accurate and reliable. However, no responsibility is assumed by Same Sky for its use, nor for any infringements of patents or other rights of third parties which may result from its use.

Same Sky products are not authorized or warranted for use as critical components in equipment that requires an extremely high level of reliability. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.