

**MODEL:** CUSA-TR80-15-2000-TH | **DESCRIPTION:** ULTRASONIC SENSOR**FEATURES**

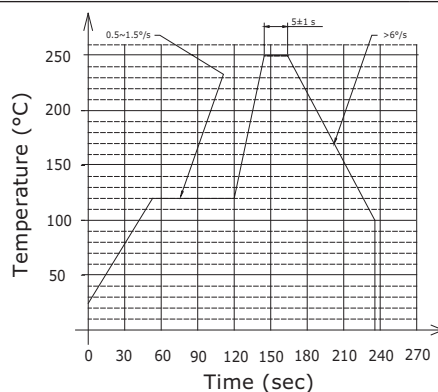
- aluminium can
- open type
- combination unit: receiver & transmitter
- sensitivity -75 dBV
- detectable range 15 meters

**SPECIFICATIONS**

parameter	conditions/description	min	typ	max	units
type	transmitter/receiver				
operating voltage	at 39 kHz			80	Vp-p
frequency		38	39	40	kHz
sensitivity		-75			dBV/ $\mu$ Mbar
sound pressure level	at 10 V, 30 cm, sine wave	105			dB
directivity			80		degree
capacitance	at 1 kHz	1,500	2,000	2,500	pF
detectable range		0.2		15	m
response time				1.6	ms
dimensions	$\varnothing 9.8 \times 7.0$				mm
material	aluminum				
terminal	pins (iron with tin plating)				
weight			0.74		g
operating temperature		-20		80	$^{\circ}$ C
RoHS	yes				

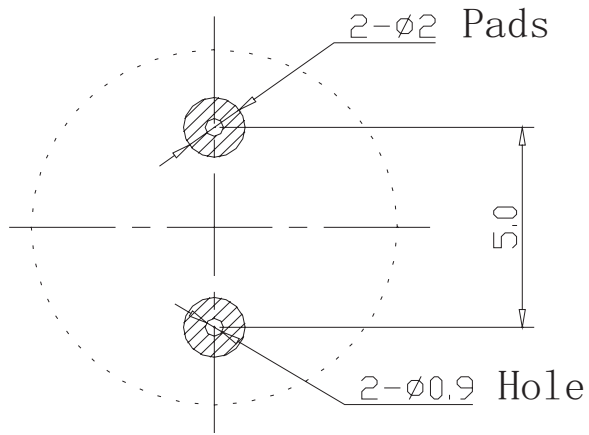
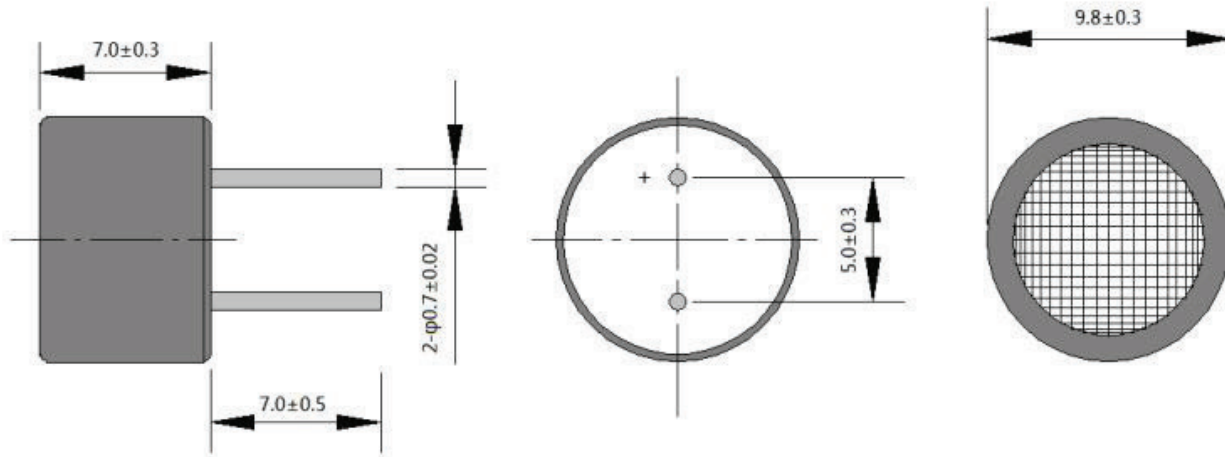
**SOLDERABILITY**

parameter	conditions/description	min	typ	max	units
wave soldering				250	$^{\circ}$ C



## MECHANICAL DRAWING

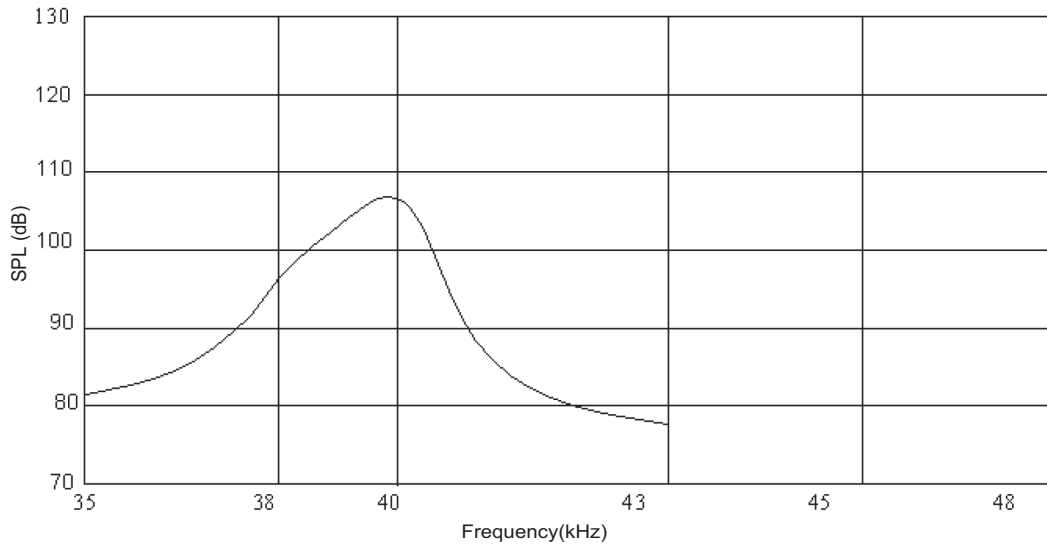
units: mm



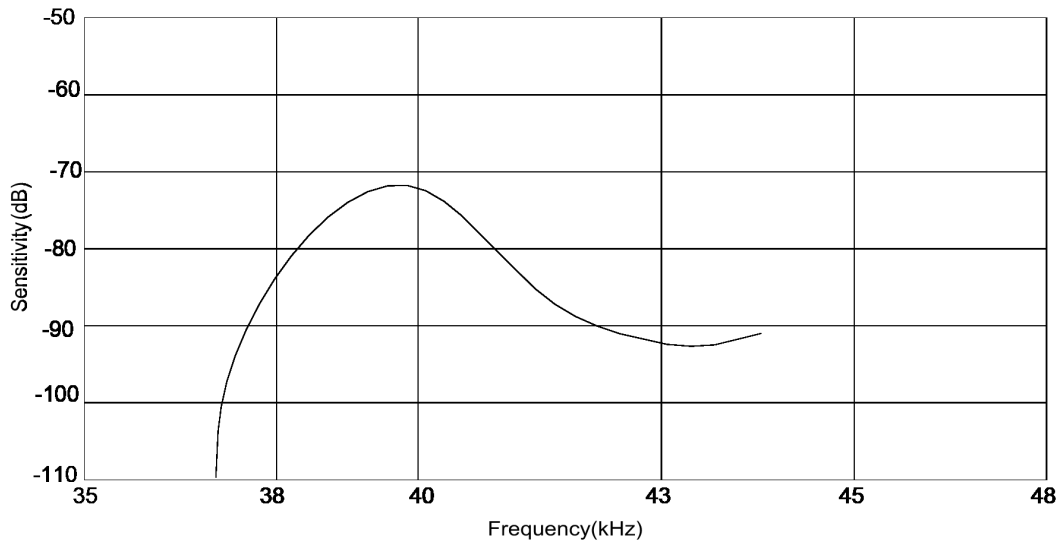
Recommended PCB Layout  
Top View

## BEAM PATTERNS

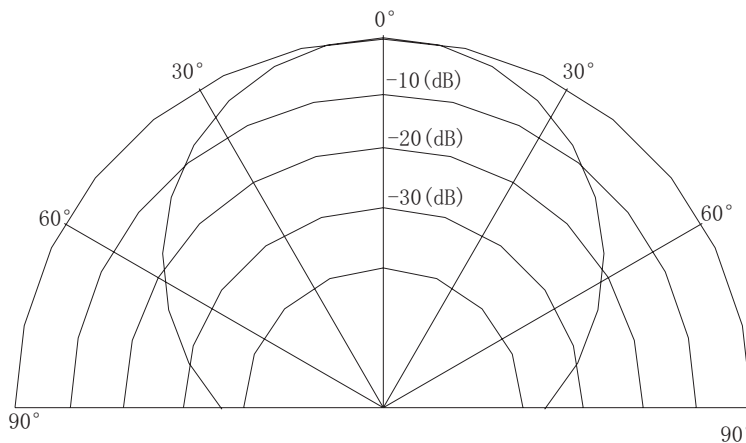
SPL vs. Frequency (Transmitter)



Sensitivity vs. Frequency (Receiver)



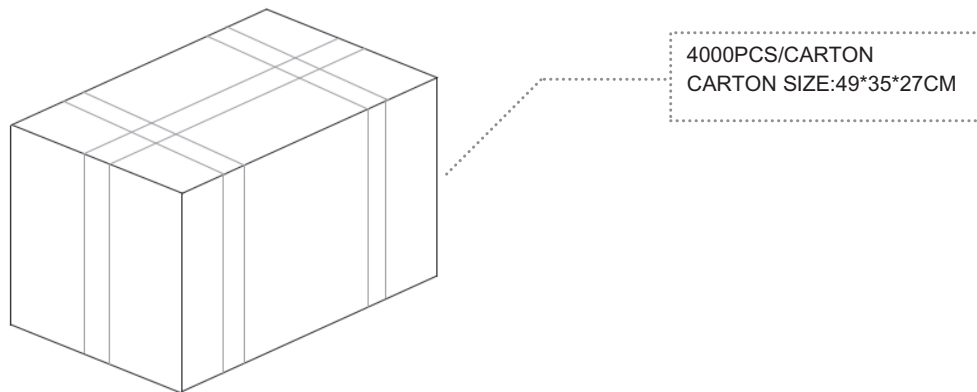
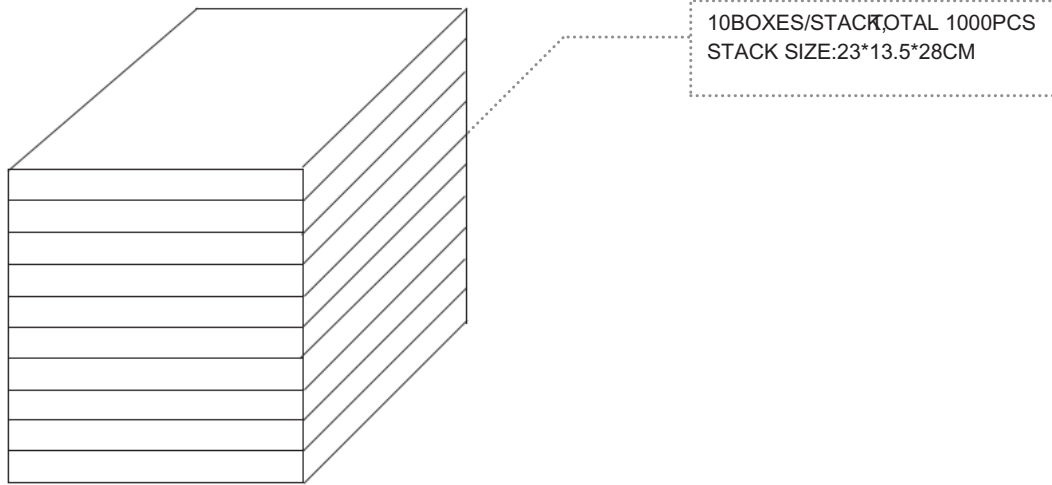
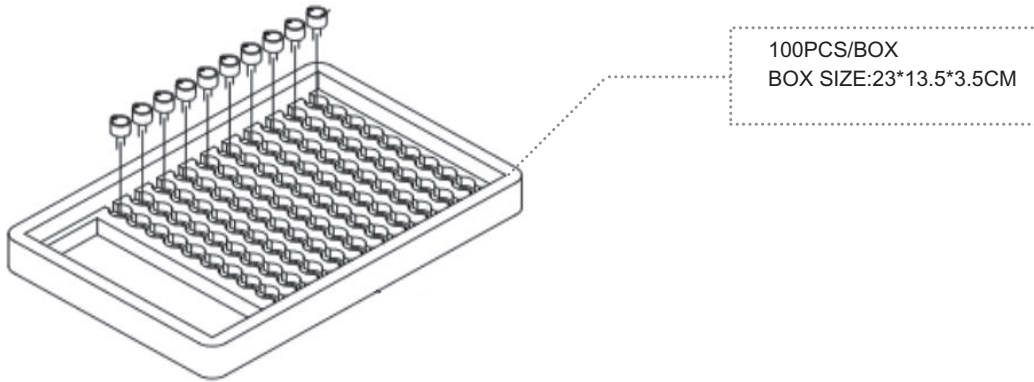
Directivity



## PACKAGING

units: mm

Tray Size: 230 x 135 x 35 mm  
Tray QTY: 100 pcs per tray  
Carton Size: 490 x 350 x 270 mm  
Carton QTY: 4,000 pcs per carton



## REVISION HISTORY

---

rev.	description	date
1.0	initial release	12/02/2020

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.

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

CUI Devices 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.