

**MODEL:** CUSP-TR80-18-2400-TH | **DESCRIPTION:** ULTRASONIC SENSOR

**FEATURES**

- plastic can
- open type
- combination unit: receiver & transmitter
- sensitivity -68 dBV
- detectable range 18 meters


**SPECIFICATIONS**

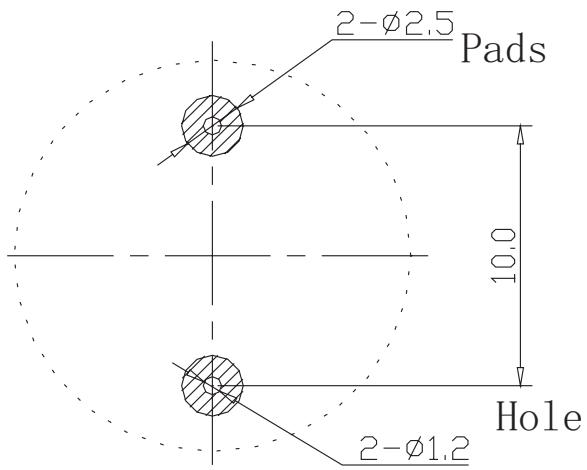
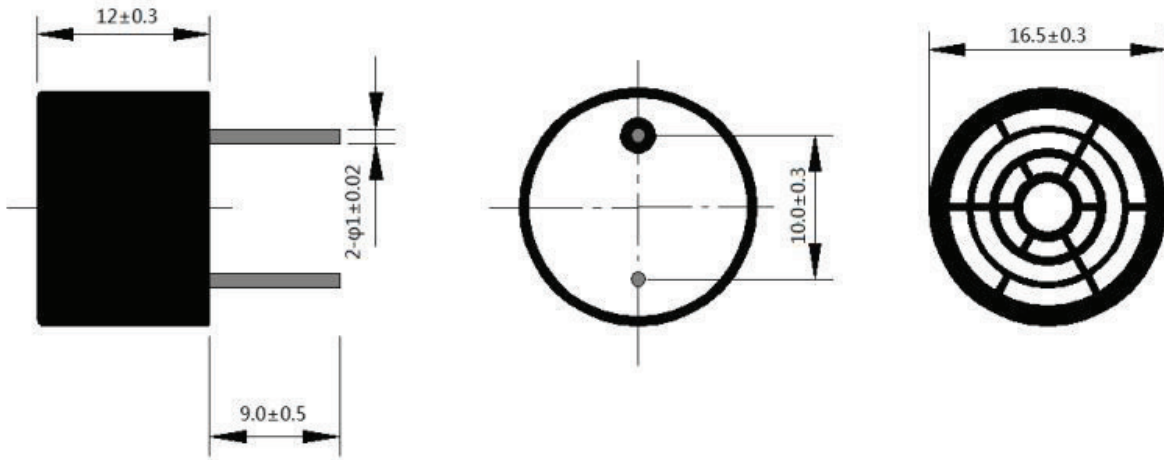
parameter	conditions/description	min	typ	max	units
type	transmitter/receiver				
operating voltage	at 39 kHz			150	Vp-p
frequency		38	39	40	kHz
sensitivity		-68			dBV/ $\mu$ Mbar
sound pressure level	at 10 V, 30 cm, sine wave	115			dB
directivity			80		degree
capacitance	at 1 kHz	1,920	2,400	2,880	pF
detectable range		0.2		18	m
response time				1.6	ms
dimensions	$\varnothing$ 16.5 x 12.0				mm
material	ABS				
terminal	pins (iron with tin plating)				
weight			2.0		g
operating temperature		-20		70	$^{\circ}$ C
RoHS	yes				

**SOLDERABILITY**

parameter	conditions/description	min	typ	max	units
hand soldering	for $3 \pm 0.5$ seconds	370	380	390	$^{\circ}$ C

## MECHANICAL DRAWING

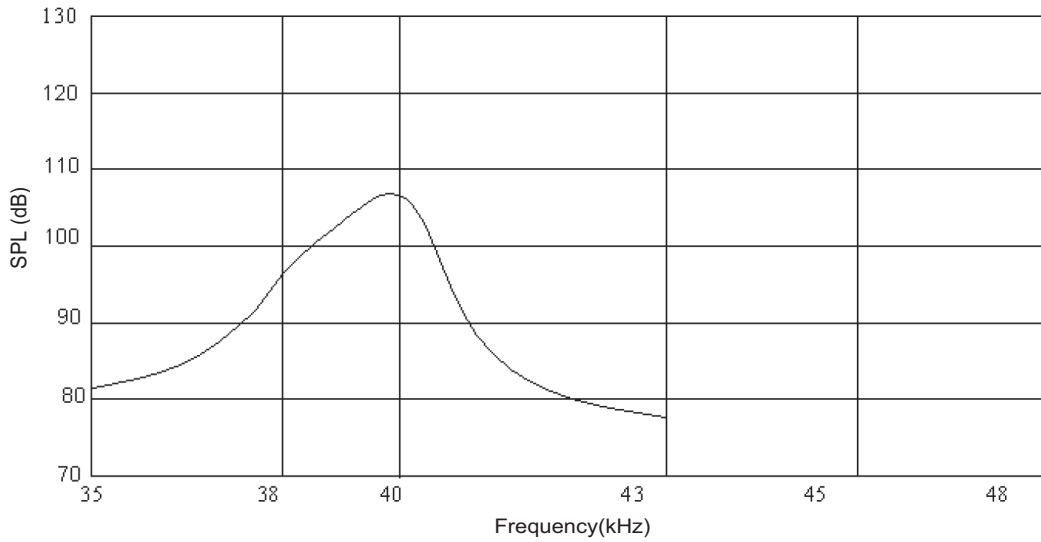
units: mm



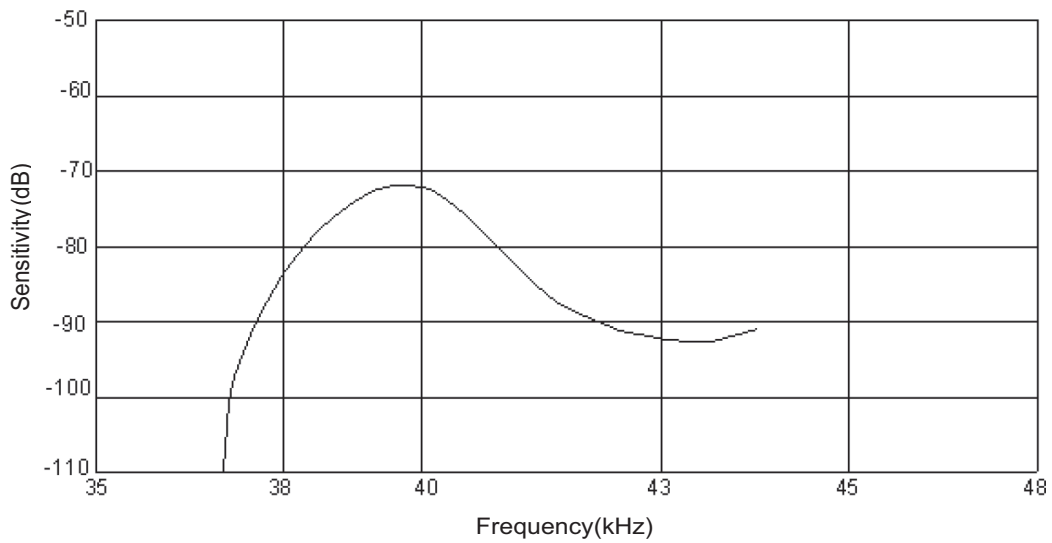
Recommended PCB Layout  
Top View

## BEAM PATTERNS

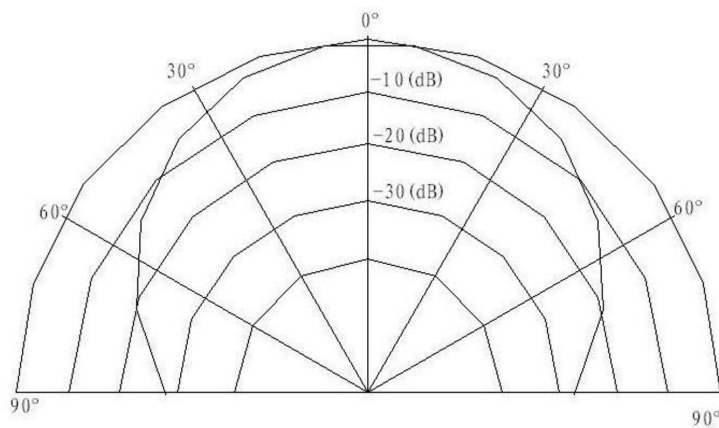
SPL vs. Frequency [Transmitter]



Sensitivity vs. Frequency [Receiver]



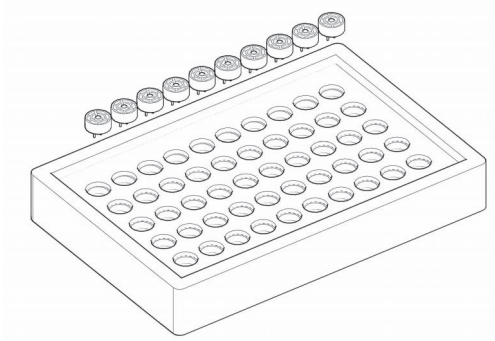
Directivity



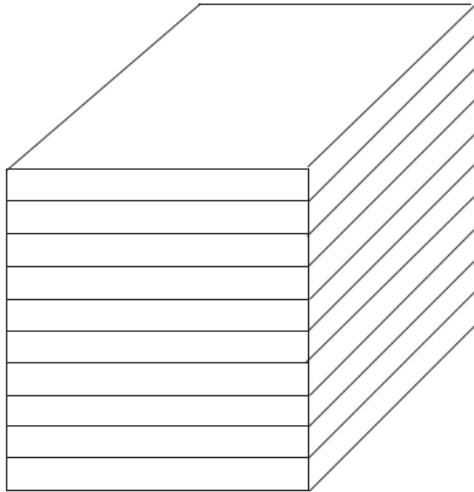
## PACKAGING

units: mm

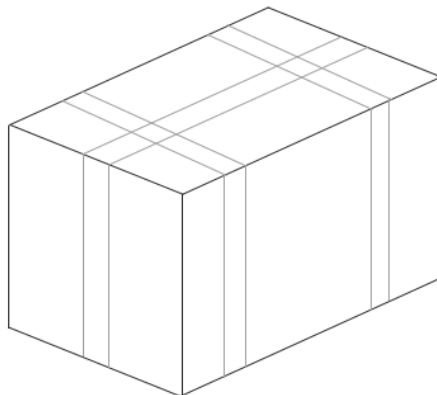
Tray Size: 240 x 160 x 30 mm  
Tray QTY: 50 pcs per tray  
Carton Size: 480 x 280 x 320 mm  
Carton QTY: 2,000 pcs per carton



50PCS/BOX  
BOX SIZE:24\*16\*3CM



10BOXES/STACK, TOTAL 500PCS  
STACK SIZE:24\*16\*24CM



2000PCS/CARTON  
CARTON SIZE:48\*28\*32CM

## REVISION HISTORY

rev.	description	date
1.0	initial release	12/02/2020
1.01	logo, datasheet style update	08/05/2022

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



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

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