

**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**

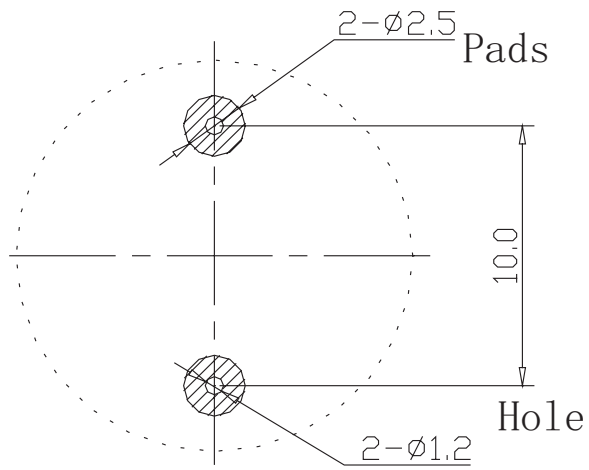
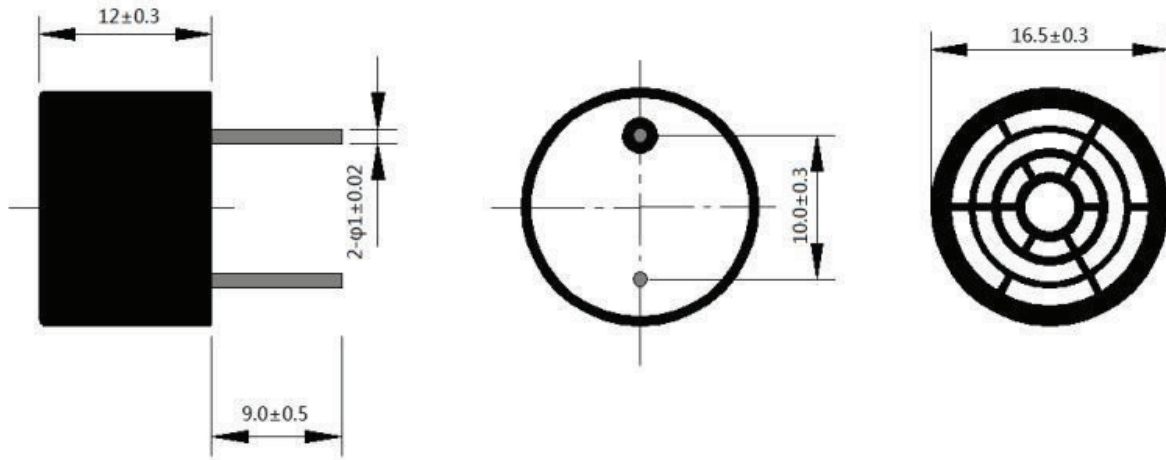
parameter	conditions/description	min	typ	max	units
type	transmitter/receiver				
operating voltage	at 39 kHz			150	Vp-p
frequency		38	39	40	kHz
sensitivity		-68			dBV/ $\mu$ Mbar
sound pressure level	at 10 V, 30 cm, sine wave	115			dB
directivity			80		degree
capacitance	at 1 kHz	1,920	2,400	2,880	pF
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

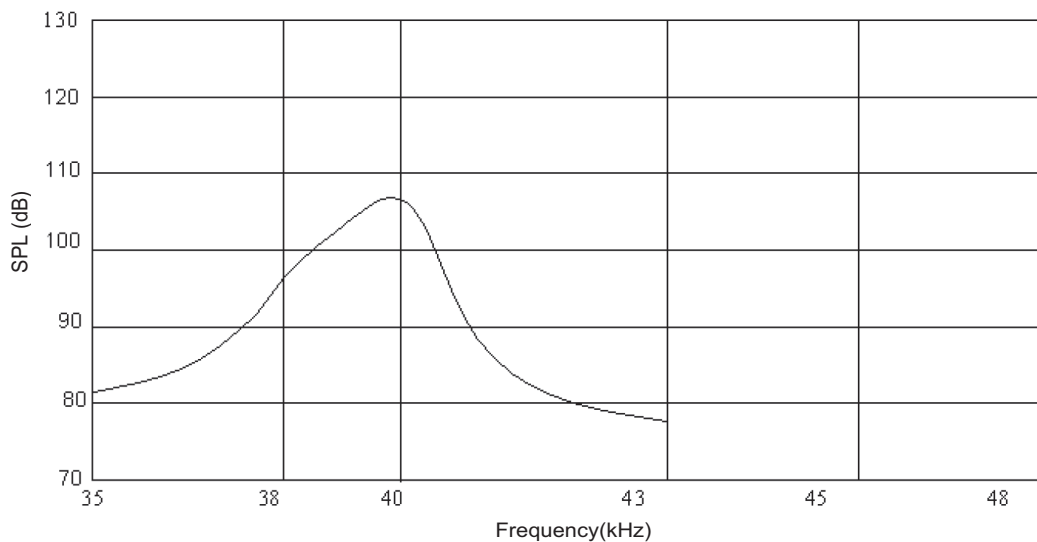
units: mm



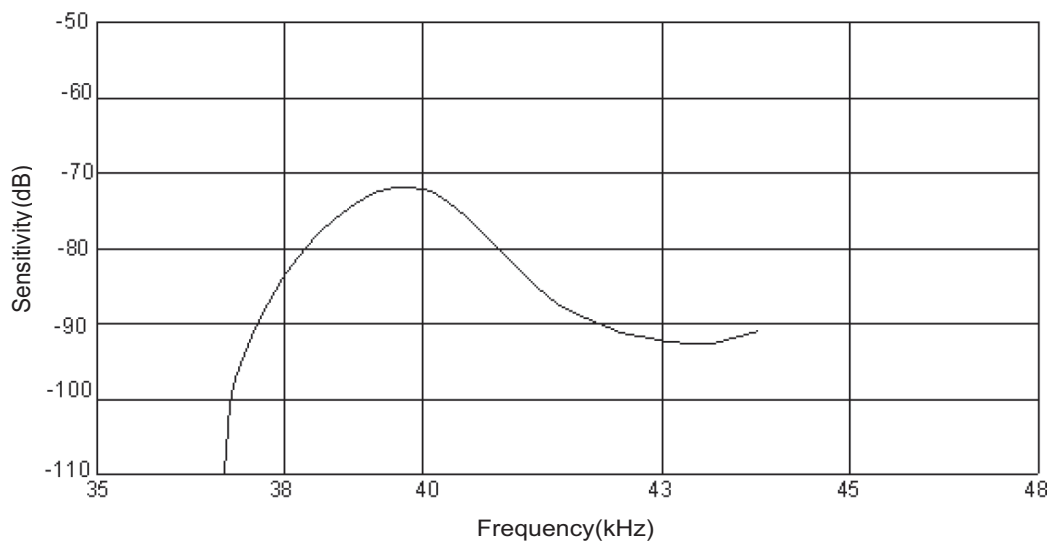
Recommended PCB Layout  
Top View

## BEAM PATTERNS

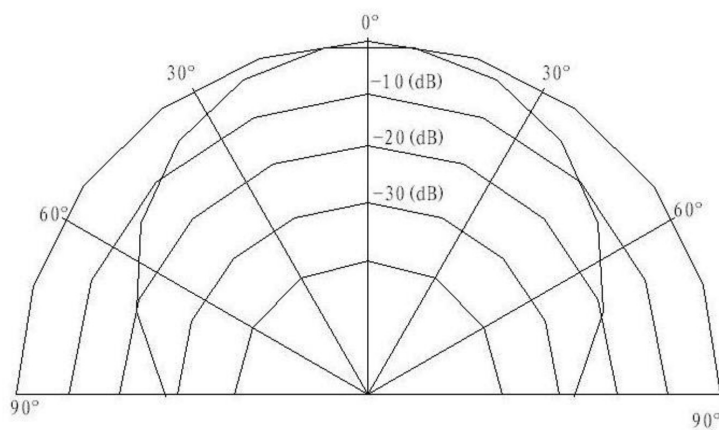
SPL vs. Frequency [Transmitter]



Sensitivity vs. Frequency [Receiver]



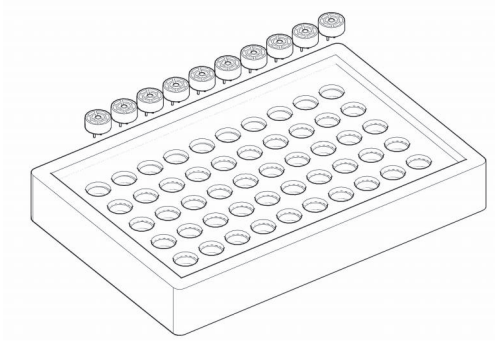
Directivity



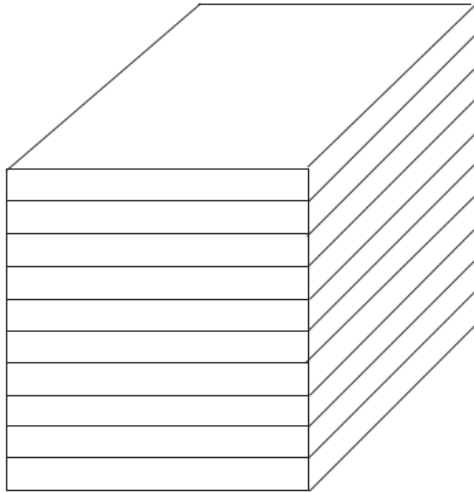
## PACKAGING

units: mm

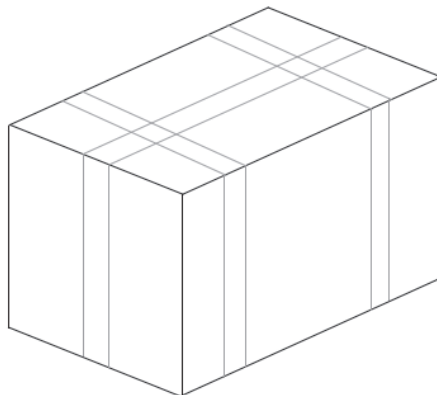
Tray Size: 240 x 160 x 30 mm  
Tray QTY: 50 pcs per tray  
Carton Size: 480 x 280 x 320 mm  
Carton QTY: 2,000 pcs per carton



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
1.02	CUI Devices rebranded to Same Sky	09/12/2024

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.

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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.

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