

MODEL: CUSP-TR80-15-2500-TH | **DESCRIPTION:** ULTRASONIC SENSOR

FEATURES

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


SPECIFICATIONS

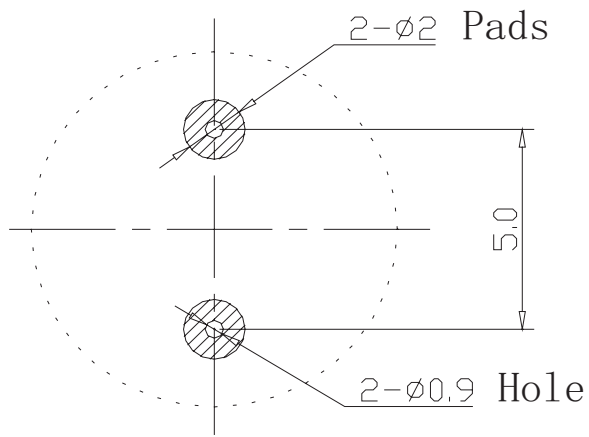
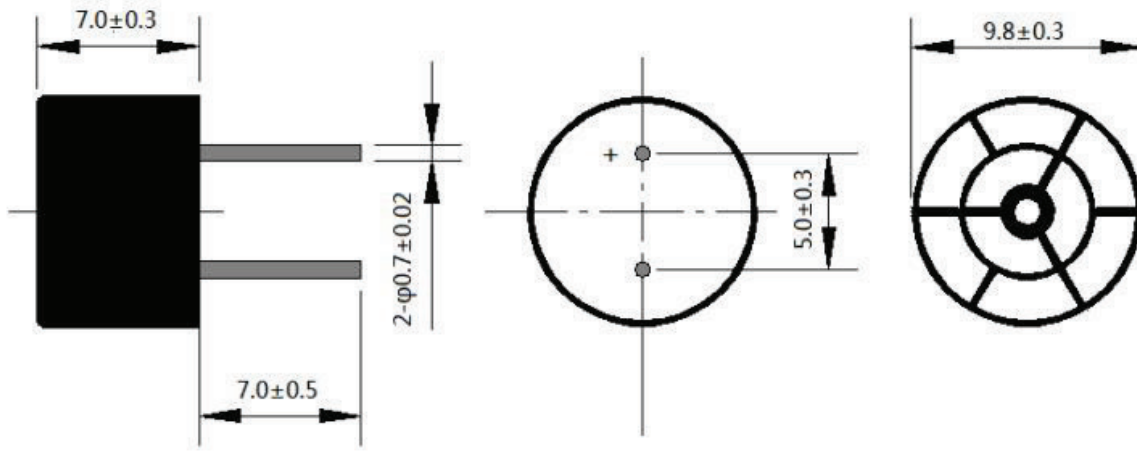
| parameter | conditions/description | min | typ | max | units |
|-----------------------|------------------------------|-------|-------|-------|-----------------|
| type | transmitter/receiver | | | | |
| operating voltage | at 40 kHz | | | 80 | Vp-p |
| frequency | | | 40 | | kHz |
| sensitivity | | -75 | | | dBV/ μ 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 | ABS | | | | |
| terminal | pins (iron with tin plating) | | | | |
| weight | | | 0.58 | | g |
| operating temperature | | -20 | | 80 | $^{\circ}$ C |
| RoHS | yes | | | | |

SOLDERABILITY

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

MECHANICAL DRAWING

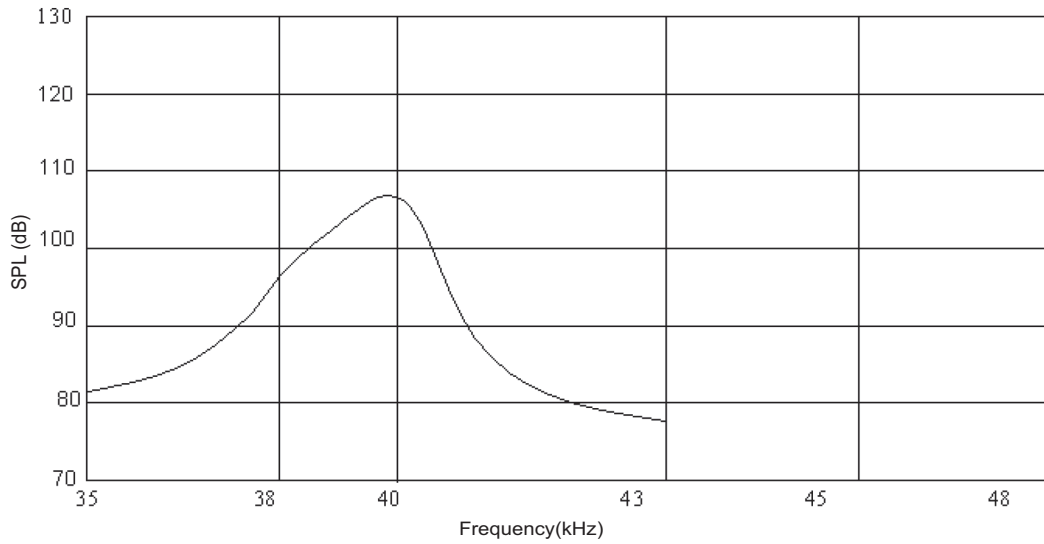
units: mm



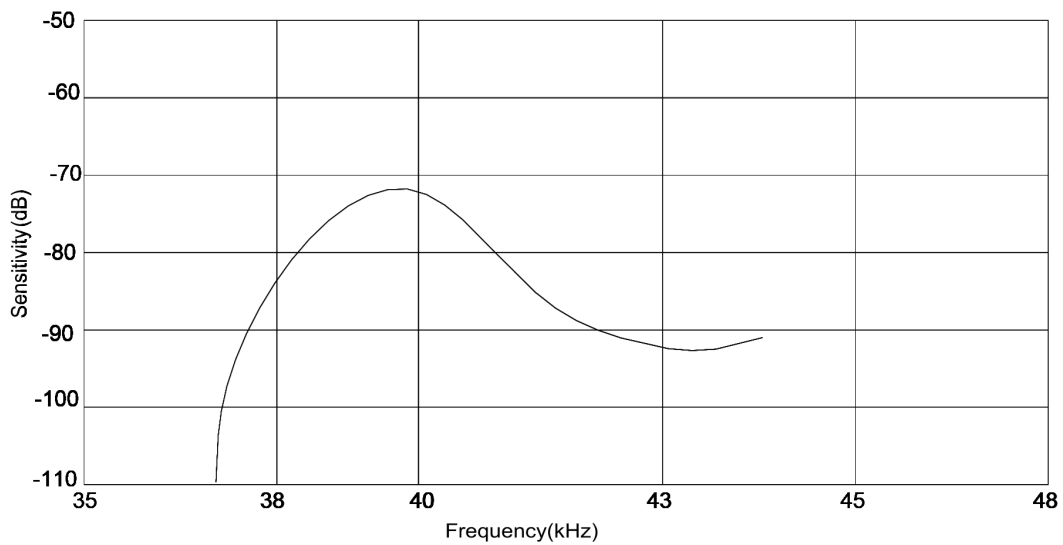
Recommended PCB Layout
Top View

BEAM PATTERNS

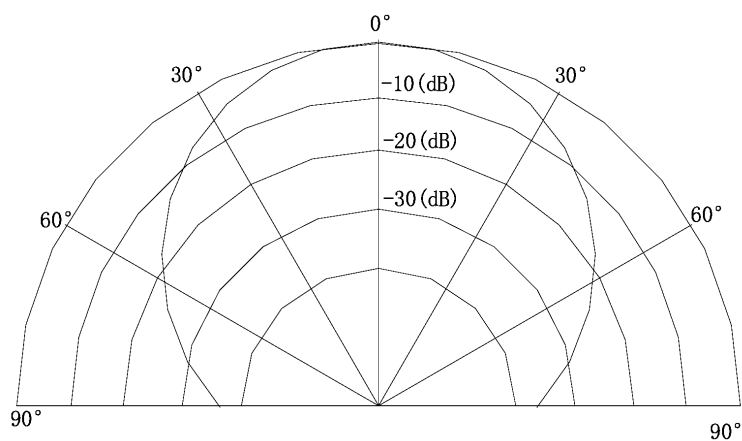
SPL vs. Frequency [Transmitter]



Sensitivity vs. Frequency [Receiver]



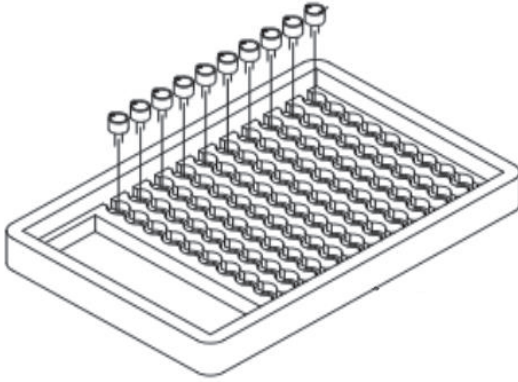
Directivity



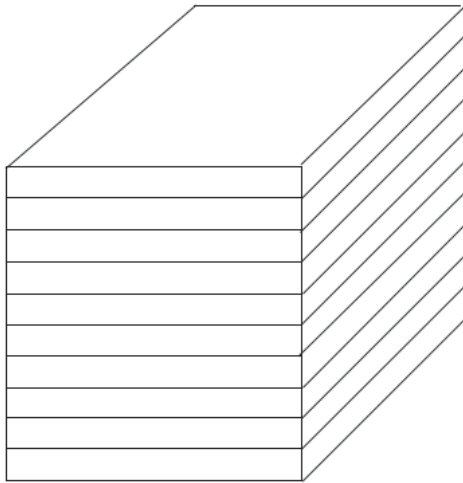
PACKAGING

units: mm

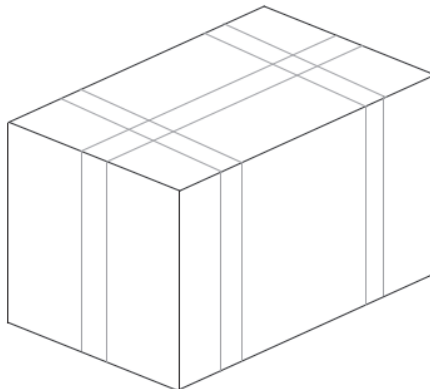
Tray Size: 230 x 135 x 35 mm
Tray QTY: 100 pcs per tray
Carton Size: 490 x 350 x 270 mm
Carton QTY: 4,000 pcs per carton



100PCS/BOX
BOX SIZE:23*13.5*5CM



10BOXES/STACK, TOTAL 1000PCS
STACK SIZE:23*13.5*28CM



4000PCS/CARTON
CARTON SIZE:49*35*27CM

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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