

**MODEL:** CUSA-TR801-065-2000-TH68 | **DESCRIPTION:** ULTRASONIC SENSOR**FEATURES**

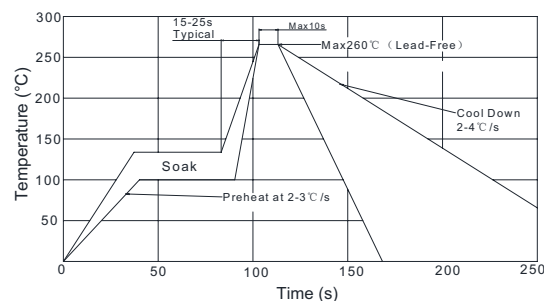
- aluminum can
- IP68 rated
- combination unit: receiver & transmitter
- through hole

**SPECIFICATIONS**

| parameter             | conditions/description        | min   | typ   | max   | units              |
|-----------------------|-------------------------------|-------|-------|-------|--------------------|
| type                  | transmitter/receiver          |       |       |       |                    |
| operating voltage     | at 40 kHz                     |       |       | 150   | Vp-p               |
| frequency             |                               | 38.5  | 40    | 41.5  | kHz                |
| echo sensitivity      | at 1 m                        | 140   |       |       | mV                 |
| sound pressure level  | at 10 V, 30 cm, sine wave     | 96    |       |       | dB                 |
| directivity           | at -6 dB                      | 65    | 80    | 95    | degree             |
| capacitance           | at 1 kHz                      | 1.600 | 2,000 | 2.400 | pF                 |
| detectable range      |                               | 0.3   |       | 6.5   | m                  |
| response time         |                               |       |       | 2.5   | ms                 |
| impedance             |                               |       |       | 3,000 | $\Omega$           |
| dimensions            | $\varnothing 18 \times 12$    |       |       |       | mm                 |
| material              | aluminum                      |       |       |       |                    |
| terminal              | pins (brass with tin plating) |       |       |       |                    |
| weight                |                               |       | 5.34  |       | g                  |
| operating temperature |                               | -40   |       | 80    | $^{\circ}\text{C}$ |
| storage temperature   |                               | -40   |       | 85    | $^{\circ}\text{C}$ |
| RoHS                  | yes                           |       |       |       |                    |
| IP level              | IP68                          |       |       |       |                    |

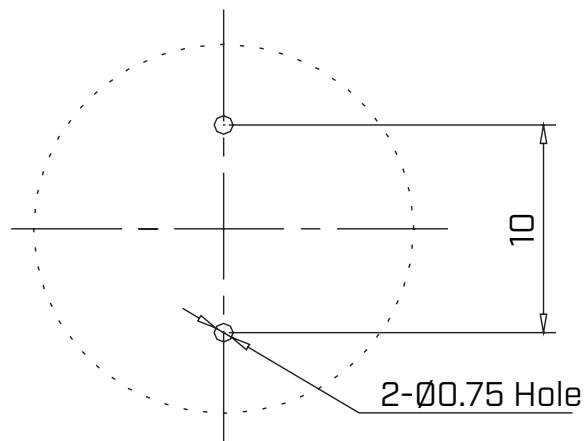
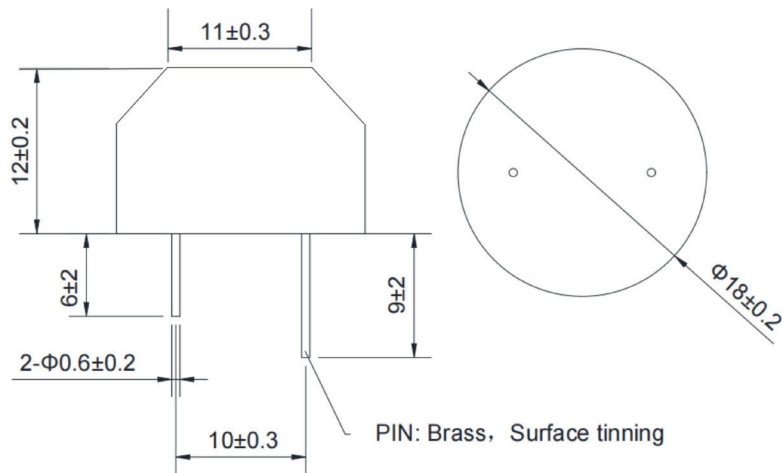
**SOLDERABILITY**

| parameter      | conditions/description | min | typ | max | units              |
|----------------|------------------------|-----|-----|-----|--------------------|
| wave soldering |                        |     |     | 260 | $^{\circ}\text{C}$ |



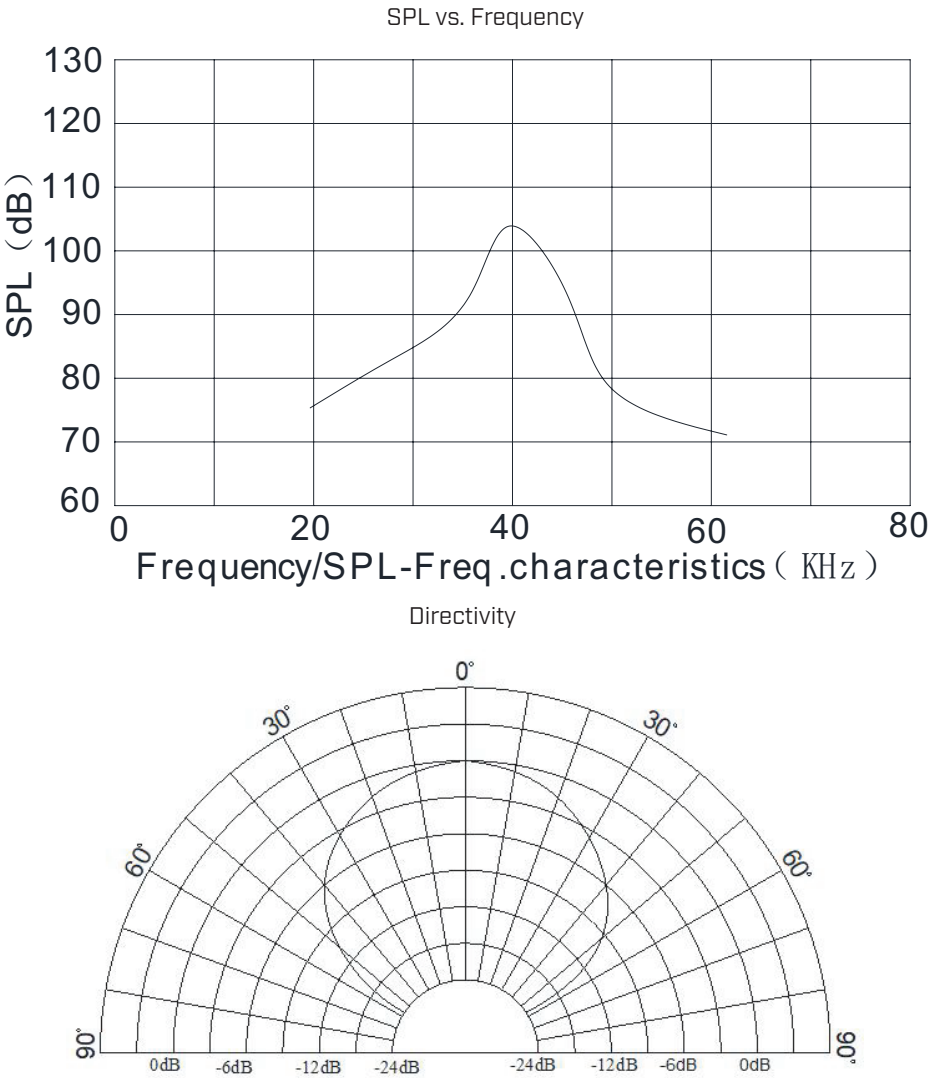
## MECHANICAL DRAWING

units: mm



Recommended PCB Layout  
Top View

BEAM PATTERNS



## PACKAGING

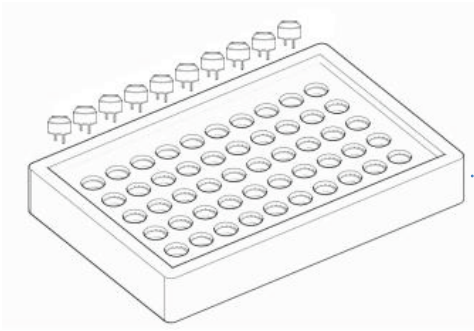
units: mm

Tray Size: 235 x 135 x 30 mm

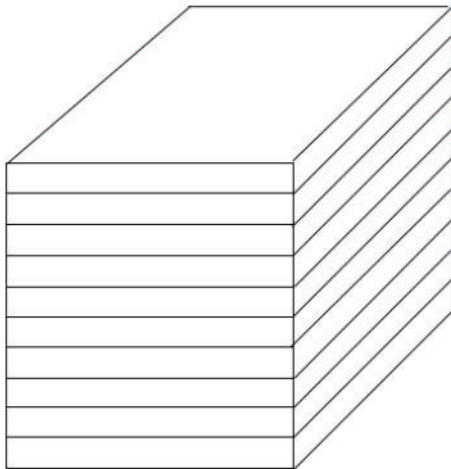
Tray QTY: 50 pcs per tray

Carton Size: 280 x 285 x 240 mm

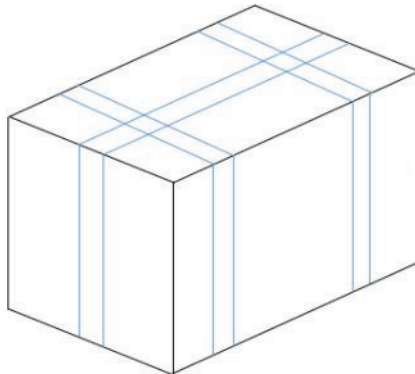
Carton QTY: 1,000 pcs per carton



50PCS/BOX  
BOX SIZE:23.5\*13.5\*3CM



10BOXES/STACK, TOTAL 500PCS  
STACK SIZE:23.5\*13.5\*31CM



1000PCS/CARTON  
CARTON SIZE:28\*28.5\*24CM

REVISION HISTORY

| rev. | description                       | date       |
|------|-----------------------------------|------------|
| 1.0  | initial release                   | 05/19/2022 |
| 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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