

**date** 08/05/2022

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# MODEL: CUSA-TR65-065-2200-TH68 | DESCRIPTION: ULTRASONIC SENSOR

#### **FEATURES**

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





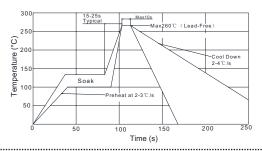


### **SPECIFICATIONS**

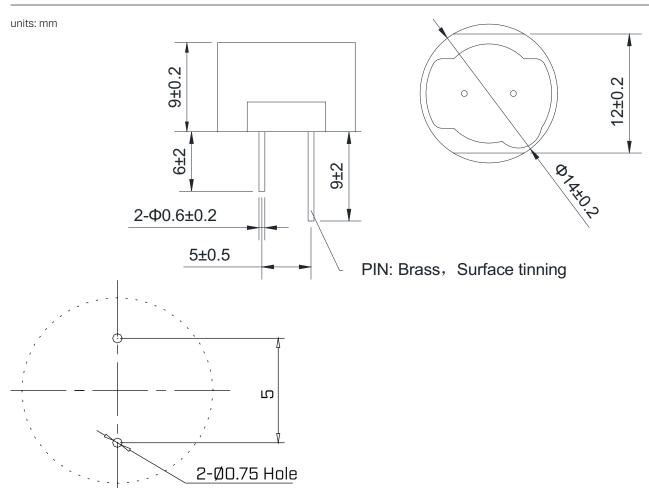
| parameter             | conditions/description                               | min       | typ       | max       | units            |
|-----------------------|--|-----------|-----------|-----------|------------------|
| type                  | transmitter/receiver                                 |           |           |           |                  |
| operating voltage     | at 40 kHz  |           |           | 150       | Vp-p             |
| frequency             |  | 38.5      | 40        | 41.5      | kHz              |
| echo sensitivity      | at 1 m   | 120       |           |           | mV               |
| sound pressure level  | at 10 V, 30 cm, sine wave                            | 100       |           |           | dB               |
| directivity           | horizontal angle at -6 dB<br>vertical angle at -6 dB | 105<br>50 | 120<br>65 | 135<br>80 | degree<br>degree |
| capacitance           | at 1 kHz   | 1,760     | 2,200     | 2,640     | pF               |
| detectable range      |  | 0.4       |           | 6.5       | m                |
| response time         |  |           |           | 1.8       | ms               |
| impedance             |  |           |           | 3,000     | Ω                |
| dimensions            | Ø14 x 9.0  |           |           |           | mm               |
| material              | aluminum   |           |           |           |                  |
| terminal              | pins (brass with tin plating)                        |           |           |           |                  |
| weight                |  |           | 2.92      |           | g                |
| operating temperature |  | -40       |           | 80        | °C               |
| storage temperature   |  | -40       |           | 85        | °C               |
| RoHS                  | yes  |           |           |           |                  |
| IP level              | IP68   |           |           |           |                  |

### **SOLDERABILITY**

| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| wave soldering |                        |     |     | 260 |       |

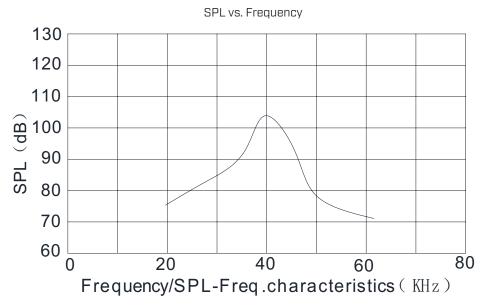


# **MECHANICAL DRAWING**

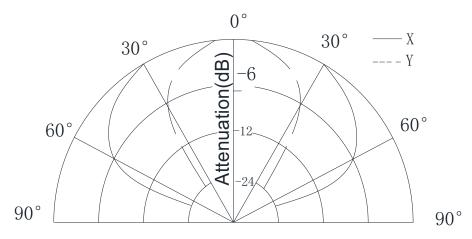


Recommended PCB Layout Top View

## **BEAM PATTERNS**



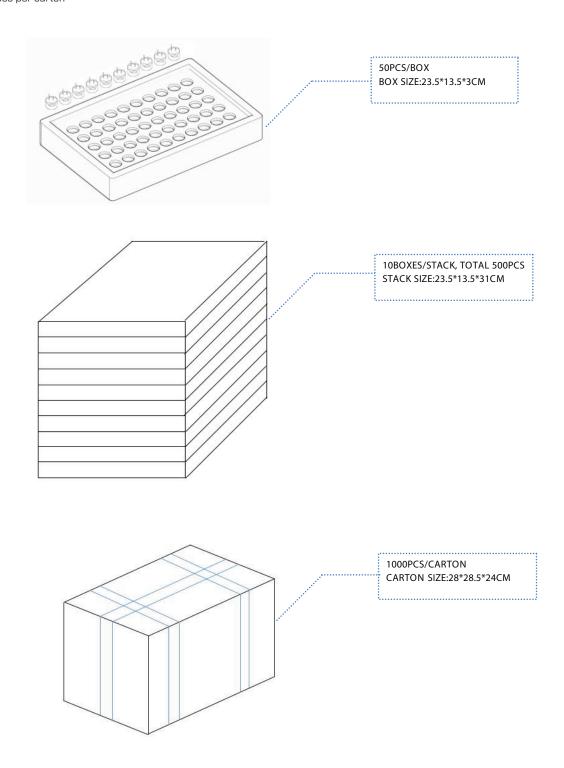




## **PACKAGING**

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



### **REVISION HISTORY**

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 05/18/2022 |
| 1.01 | logo, datasheet style update | 08/05/2022 |

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



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