

**date** 08/05/2022

page 1 of 4

# MODEL: CUSA-TR07-01-400-TH67 | DESCRIPTION: ULTRASONIC SENSOR

#### **FEATURES**

- · aluminum can
- IP67 rated
- · combination unit: receiver & transmitter
- high frequency





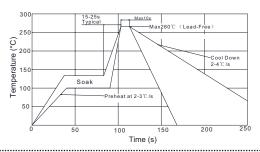


#### **SPECIFICATIONS**

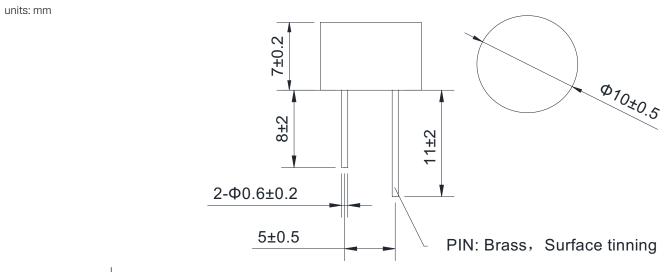
| parameter             | conditions/description        | min  | typ  | max  | units  |
|-----------------------|-------------------------------|------|------|------|--------|
| type                  | transmitter/receiver          |      |      |      |        |
| operating voltage     | at 300 kHz                    |      |      | 400  | Vp-p   |
| frequency             |                               | 285  | 300  | 315  | kHz    |
| echo sensitivity      | at 0.1 m                      | 200  |      |      | mV     |
| directivity           | at -6 dB                      | 5    | 7    | 9    | degree |
| capacitance           | at 1 kHz                      | 280  | 400  | 520  | pF     |
| detectable range      |                               | 0.05 |      | 1.0  | m      |
| response time         | at 200 Vp-p, 300 kHz          |      |      | 0.29 | ms     |
| dimensions            | Ø10 x 7.0                     |      |      |      | mm     |
| material              | aluminum                      |      |      |      |        |
| terminal              | pins (brass with tin plating) |      |      |      |        |
| weight                |                               |      | 1.24 |      | g      |
| operating temperature |                               | -40  |      | 80   | °C     |
| storage temperature   |                               | -40  |      | 85   | °C     |
| RoHS                  | yes                           |      |      |      |        |
| IP level              | IP67                          |      |      |      |        |

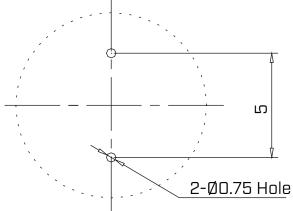
### **SOLDERABILITY**

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



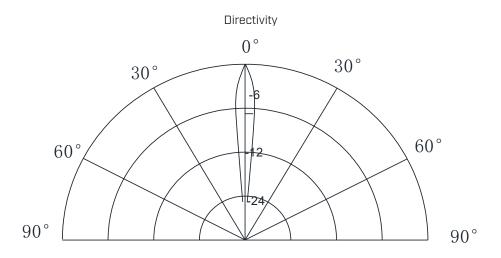
# **MECHANICAL DRAWING**





Recommended PCB Layout Top View

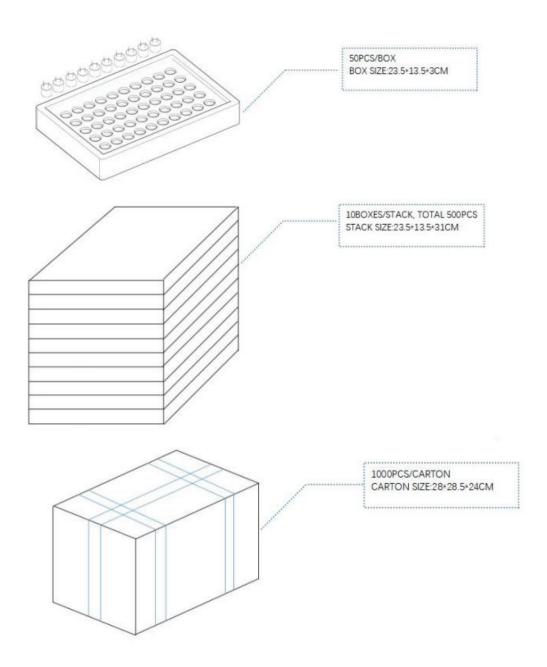
### **BEAM PATTERNS**



## **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              | 05/24/2022 |  |
| 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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