

**MODEL:** CMT-8503-90-SMT-TR | **DESCRIPTION:** MAGNETIC BUZZER TRANSDUCER**FEATURES**

- surface mount
- 90 dB
- magnetic
- externally driven

**SPECIFICATIONS**

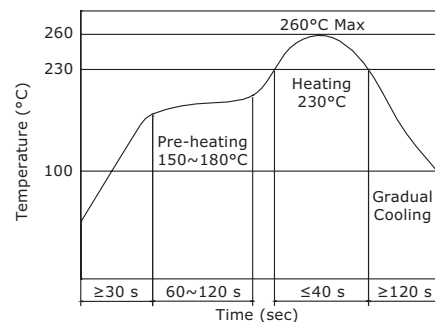
| parameter             | conditions/description                                                                 | min | typ   | max | units |
|-----------------------|----------------------------------------------------------------------------------------|-----|-------|-----|-------|
| rated voltage         | Vo-p  |     | 3.6   |     | Vo-p  |
| operating voltage     |                                                                                        | 2.5 |       | 4.5 | Vo-p  |
| current consumption   | at rated voltage, 3,100 Hz, ½ duty square wave                                         |     |       | 90  | mA    |
| rated frequency       |                                                                                        |     | 3,100 |     | Hz    |
| sound pressure level  | at 10 cm, rated voltage, 3,100 Hz, ½ duty square wave                                  | 90  |       |     | dB    |
| coil resistance       |                                                                                        | 17  | 20    | 23  | Ω     |
| dimensions            | 8.5 x 8.5 x 3.0                                                                        |     |       |     | mm    |
| weight                |                                                                                        |     | 0.6   |     | g     |
| material              | LCP                                                                                    |     |       |     |       |
| terminal              | surface mount (brass with gold plating)                                                |     |       |     |       |
| operating temperature |                                                                                        | -40 |       | 85  | °C    |
| storage temperature   |                                                                                        | -40 |       | 85  | °C    |
| RoHS                  | yes                                                                                    |     |       |     |       |

Notes: 1. All specifications measured at 25±3°C, humidity at 60~70%, under 86~106 kPa pressure, unless otherwise noted.

**SOLDERABILITY**

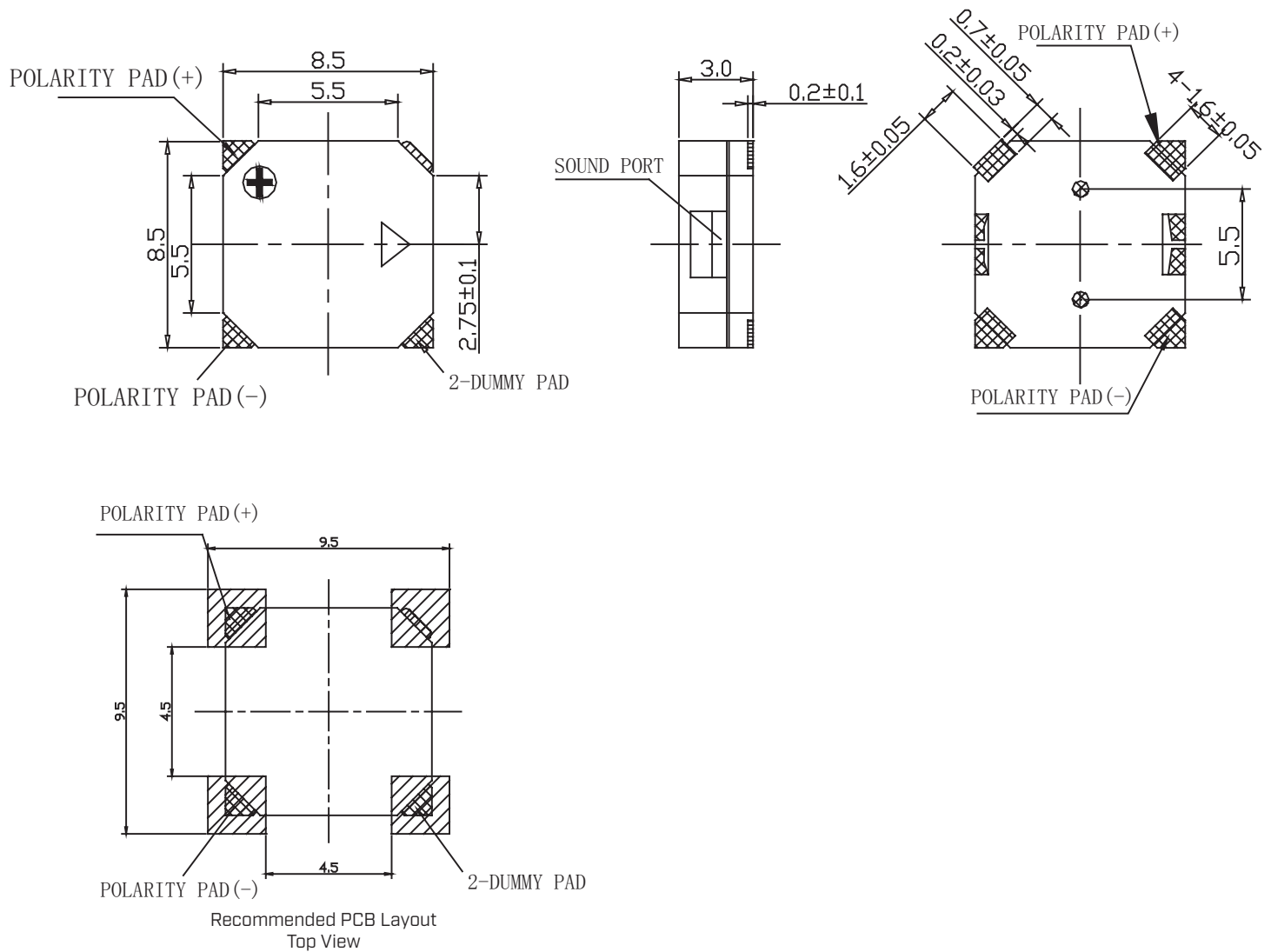
| parameter                      | conditions/description                   | min | typ | max | units |
|--------------------------------|------------------------------------------|-----|-----|-----|-------|
| reel storage                   | at relative humidity <60%                |     |     | 25  | °C    |
| reflow soldering <sup>2</sup>  | see recommended reflow soldering profile |     |     | 260 | °C    |
| drying conditions <sup>3</sup> | bake at 40°C for 24 hours                |     |     |     |       |

Note: 2. It is recommended to reflow solder within 48 hours from opening vacuum packaging at a temperature <30°C & relative humidity <60%.  
3. When out of packaging for more than 48 hours.

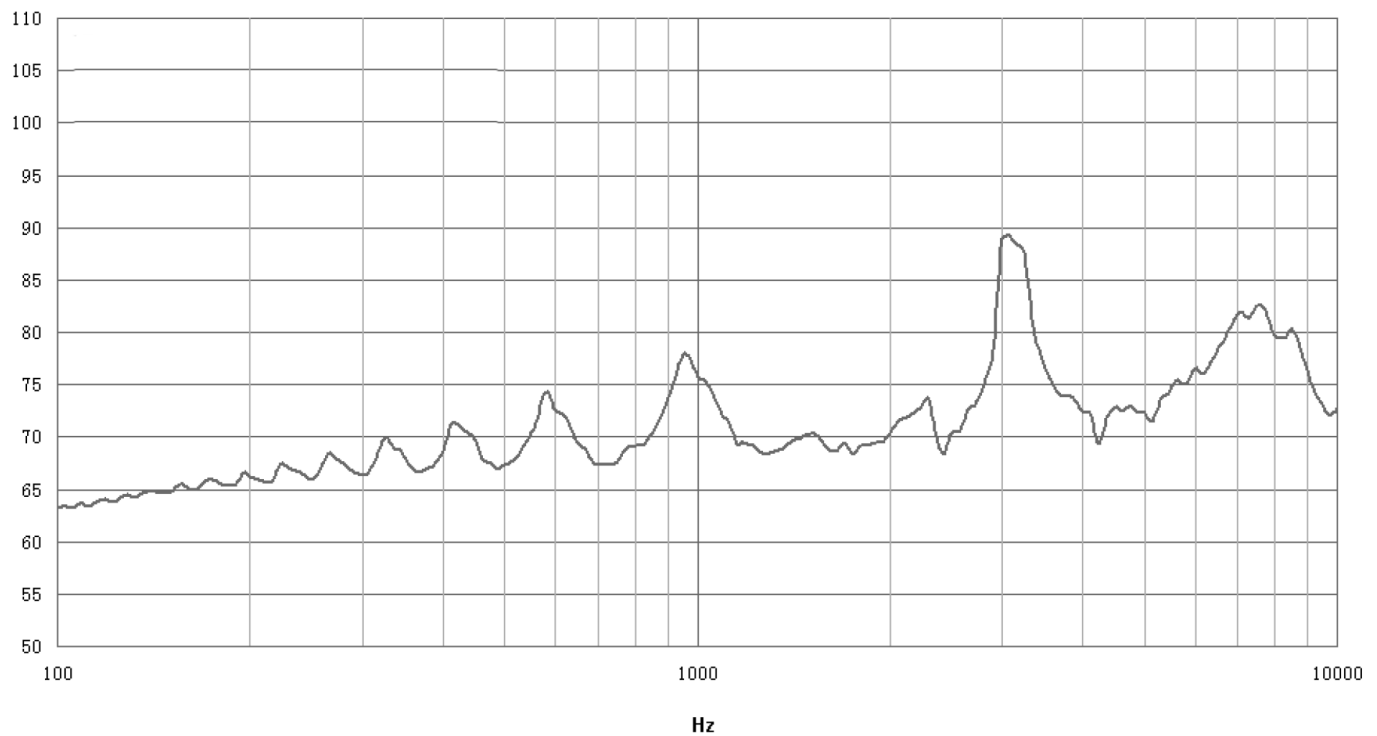


## MECHANICAL DRAWING

units: mm  
tolerance:  $\pm 0.5$  mm



## FREQUENCY RESPONSE CURVE



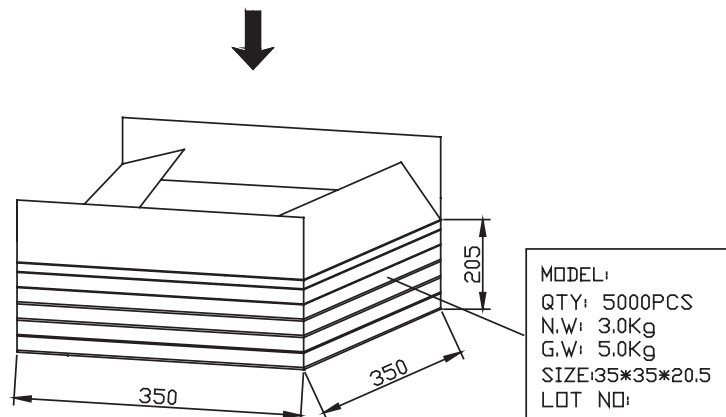
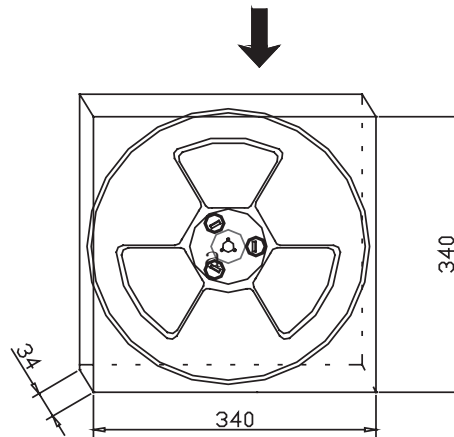
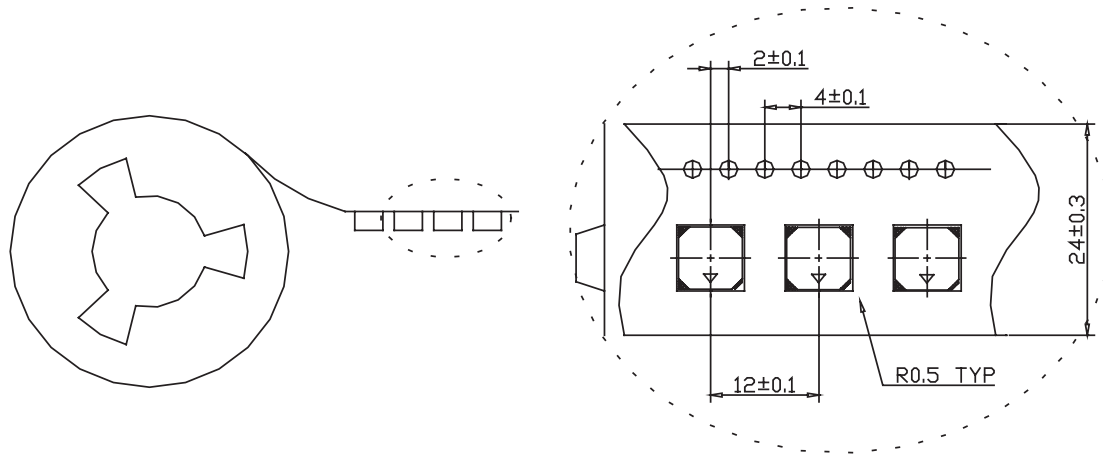
## APPLICATION CIRCUIT



## PACKAGING

units: mm

Reel Size:  $\varnothing 330$  mm  
Reel QTY: 1,000 pcs per reel  
Carton Size: 350 x 350 x 205 mm  
Carton QTY: 5,000 pcs per carton



## REVISION HISTORY

| rev. | description                  | date       |
|------|------------------------------|------------|
| 1.0  | initial release              | 07/15/2019 |
| 1.01 | brand update                 | 12/18/2019 |
| 1.02 | 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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