|  |  |
| --- | --- |
| Name | Security Level |
| BELLSINGTM Hornet Series AMBA Receiver | Open |
| Version | A Total of Pages |
| REV 1.0 |

BRC283C10013

Product Data Sheet

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Prepared by: | Zoe Wang |  | Date: | 2019-04-18 |
| Auditor: |  |  | Date: |  |
| Approver: |  |  | Date: |  |



Shenzhen Bellsing Acoustic Tech. Co., Ltd.

BRC283C10013 AMBA receiver

# Description

## Multi advanced miniature balanced-armature receiver for in-ear monitor and headset applications with full-band response. This transducer has balanced acoustic performance through low-frequency, mid-range frequency and high-frequency.

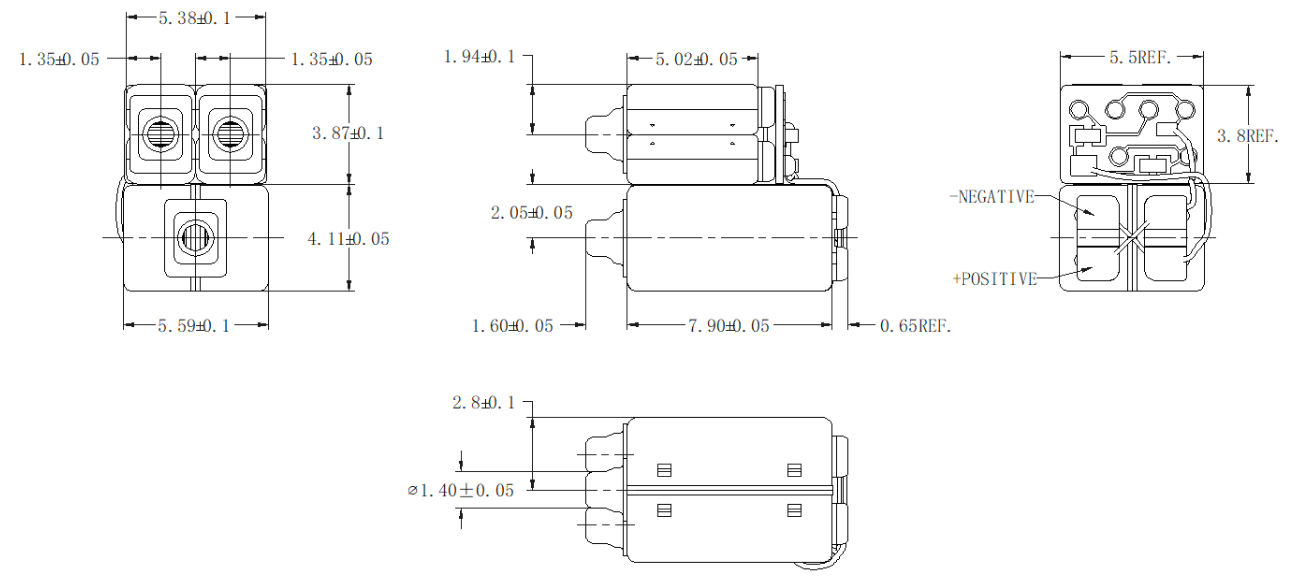
|  |  |
| --- | --- |
| Name: | Hornet Series AMBA Receiver |
| Part Number: | BRC283C10013 REV 1.0 |

# Construction Specification

## 

## Weight: 1.3 g

## Mechanical dimension：please refer to the drawing below



\*A positive voltage applied to the negative terminal (­) will result in an increase in pressure at the sound outlet.

# Features & Benefits

## A multi-way balanced armature system with added low frequency headroom

## Designed for pro-audio in-ear application

## Enables customized cross-over response to achieve target frequency response

## Outstanding efficiency

## Substantial maximum output

## Magnetic-radiation shielded

## Optimized mechanical shock resistance

# Electro-acoustic Specifications

## Test condition

## Acoustic tubing: Tubeless fixture

## Acoustic coupler: IEC711 coupler

## Constant voltage drive: 0.15V RMS

## Environment: 23℃, RH 50%

## Acoustic Parameter I

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Item | | Nominal | Tolerance | Comments |
| Sensitivity(dB) | @20Hz | 117.5 | +/- 3.0 |  |
| @200Hz | 118.5 | +/- 3.0 |  |
| @500Hz | 117 | +/- 3.0 |  |
| @1000Hz | 117 | +/- 3.0 |  |
| Peak1 | Frequency (Hz) | 2360 | +/- 350 |  |
| SPL(dB) | 126 | +/- 3.0 |  |
| Peak2 | Frequency (Hz) | 4750 | +/- 500 |  |
| SPL(dB) | 127 | +/- 3.0 |  |
| Peak3 | Frequency (Hz) | 11000 | +/- 1500 |  |
| SPL(dB) | 119 | +/- 3.0 |  |
| Maximum output @ Peak frequency (dB) | | 139 | N/A | THD<10% |

## Acoustic Parameter II

|  |  |  |  |
| --- | --- | --- | --- |
| Test Item | | Nominal | Comments |
| THD (%) | @1/2 1st peak | <5.0 |  |
| @1/3 1st peak | <5.0 |  |

## Electric Parameter

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test Item | | Nominal | Tolerance | Comments |
| Impedance(Ω) | @500Hz | 18 | +/- 15% |  |
| @1000Hz | 31.5 | +/- 15% |  |
| DCR(Ω) | | 12.5 | +/- 10% |  |

## Nominal Frequency Response Curve

# Package and Storage Condition

## Package: PET bubble pack, 1 pcs per bubble, 100 pcs per pack

## Storage temperature range: -40℃ ~ 60℃

## Storage humidity range: <60%