

# ESC210CC30017

## Description

Miniature balanced-armature receiver with magnetic-radiation shielding for use in ITE (In The Ear), BTE (Behind the Ear) applications with standard response. This transducer can also play an excellent role as a woofer / wide-band driver in commercial hearing products



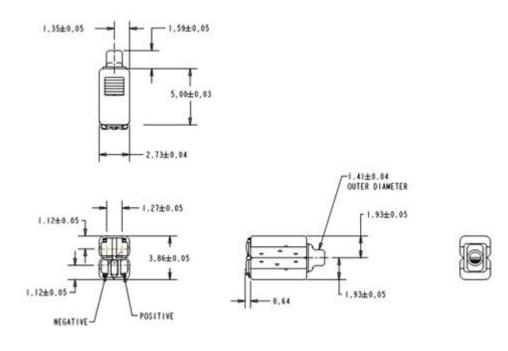
## **Product Feature**

- Perfect package size for ITE, BTE applications
- Outstanding efficiency
- Substantial maximum output
- Magnetic-radiation shielded
- Optimized mechanical shock resistance
- Water resistant

## **Mechanical Data**

Weight: 0.32 g Mechanical dimension: please refer to the drawing below





## **Test condition**

Acoustic tubing: 10.0 mm of 1.0 mm diameter tubing Acoustic coupler: IEC711 coupler (volume of 2cc) Constant voltage drive: 0.85 V RMS Environment: 23 °C, RH 50%

## **Acoustic Parameter I**

Test Item		Nominal	Tolerance	Comments
Sensitivity (dB)	@ 200Hz	103.0	+/- 3.0	
	@ 500Hz	101.0	+/- 3.0	
	@ 1000Hz	100.0	+/- 3.0	
Peak 1	Frequency (Hz)	2900	+/- 350	
	SPL (dB)	108.0	+/- 3.0	
Peak 2	Frequency (Hz)	6000	+/- 500	
	SPL (dB)	103.0	+/- 3.0	
Maximum output @ peak frequency (dB)		123.5	N/A	THD<10%

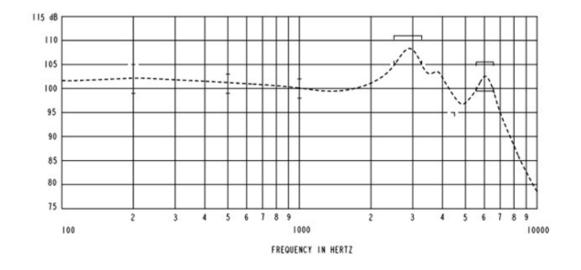


## **Acoustic Parameter II**

Test Item		Nominal	Comments
THD (%)	@ 1/2 1 <sup>st</sup> peak	< 5.0	
	@ 1/3 1 <sup>st</sup> peak	< 5.0	
	@ 500 Hz	< 5.0	

Test Item		Nominal	Tolerance	Comments
Impedance (ohm)	@ 500Hz	31.0	+/- 15%	
	@ 1000Hz	43.0	+/- 15%	
DCR (ohm)		25.0	+/- 10%	

## **Nominal Frequency Response Curve**



## Package and Storage Condition

- Package: PET bubble pack, 2 pc per bubble, 200pcs per pack
- Storage temperature range: -40°C ~ 60°C
- Storage humidity range: < 60%



## ESCC350H32063 AMBA receiver

#### Description

Advanced Miniature balanced-armature (AMBA) receiver with magnetic-radiation shielding for use in ITE (In The Ear), CIC (Complete in the Canal) and IIC (Invisible in the Canal) & In-ear Monitor applications with standard response. This transducer can also play an excellent role as a tweeter in commercial hearing products.

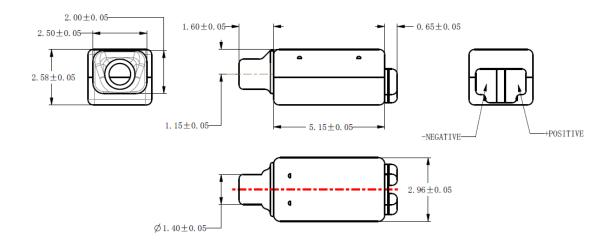
Name:	Hornet Series AMBA Receiver
Part Number:	ESC350H32063 REV A

#### **Construction Specification**



#### Weight: 0.16 g

Mechanical dimensions: please refer to the drawing below





#### **Features & Benefits**

- Perfect package size for ITE, CIC, IIC & In-ear Monitor applications
- Outstanding efficiency
- Substantial maximum output
- Magnetic-radiation shielded
- Optimized mechanical shock resistance
- Water resistance

#### **Electro-acoustic Specifications**

#### **Test condition**

- Acoustic tubing: 10.0mm of 1.0mm diameter tubing
- Acoustic coupler: IEC711 coupler (volume of 2cc)
- Constant voltage drive: 0.12V RMS
- Environment: 23°C, RH 50%

#### **Acoustic Parameter I**

Test Item		Nominal	Tolerance	Comments
	@200Hz	106	+/- 3.0	
Sensitivity(dB)	@500Hz	105	+/- 3.0	
Constantly (dD)	@1000Hz	105	+/- 3.0	
	Frequency (Hz)	3150	+/- 350	
Peak1	SPL(dB)	117	+/- 3.0	
	Frequency (Hz)	5600	+/- 500	
Peak2	SPL(dB)	111	+/- 3.0	
Maximum output@Peak frequency (dB)		128	N/A	THD<10%

## **Acoustic Parameter II**

Test Item		Nominal	Comments
	@1/2 1 <sup>st</sup> peak	<5.0	

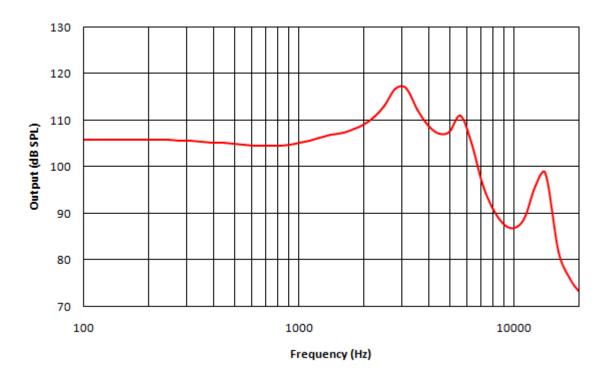


THD(%)	@1/3 1 <sup>st</sup> peak	<5.0	
1 HD(%)	@500Hz	<5.0	

#### **Electric Parameter**

Test Item		Nominal	Tolerance	Comments
	@500Hz	26.6	+/- 15%	
Impedance(Ω)	@1000Hz	36.8	+/- 15%	
DCR(Ω)		22.0	+/- 10%	

## **Nominal Frequency Response Curve**



## Package and Storage Condition

- Package: PET bubble pack, 2pc per bubble, 200pcs per pack
- Storage temperature range: -40°C ~ 60°C
- Storage humidity range: <60%