

# Bridgetek Pte Ltd

## Datasheet

### CleO-Speaker Module



## 1 Introduction

The *CleO*-Speaker module is a speaker accessory for the *CleO* series –The Smart TFT Display for Arduino. It consists of a 0.5W 8 OHM speaker driver preinstalled inside a black speaker.

With the *CleO*-Speaker module, users can playback music/tones whenever the *CleO* application requires it. There is also an audio line in capability provided to allow users to input audio from an external source to *CleO*'s on board speaker amplifier.

## 2 Ordering Information

Part No.	Description
<i>CleO</i> -SPK1	<i>CleO</i> -Speaker , 8 OHM 0.5 W speaker driver in black bezel

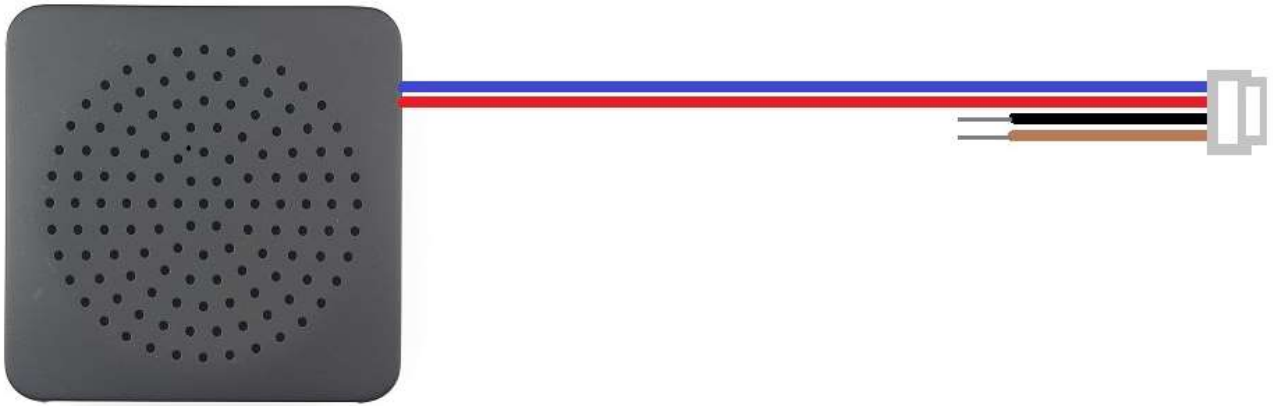
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### 3 Module Technical Specification

#### 3.1 Technical Data



**Figure 1 - CleO Speaker**

1	Part Number	CleO-SPK1
2	Dimension	63(W)X63(L)X23.8(D) MM
3	Norminal Impedance	8 OHM ± 15 %
4	Norminal power	0.5W
5	Rated Power	1W
6	Resonance Frequency (FO)	400Hz ±20% Hz
7	Output SPL	87dB ±3dB /1Watt 0.5Meter

**Table 1 - Technical Data**

See the **Table 2** for the cable pin out definition

Pin No	Pin Description
1	Speaker Negative Terminal
2	Speaker Positive Terminal
3	Ground
4	External Line In

**Table 2 - Pin Out Definition**

Note: A speaker cable is shipped together with CleO35 and CleO50 modules.

### 3.2 Typical Performance Characteristics

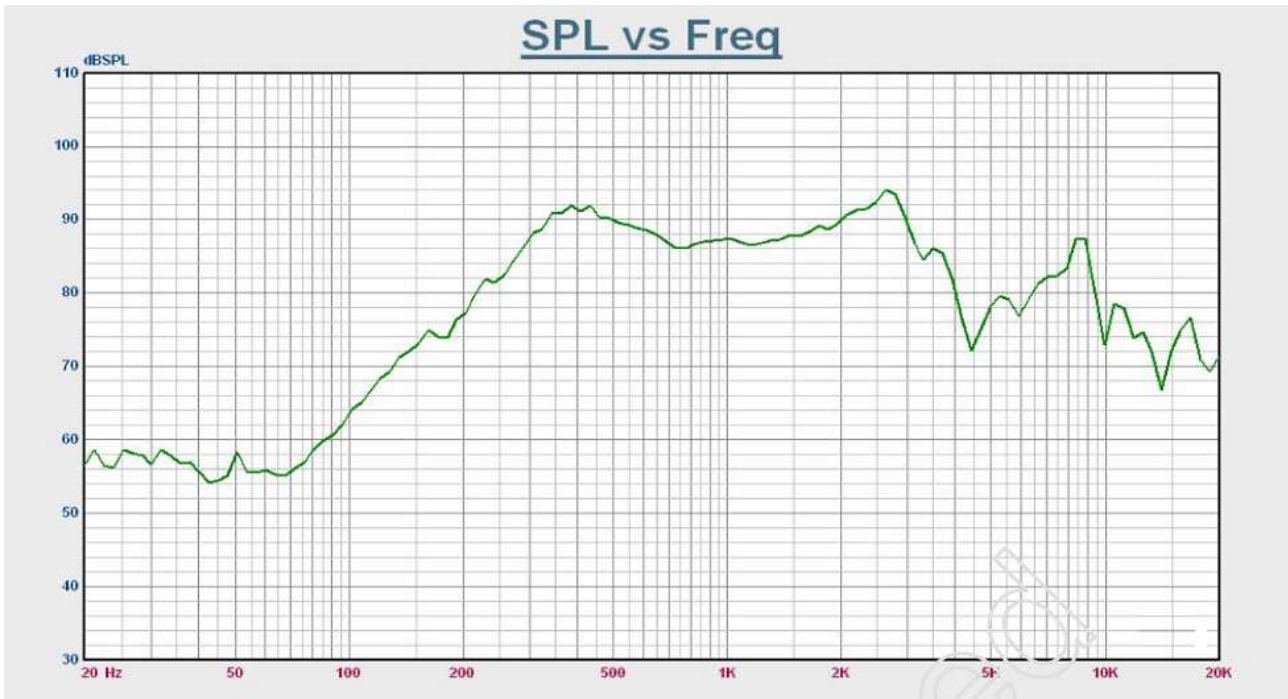


Figure 2 - SPL Vs Frequency Curve

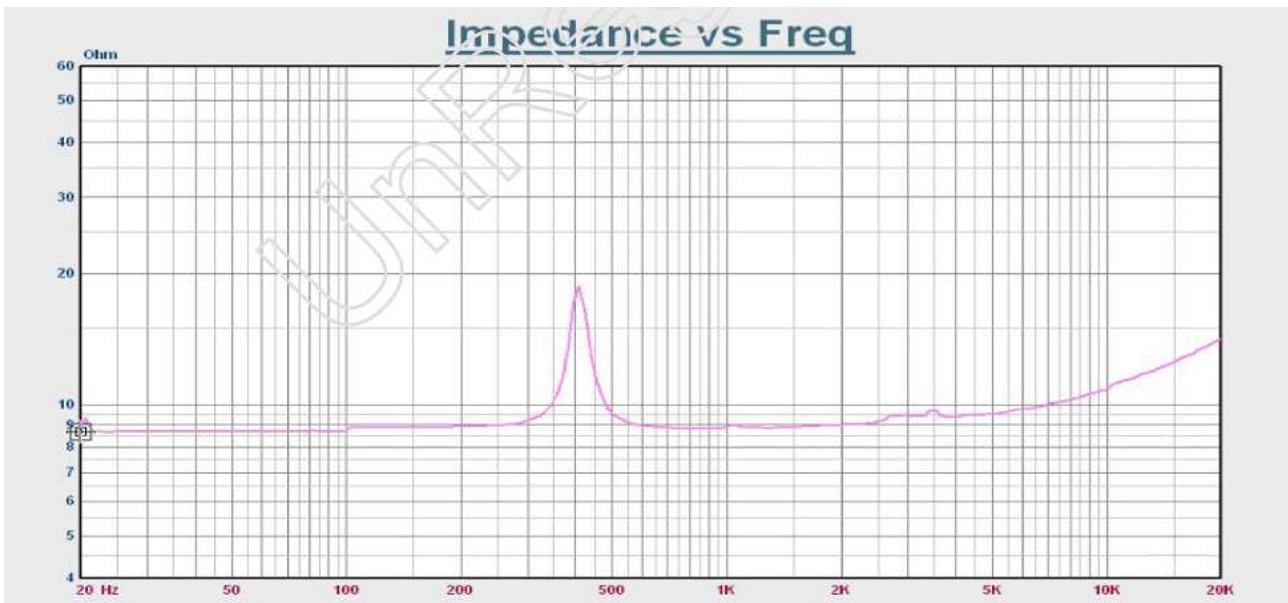
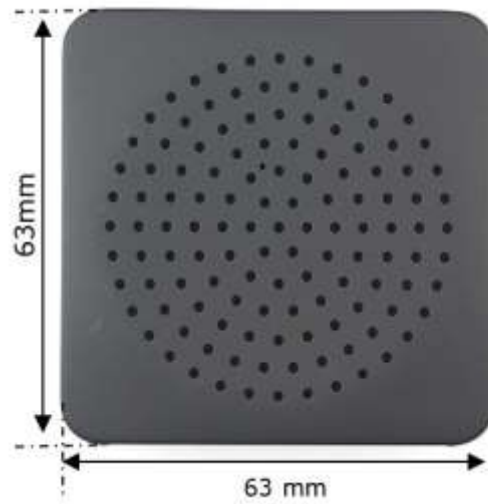


Figure 3 - Impedance Vs Frequency Curve

## 4 Mechanical Dimensions

### 4.1 Speaker Module Dimension



**Figure 4 - CleO Speaker Module Dimensions**

### 4.2 Speaker Enclosure Dimension

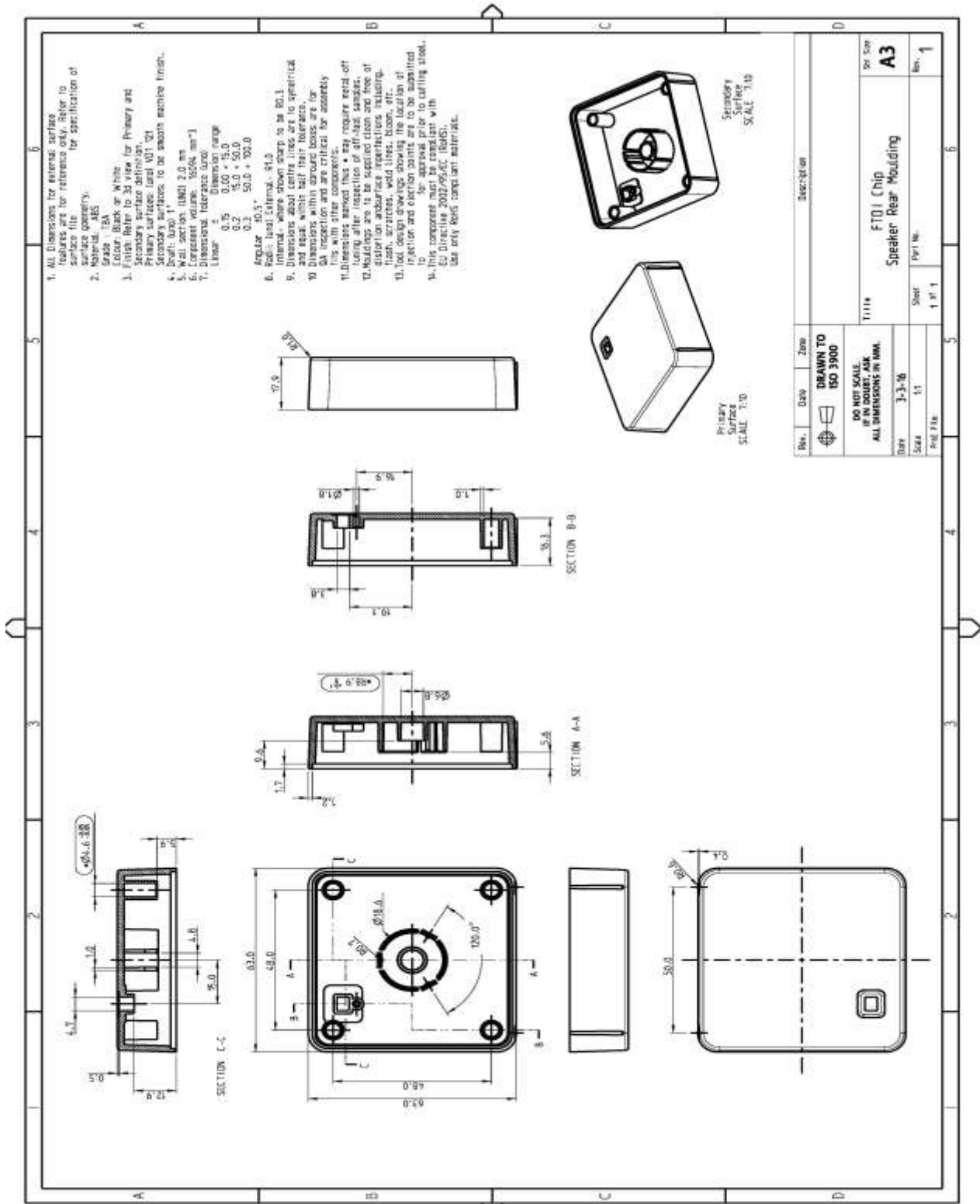
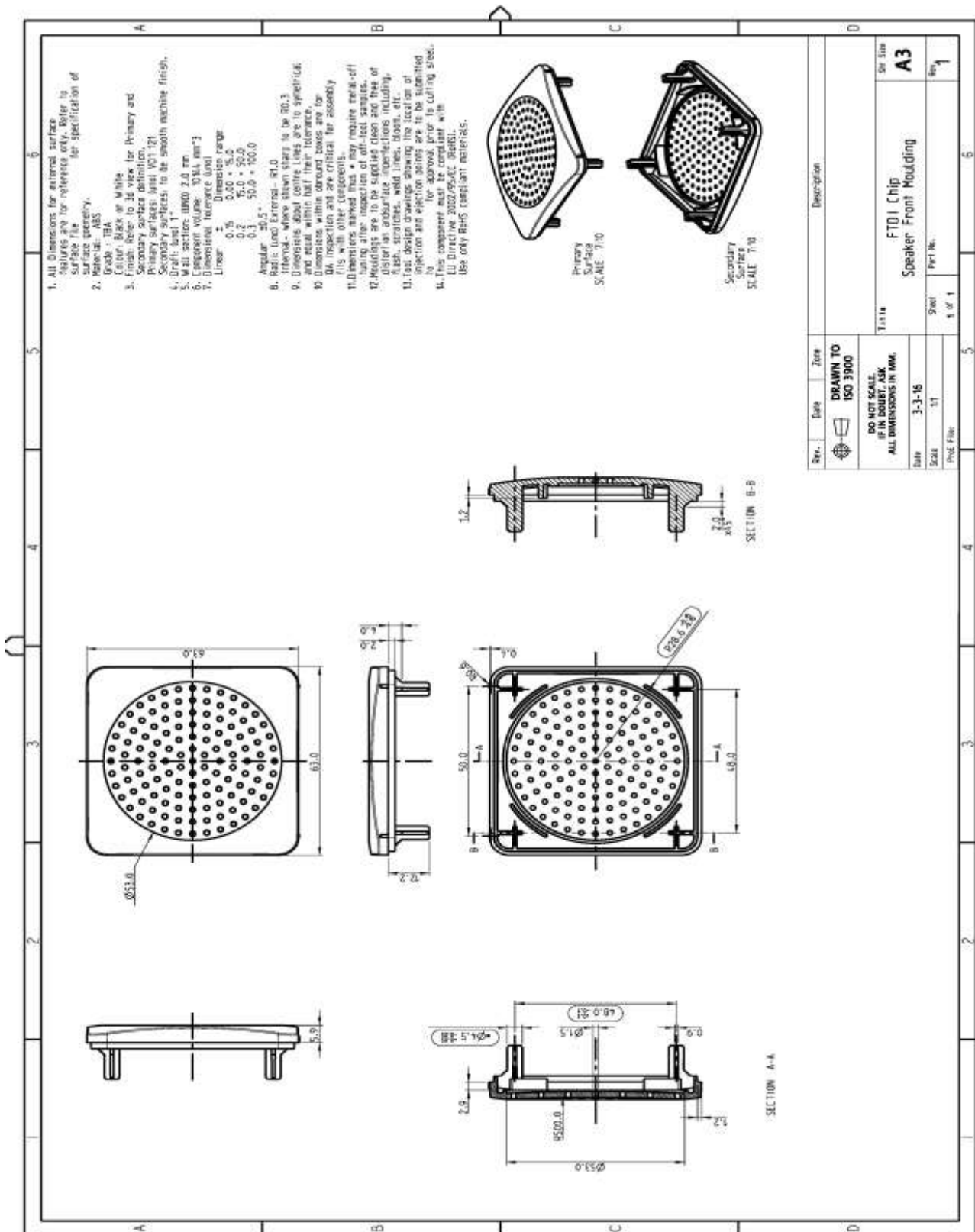


Figure 5 - CleO Speaker Enclosure Drawing (Rear)



**Figure 6 - CleO Speaker Enclosure Drawing (Front)**

## 5 Contact Information

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## Appendix A – References

### Document References

NA

### Acronyms and Abbreviations

Terms	Description
SPL	Sound Pressure Level

## Appendix B - List of Figures and Tables

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## Appendix C – Revision History

Document Title: CleO-Speaker Module Datasheet  
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Document Feedback: [Send Feedback](#)

Revision	Changes	Date
Version 1.0	Initial Release	2016-04-21
Version 1.1	Dual branding to reflect the migration of the product to the Bridgetek name – logo changed, copyright changed, contact information changed	2016-09-16
Version 1.2	Document migrated from FTDI/BRT Dual branding to BRT; Removed Speaker Cable information from datasheet	2017-09-21