

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

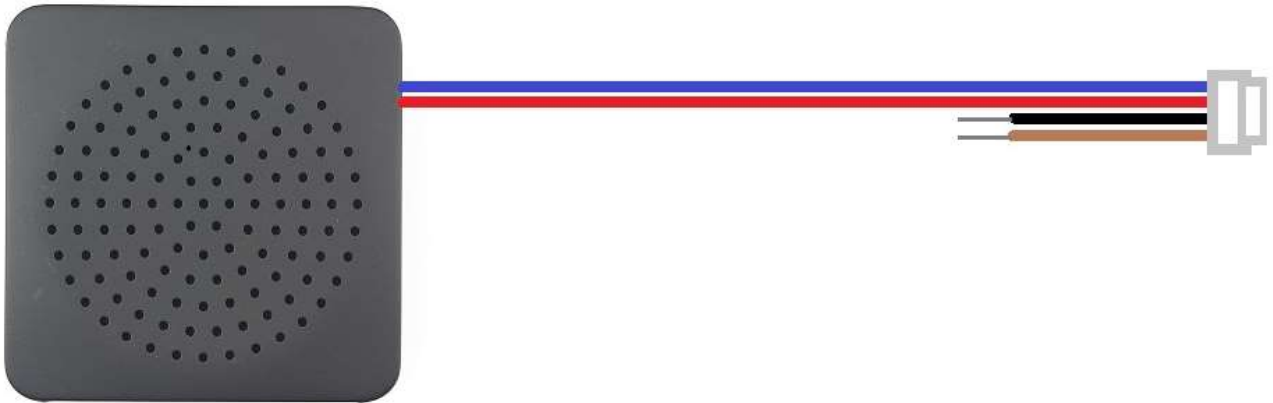


Figure 1 - CleO Speaker

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

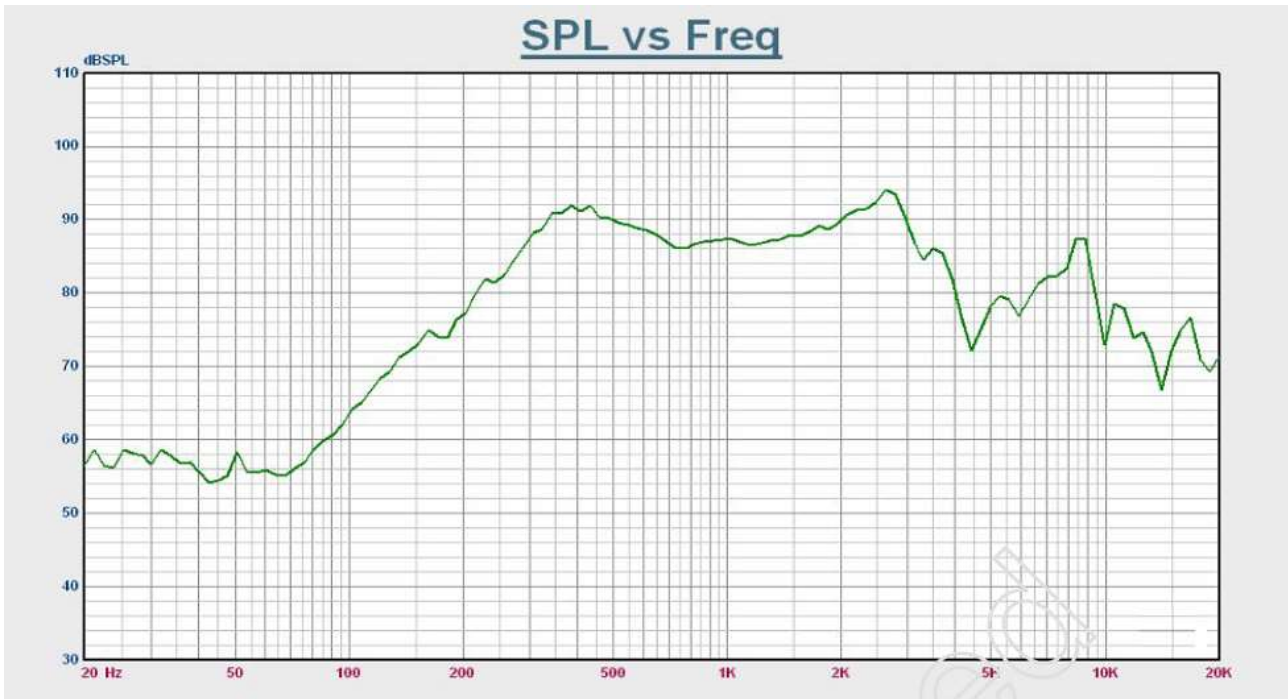


Figure 2 - SPL Vs Frequency Curve

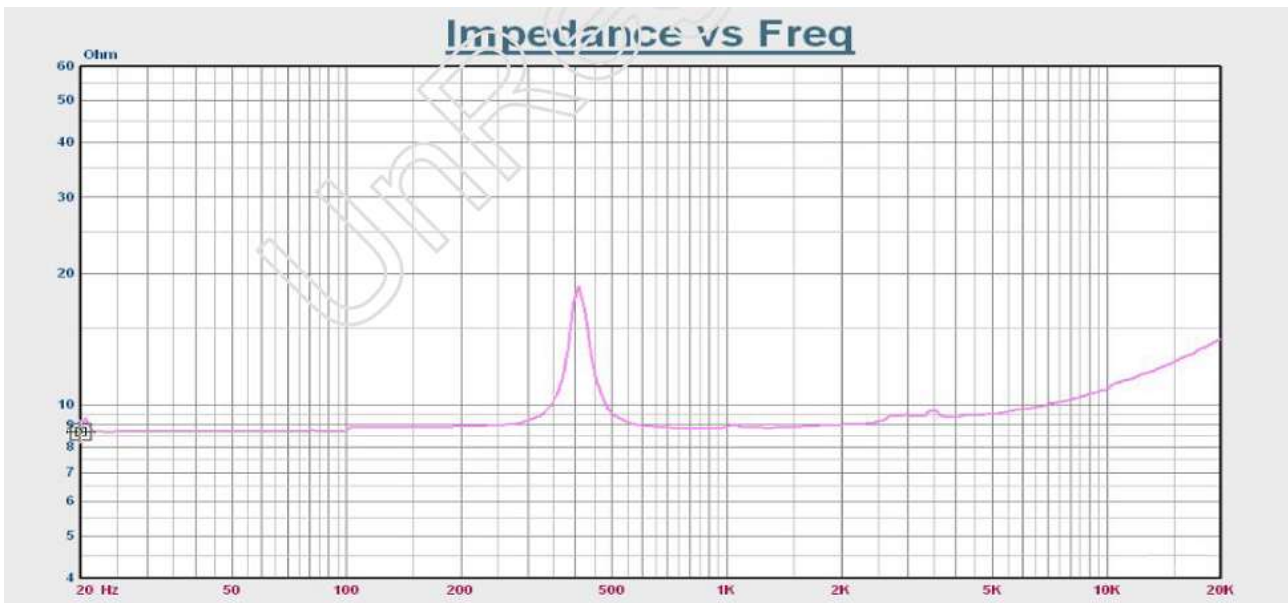


Figure 3 - Impedance Vs Frequency Curve

4 Mechanical Dimensions

4.1 Speaker Module Dimension

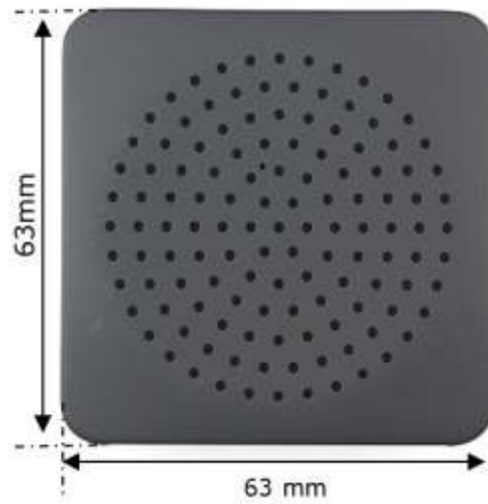


Figure 4 - CleO Speaker Module Dimensions

4.2 Speaker Enclosure Dimension

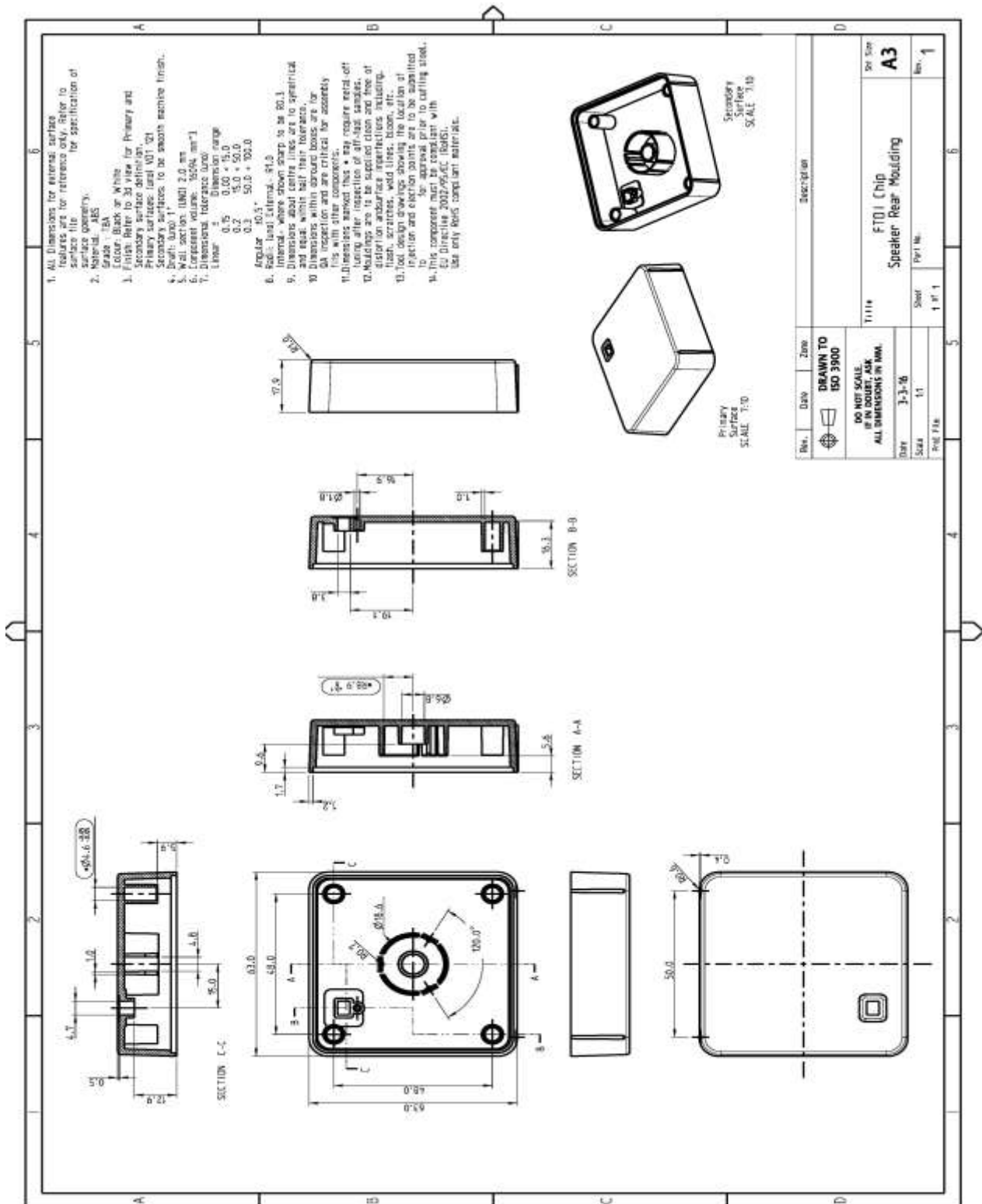


Figure 5 - CleO Speaker Enclosure Drawing (Rear)

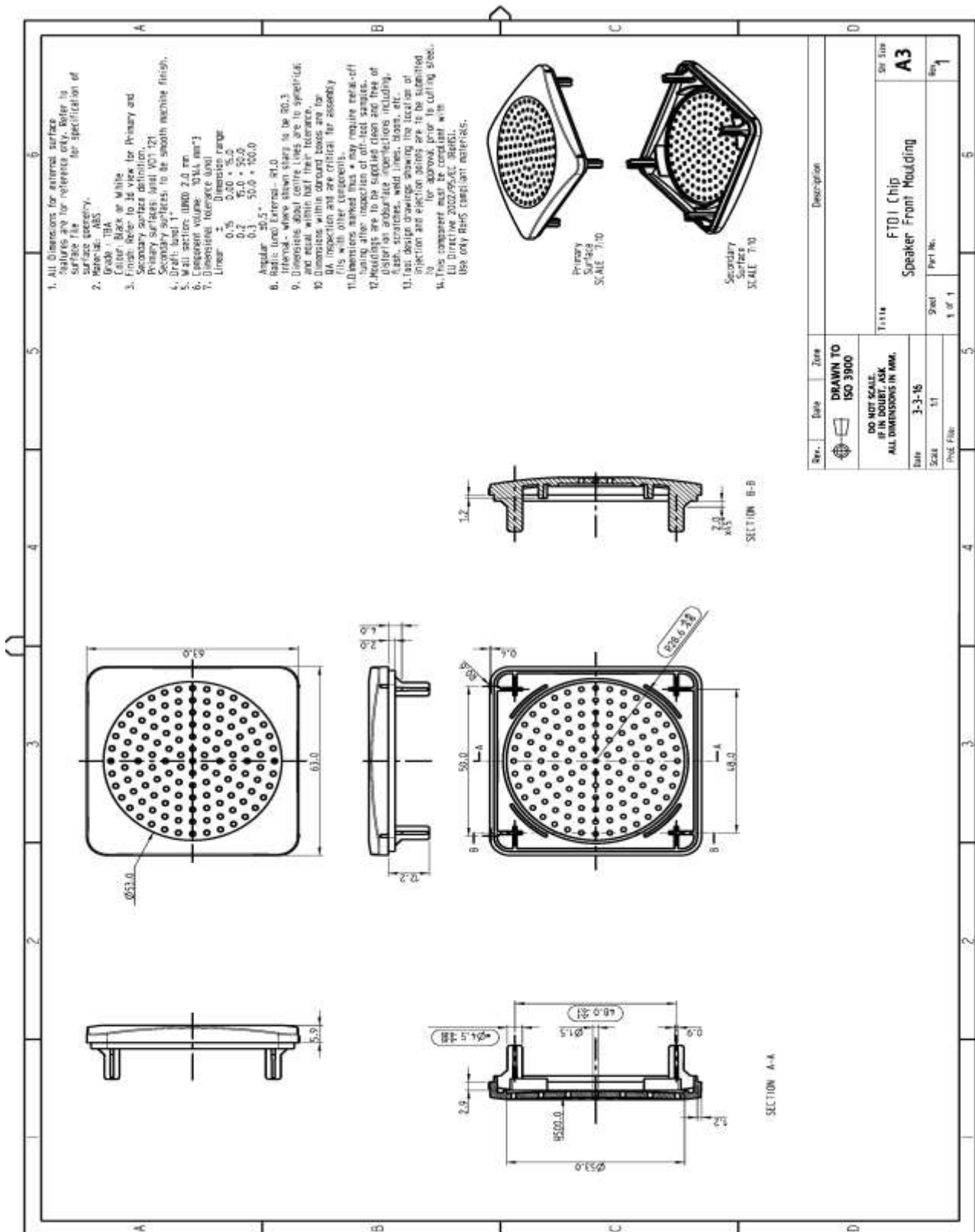


Figure 6 - CleO Speaker Enclosure Drawing (Front)

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
Document Reference No.: BRT_000018
Clearance No.: BRT#020
Product Page: <http://brtchip.com/m-cleo/>
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

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