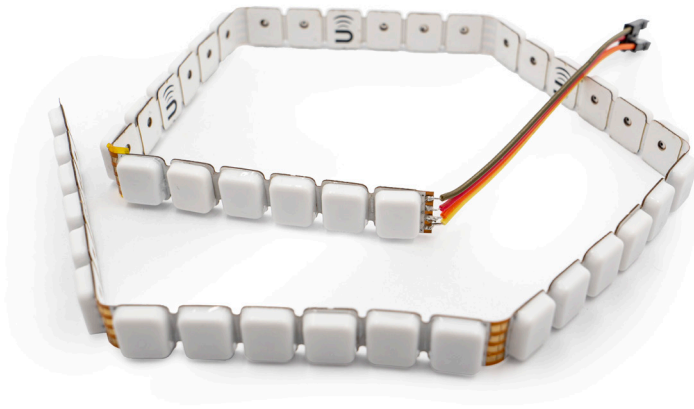


SOUND STRIPE

DIONE MINI UY-R3010 | DATASHEET

U))) SOUND



Dione Mini consists of an array of MEMS speakers and the amplifiers to drive them. One unit of Dione Mini contains 5 USound Adap speakers, which are all connected in parallel driven by an integrated amplifier. Dione Mini is usually delivered as an array of 7 connected individual Dione Mini sections which may be separated to suit the users need. Due to its flexible structure and protective construction, it is ideal for applications where audio is added on top of an existing design.

FEATURES SOUND STRIPE

- Bendable speaker array
- Integrated amplifier
- Each Array segment contains 1 amplifier and 5 speakers.
- Lightweight construction
- Wide audio bandwidth: 2-20 kHz
- Hidden speakers for seamless integration
- Inherently protected from mechanical damage

DIONE MINI APPLICATIONS

The Dione Mini can be used as an audio add-on for existing non-audio devices. It can also act as a tweeter in a typical 2-way system.

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REVISION HISTORY

Release date: July 2020

SPECIFICATIONS

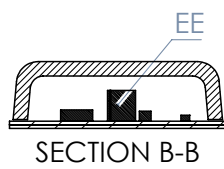
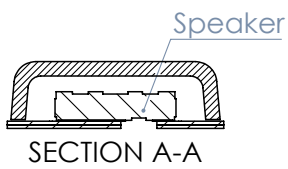
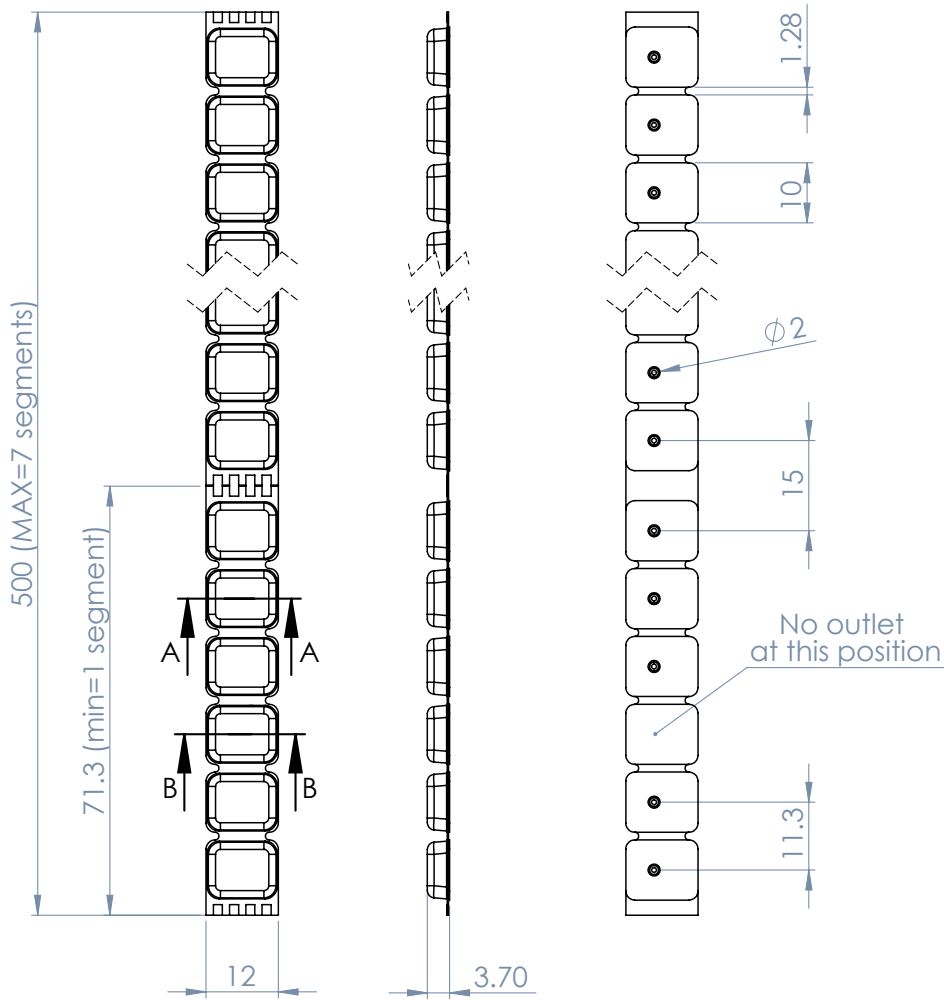
Standard conditions: Supply voltage for amplifier: $5V_{DC}$; nominal audio input voltage: $620mV_{rms}$.

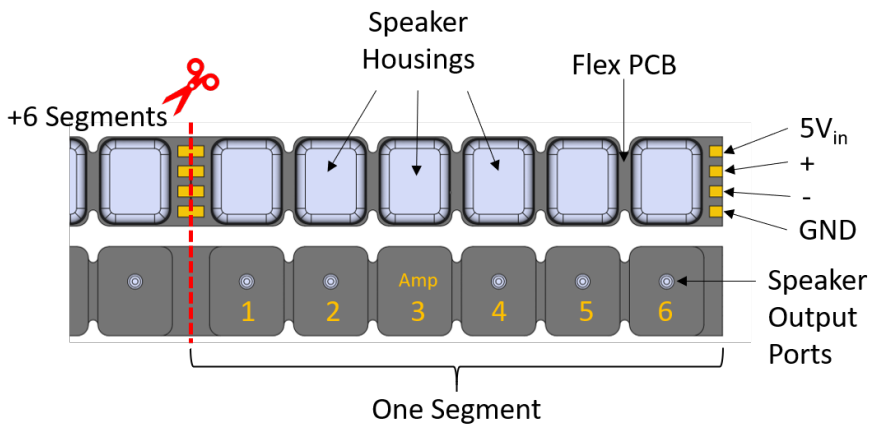
General parameters		
Number of speakers per segment	[-]	5
Number of segments per stripe on delivery	[-]	7
Included back volume per speaker	[mm ³]	100

Acoustics in Baffle (IEC 60318-5)		
SPL _{10cm} @ 1 kHz / 620 mV _{rms}	[dB]	58
SPL _{10cm} @ 4 kHz / 620 mV _{rms}	[dB]	80
SPL _{10cm} @ 10 kHz / 620 mV _{rms}	[dB]	74
THD @ 2 kHz / 62 mV _{rms} (50 dB)	[%]	2
THD @ 4 kHz / 62 mV _{rms} (59 dB)	[%]	1
THD @ 10 kHz / 62 mV _{rms} (54 dB)	[%]	7

Electronics		
Supply Voltage range	[V _{DC}]	2.5-5.5
Gain of Amplifiers @ 1kHz	[dB]	24
Low Frequency limit of Amplifiers (±3dB)	[Hz]	<20
High Frequency limit of Amplifiers (±3dB)	[kHz]	20

MECHANICAL DIMENSIONS





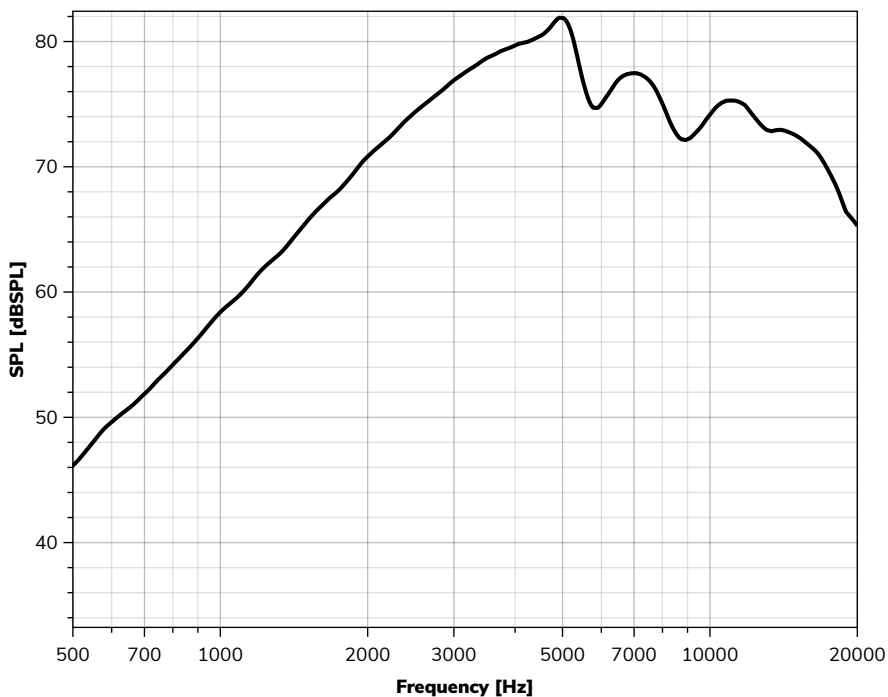
Mechanics		
Length per segment	[mm]	71.3
Width	[mm]	12
Height	[mm]	4
Weight per segment	[g]	2.4
Maximum bending angle per element in direction of the speaker housings	[°]	40
Minimum bending radius of Stripe	[mm]	3

TEST CONDITIONS

ACOUSTICS

General	
Measurement system	Audio Precision APx
Measurement signal	Exp. Sweep
Voltage level at audio input	620 mV _{rms}
Baffle (IEC 60318-5)	
Baffle type	IEC 60268-5
Mic distance	10 cm
Microphone	GRAS 46AC
Microphone diameter	1/2"

ACOUSTIC PERFORMANCE IN BAFFLE (IEC 60318-5)



RELATED DOCUMENTATION

[Adap UT-P2019 Datasheet](#)

COMPATIBLE PRODUCTS

Product name	Description
Helike UA-E3010	Development board for evaluating, rapid prototyping and designing audio solutions using our MEMS speaker technology

SIMILAR PRODUCTS

Product name	Description
Dione Maxi UY-R3020	MEMS speaker array on a flexible PCB with an external amplifier
Harpalyke UY-R2010	MEMS speaker array

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