

## SAS SERIES



### INTRODUCTION

Sonitron **A**larms **S**eries are developed for a temperature range of -40°C to +85°C. Small designs and very loud output are the main characteristics of this piezo series. Different models are developed for use in applications where dimensions should be small and sound output loud, such as fire alarms, security devices,...etc.

### ADVANTAGES & APPLICATIONS

#### ADVANTAGES :

- Loud siren output with high sound pressure level
- Dust tight, waterproof (IP67)
- Low current consumption
- No magnetic field

#### APPLICATIONS :

- Car alarm
- Fire alarm
- Motor alarm
- Home security alarm



## SAS-2155 PIEZO SOUNDER

2000 to 3000 Hz



The SAS-2155 is a thin piezo electric siren with high sound pressure, low weight and low current consumption. The sound output is a powerful, clear and less aggressive sweep signal. There are many applications for this siren: all fire alarms, cars and motor vehicles, automation equipment, security devices, etc. The vibrating elements are unique and developed at Sonitron (worldwide patented). This series is made from high quality materials, offers extreme reliability and robustness, and features life time over 2000 hours in continuous use.

## SPECIFICATIONS



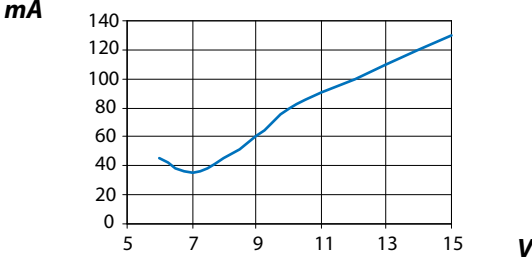
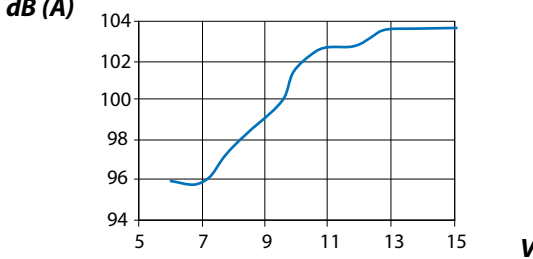
Model	Function	Sound pressure level (dB(A)(±2dB(A))	Frequency (Hz)(±30%)	Operating voltage (Vdc)	Operating*** DCcurrent(mA)
SAS-2155-S	Sweep	102	2000 to 3000**	6-15	100

\*\* Interval frequency is 3Hz (± 2Hz).

\*\*\* Operating current @12Vdc

Operating temperature:	-40°C to +85°C
Storage temperature:	-40°C to +85°C
Expected life time:	2000 hours continuous working @12Vdc @21°C @35% RH
Color:	grey, black
Terminals:	pins, fast-on and wire connection
Case material:	Standard ABS plastic (UL rating: 94HB) Akulon plastic on request
Weight:	35g
Mounting method:	Mounting on panels and walls with universal bracket

## ELECTRICAL PARAMETERS

Model	Current consumption vs. operating voltage	Sound pressure level vs. operating voltage
SAS-2155-S	<b>mA</b> 	<b>dB (A)</b> 

Note : All measurements are made in free air @1 meter @21°C @35% RH. For measurement purposes, the alarm was mounted with mounting bracket "MB1" on a wooden panel.

## SAST-2155 PIEZO TRANSDUCER

2000 to 3000 Hz



The SAST-2155 is a transducer version of the SAS-2155-S. The drive electronics are not included on the internal pcb and must be created by the customer to realize a good functional sound output. The maximum dB(A) level is obtained if the drive frequency is used between 2kHz and 3kHz. Several signals can be combined or produced in continuous, intermittent, warbler or sweep mode. Square wave signals give extra sound dimensions because of their harmonic content.

The SAST-2155 is available with connections in pins, Fast-ons or wires. The casing is standard in UL94HB ABS plastic but can be obtained in Akulon plastic on request. For Fast and strong mounting on a wall, several mounting brackets are available.

When the maximum voltage peak to peak signal of 40Vpp square wave is respected a life time over 2000 hours can be obtained in continuous use.

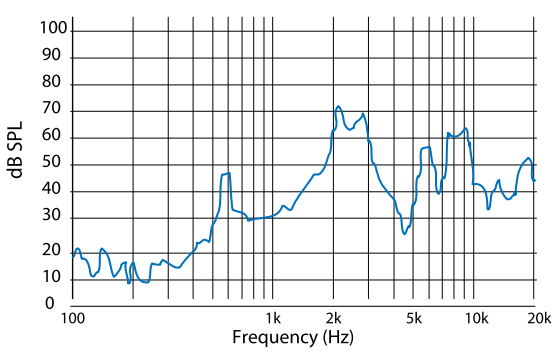
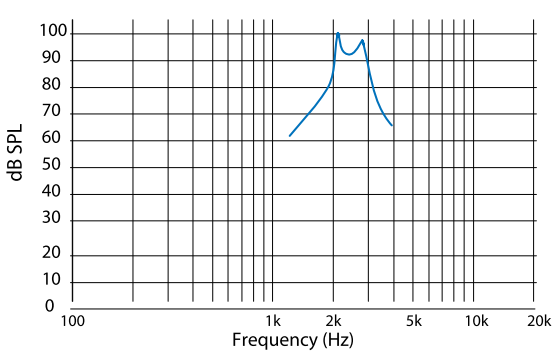
This transducer is the best product for the realization of your personalized alarm or siren driven by customers electronics.

## SPECIFICATIONS

Model	SPL * (dB(A))	Frequency Range (Hz)	Capacitance (+/-30%) nF)	Operating voltage (VAC pp)	Weight (g)
SAST-2155	See graph	2000 - 3000	75 nF	0 to 40	35g

Operating temperature:	-40°C to +85°C
Storage temperature:	-40°C to +85°C
Expected life time:	2000 hours continuous working
Color:	grey, black
Terminals:	pins, fast-on and wire connection
Case material:	Standard ABS plastic (UL rating: 94HB) Akulon plastic on request
Max. SPL	+/- 100dB(A) @100cm
Mounting method:	Mounting on panels and walls with universal bracket

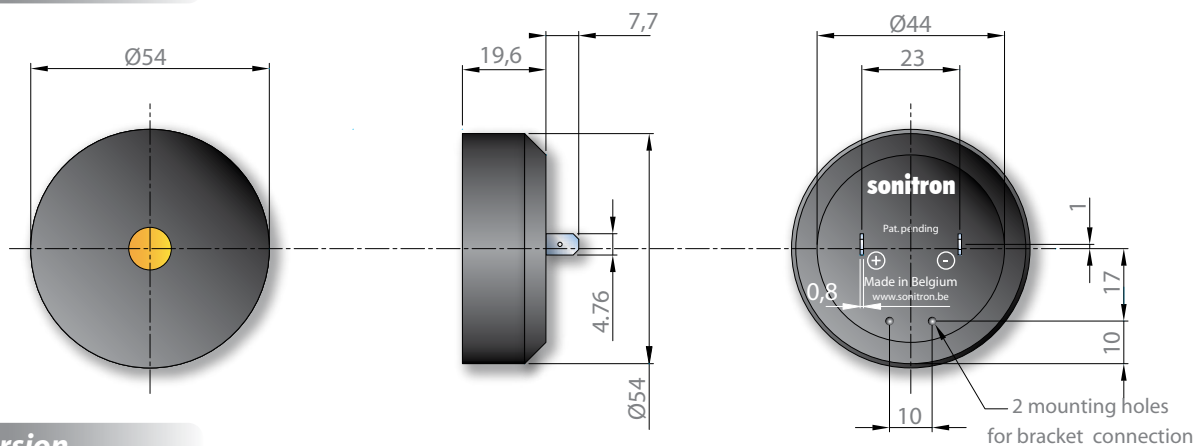
## ELECTRICAL PARAMETERS

Model	Frequency response graph	Max Sound pressure vs. frequency
SAST-2155	<p>Pink Noise, 21.21Vrms, 100cm</p> 	<p>Peak hold frequency sweep from 1kHz to 4kHz with a square wave of 40 Vpp, distance 100cm.</p>  <p>(precision of frequency: +/- 15%)</p>

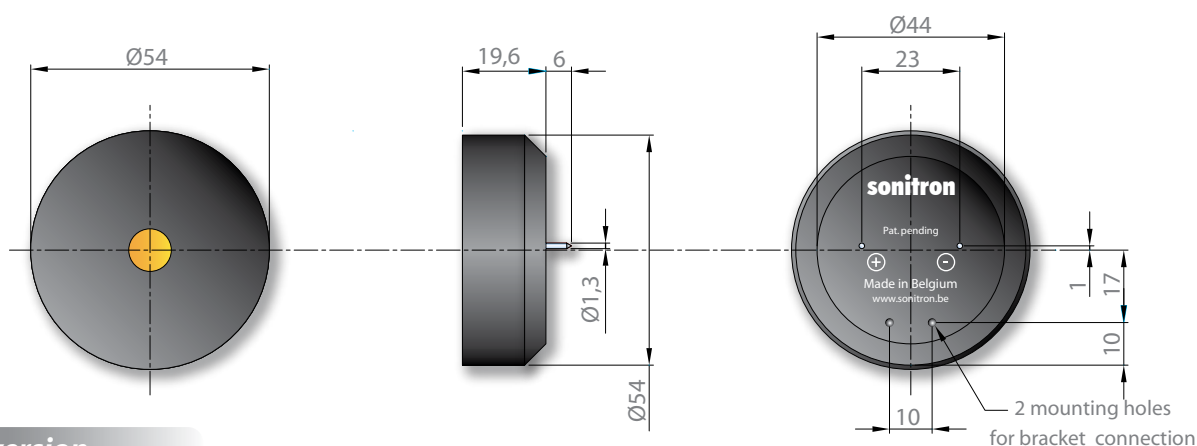
## DIMENSIONS SAS SERIES (all dimensions are in mm)

### Dimensions SAS-2155-S & SAST-2155 without mounting bracket

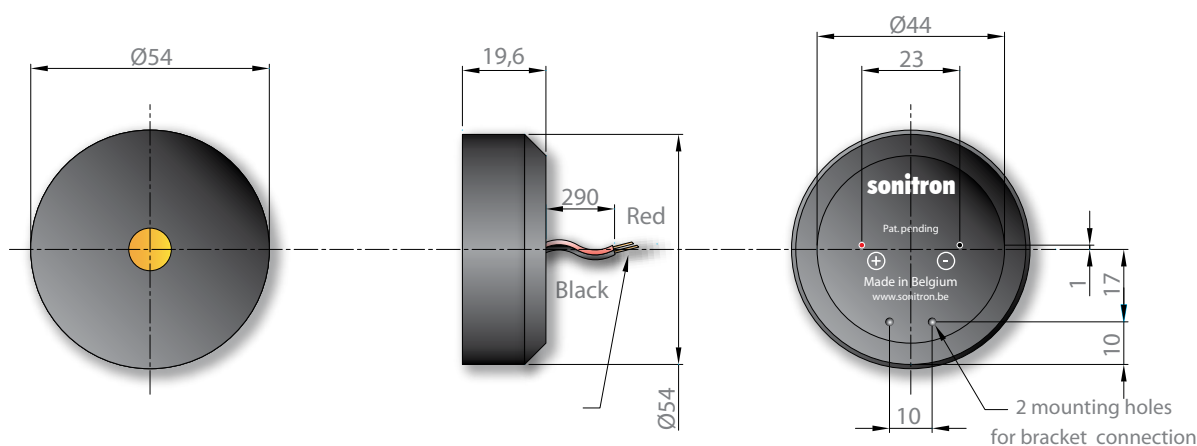
#### Fast-on version



#### Pin version

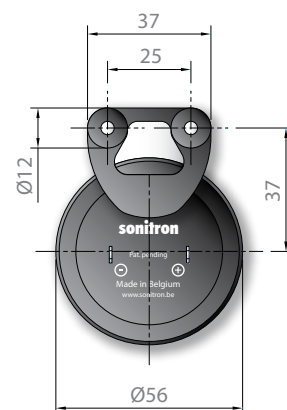
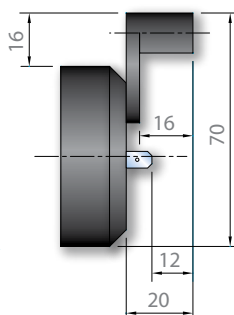
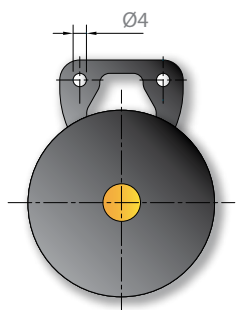
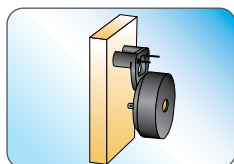


#### Wire version

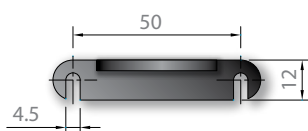
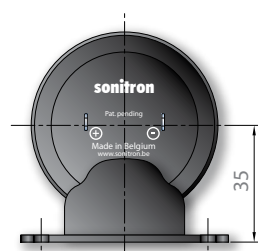
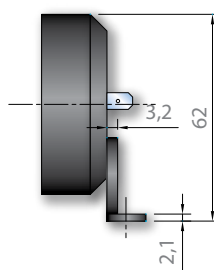
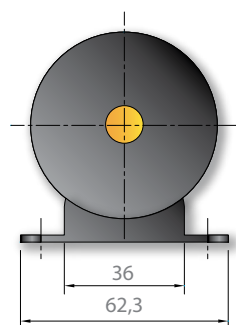
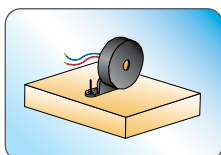


## PRODUCT OPTIONS

### 1. Dimensions with mounting bracket (MB1)

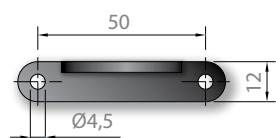
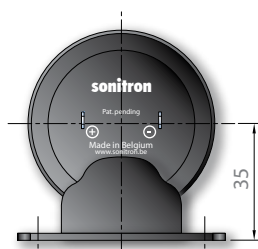
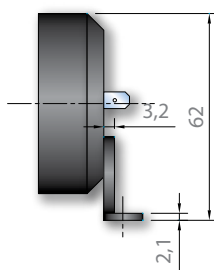
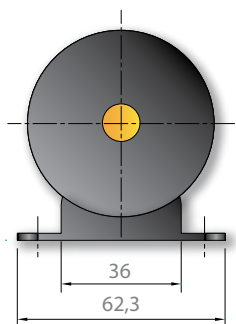
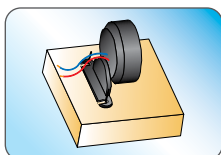


### 2. Dimensions with mounting bracket (MB2)



grooves version

### 3. Dimensions with mounting bracket (MB3)



holes version

Tolerance: +/- 0.2mm mm

## PRODUCT CODIFICATION

<b>SAS</b> ↓ <b>Sonitron Alarm Series</b>	<b>T - 2155</b> ↓ <b>Transducer (without electronics)</b>	<b>S</b> ↓ <b>S: sweep</b>	<b>W P F</b> ↓ <b>W: wire AWG 24 (12cm) P: round pin F: fast-on terminal 4.76mm</b>	<b>MB</b> ↓ <b>Mounting Bracket</b>	<b>1 2 3</b> ↓ <b>1: wall connection 2: flat connection (with grooves) 3: flat connection (with holes)</b>	<b>S</b> ↓ <b>Separate mounting bracket</b>
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## LIST OF AVAILABLE PRODUCT TYPES

### Without bracket

SAS-2155-S-F	SAS-2155-S-P	SAS-2155-S-W
SAST-2155-F	SAST-2155-P	SAST-2155-W

### With bracket

SAS-2155-S-F-MB1 SAS-2155-S-F-MB2 SAS-2155-S-F-MB3	SAS-2155-S-P-MB1 SAS-2155-S-P-MB2 SAS-2155-S-P-MB3	SAS-2155-S-W-MB1 SAS-2155-S-W-MB2 SAS-2155-S-W-MB3
SAS-2155-S-F-MB1S SAS-2155-S-F-MB2S SAS-2155-S-F-MB3S	SAS-2155-S-P-MB1S SAS-2155-S-P-MB2S SAS-2155-S-P-MB3S	SAS-2155-S-W-MB1S SAS-2155-S-W-MB2S SAS-2155-S-W-MB3S
SAST-2155-F-MB1 SAST-2155-F-MB2 SAST-2155-F-MB3	SAST-2155-P-MB1 SAST-2155-P-MB2 SAST-2155-P-MB3	SAST-2155-W-MB1 SAST-2155-W-MB2 SAST-2155-W-MB3
SAST-2155-F-MB1S SAST-2155-F-MB2S SAST-2155-F-MB3S	SAST-2155-P-MB1S SAST-2155-P-MB2S SAST-2155-P-MB3S	SAST-2155-W-MB1S SAST-2155-W-MB2S SAST-2155-W-MB3S

