

## Piezoceramic Speakers



### SCS-17-P10 **sonitron**

#### SCS-17-S

Good sound quality and limited distortion guarantee a clear reproduction of multiple tones, speech and music. These loudspeakers are extremely reliable, have a robust design and can be used in difficult environmental conditions and applications because of resistance of the front to water, humidity, vibrations and dust. The SCS-speaker can be mounted by soldering the SMD pads onto the PCB.

Technical Parameters	SCS-17-P10 / SCS-17-S
Rated Frequency Range	1500-8000 Hz
Sensitivity	2200 Hz - 92 dB, 5000 Hz - 91 dB
Working Voltage	5 - 30 Vpp
Capacitance	20 nF
Impedance @ 1 KHz ±20%	7957 Ω
Pitch	10 mm / SMD
Weight	1,7 g
Dimensions	18,6 x 9,7 mm

Part No.	Ord.No.
S SCS-17-P10	64049
S SCS-17-S	64050



### SCS-24-P10 **sonitron**

#### SCS-24-S

Good sound quality and limited distortion guarantee a clear reproduction of multiple tones, speech and music. These loudspeakers are extremely reliable, have a robust design and can be used in difficult environmental conditions and applications because of resistance of the front to water, humidity, vibrations and dust.

Technical Parameters	SCS-24-P10 / SCS-24-S
Rated Frequency Range	1000-8000 Hz
Sensitivity	800 Hz - 68 dB, 1600 Hz - 95 dB 4000 Hz - 87 dB
Working Voltage	5 - 30 Vpp
Capacitance	37 nF
Impedance @ 1 KHz ±20%	4300 Ω
Pitch	10 mm / SMD
Weight	4 g
Dimensions	25,1 x 9,7 mm

Part No.	Ord.No.
S SCS-24-P10	64051
S SCS-24-S	64052



### SCS-32-P10 **sonitron**

#### SCS-32-S

Good sound quality and limited distortion guarantee a clear reproduction of multiple tones, speech and music. These loudspeakers are extremely reliable, have a robust design and can be used in difficult environmental conditions and applications because of resistance of the front to water, humidity, vibrations and dust.

Technical Parameters	SCS-32-P10 / SCS-32-S
Rated Frequency Range	500-8000 Hz
Sensitivity	650 Hz - 85 dB, 2700 Hz - 100 dB 3700 Hz - 88 dB, 7500 Hz - 80dB
Working Voltage	5 - 30 Vpp
Capacitance	66 nF
Impedance @ 1 KHz ±20%	2400 Ω
Pitch	10 mm / SMD
Weight	5,9 g
Dimensions	25,1 x 9,7 mm

Type	Ord.No.
S SCS-32-P10	64053
S SCS-32-S	64054

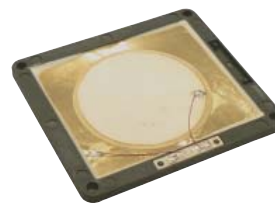


### SPS 2200-03 **sonitron**

With a thickness of only 1 mm and dimensions of 20 x 22 mm, this small multifunctional speaker/microphone is ideal for use in GPS, MP3, camera's, mobile phones, etc.

Technical Parameters	SPS 2200-03
Rated Frequency Range	700-20 000 Hz
Sensitivity	85 dB @ 10cm, 24Vpp
Capacitance	70 nF
Working Voltage	1 - 24 Vpp
Impedance @ 1 KHz ±20%	2160 Ω
Weight	0,4 g
Material	PBT

Part No.	Ord.No.
S SPS-2220-03	64043



### SPS-3530-03-C1 **sonitron**

#### SPS-4640-03-C1

#### SPS-8770-03-C1

#### SPS-3530-03-C1

SPS-4640-03-C1 are ideal for use in portable electronic devices (PDA, GPS, MP3, etc), notebooks and consumer products.

Dimensions:

39 x 43,5 mm / 43,6 x 50 mm

The SPS-8770-03 is the largest version of our piezo speakers, with a thickness of only 2 mm. This model is extremely suitable for flat devices when high sound output and broad Frequency Range are required.

Dimensions: 70 x 87 mm

Technical Parameters	SPS-3530-03-C1 / SPS-4640-03-C1 / SPS-8770-03-C1
Rated Frequency Range	700-20 000 Hz / 400-20 000 Hz 200-20 000 Hz
Sensitivity	85 dB / 83 dB / 84 dB @ 1m, 60Vpp
Capacitance	220 nF / 225 nF / 580 nF
Working Voltage	5 - 60 Vpp
Impedance @ 1 KHz ±20%	603 Ω / 680 Ω / 266 Ω
Weight	2,4 g / 2,8 g / 7,3 g
Material	PBT

Part No.	Ord.No.
S SPS-3530-03-C1	64044
S SPS-4640-03-C1	64046
S SPS-8770-03-C1	64047



### SPS-8770-UW **sonitron**

#### SPS-8770-UW10

Sonitron successfully developed the first flat piezoceramic speaker for underwater applications (max. 2m, IP68). This speaker is based on a completely new principle of piezoceramics and composite metal/polymer layer.

Dimensions: 90 x 87 x 10 mm

Technical Parameters	SPS-8770-UW / SPS-8770-UW10
Rated Frequency Range	600-20 000 Hz
Sensitivity	90 dB @ 1m
Capacitance	600 nF
Working Voltage	5 - 60 Vpp
Impedance @ 1 KHz ±20%	220 Ω
Weight	60 g
Cable length	UW - 0,45 m / UW10 - 10 m

Part No.	Ord.No.
S SPS-8770-UW	64048
SPS-8770-UW10	66202