

The piezo speaker has 60% more net sound output per membrane surface than the electro-dynamic speaker in function of the average current drain and average sound pressure level. High sound quality and low distortion guarantee perfect reproduction of music and speech. The loudspeakers are extremely reliable and can be used in difficult environmental conditions and applications because of resistance of the front to water, humidity, vibrations and dust.

The speakers are available in pin and SMD versions



ADVANTAGES & APPLICATIONS

ADVANTAGES :

- very flat and solid construction
- shock, water and dust-proof front panel
- resistant to temperature variations
- broad frequency range in small size
- combined use as speaker/micro
- no electro-magnetic field (EMC)
- little energy required at low frequencies
- less current consumption needed in the leads to the speaker
- 60% higher acoustic output in smaller speakers compared to electro-dynamic speakers
- low weight
- low distortion
- high impedance
- can be driven directly by IC

APPLICATIONS:

- home equipment & domotics
- communication equipment
- talking buzzer & door bell
- computer equipment
- cars, busses and trains
- vending machines
- multi-media equipment
- industrial equipment
- portable voice recorders
- paging systems
- public address systems
- instrumentation
- GSM, WAP, GPRS
- car radio sound system

SPECIFICATIONS:

Model	Frequency range	Peak frequency SPL	Capacitance +/- 20%	Operating voltage	Impedance at 1KHz +/- 20%	Weight
SCS-32	300 - 8000 Hz	700 Hz – 86 dB(A) 2500 Hz - 96 dB(A) 3100 Hz – 94 dB(A) 4700 Hz – 81 dB(A)	66 nF	5 to 30 Vpp	2400 ohm	5.9 g

Sound pressure level: see frequency response curve

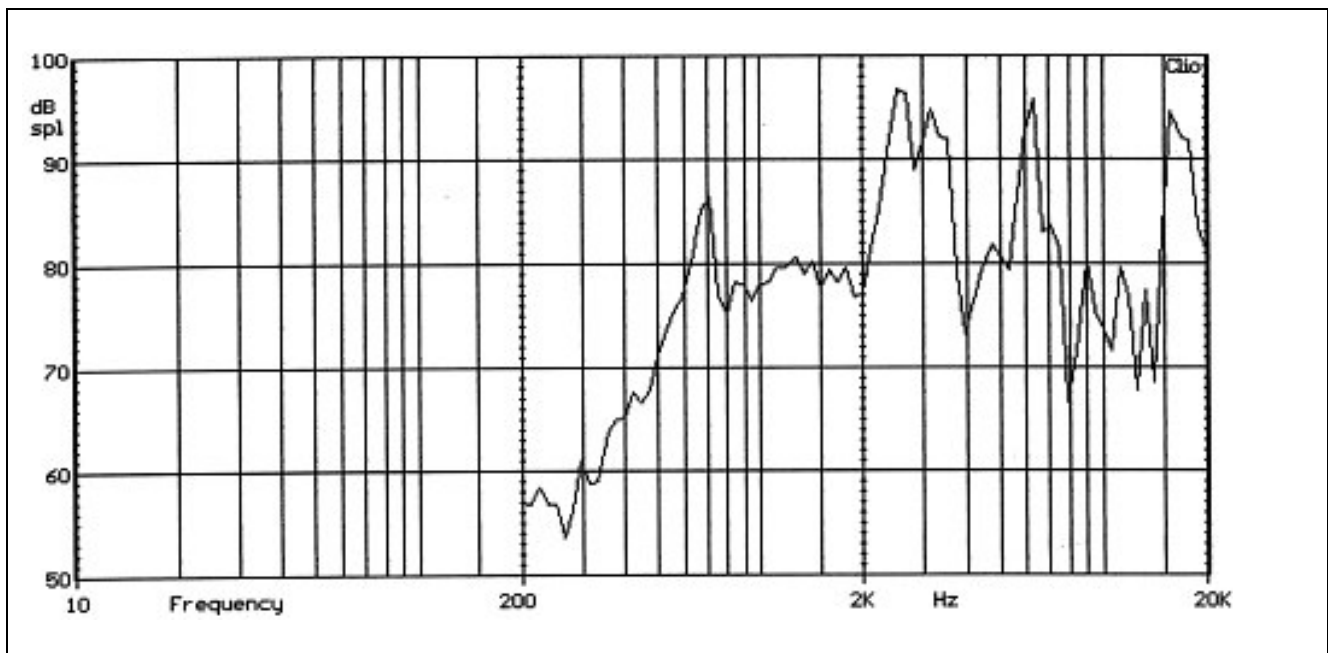
Measurements	Distance	Voltage
SCS-32	30 cm	30 Vpp sine wave

All measurements are made in free air.

Speakers mounted in a closed box with dimensions 40 x 15 x 5 cm

Operating temperature	-20°C to +60°C
Storage temperature	-40°C to +60°C
Case material SCS series	ABS (UL rating: 94 HB) for pin-versions PPS (UL rating: 94 V0/5V) for SMD-versions
Standard colour of case for SCS series	Black

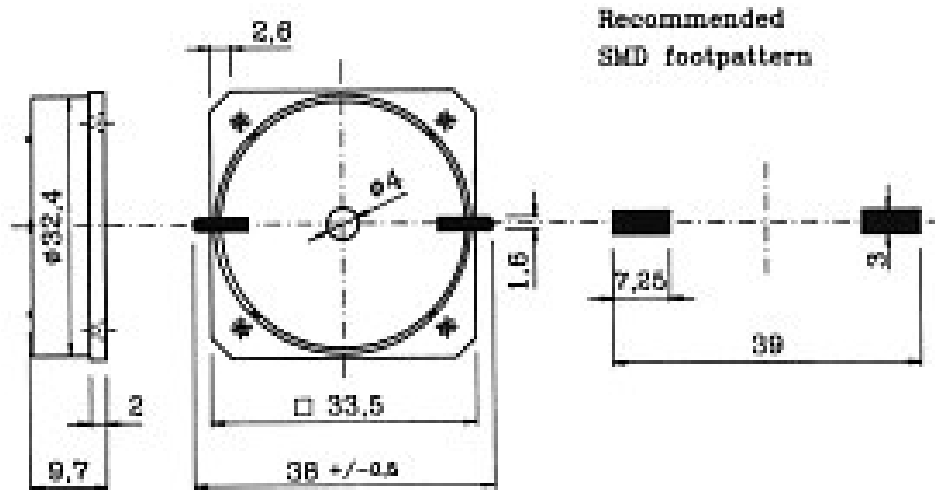
FREQUENCY RESPONSE CURVE SCS-32:



The frequency response curve is measured on an axis at a distance of 30cm at 30Vpp input voltage (sine wave) at 21° in free air. During measurement, the speaker is mounted in a closed box of 40cm H x 15cm W x 5cm. Deduct 10 dB(A) in average for use at 10Vpp.

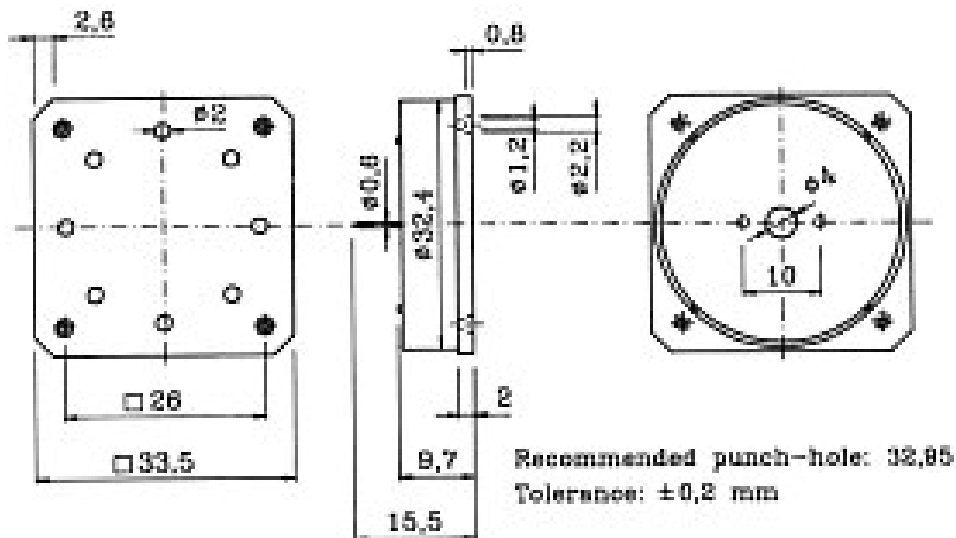
DIMENSIONS:

SMD version (case in PPS):



Tolerance: $\pm 0,2$ mm

PIN version (case in ABS):



Recommended punch-hole: 32,85
 Tolerance: $\pm 0,2$ mm

PRODUCT CODIFICATION:

The speaker series are available in 2 pin versions: through hole (P) or SMD (S).

SCS - 32

P
S



Square diameter (mm)

SCS Sonitron Ceramic Speaker

(identification code)
P: Pin distance (mm)
S: SMD-connection

The SMD models can not be soldered in a re-flow process. The terminals must be soldered by hand.

Miniature screws with nut are delivered with the speaker on request. Add N to the product code. The frame can also be glued to the front. The kind of glue depends on the nature of the material used for the front.

LIST OF AVAILABLE PRODUCT TYPES

SCS-32-P10
SCS-32-S