

## SA02 - Pre-amplifier single-ended I/O

## TECHNICAL INFORMATION

### OVERVIEW

SensorTech's preamplifiers have been designed for applications where size and weight are critical but performance cannot be compromised. The SA02 is ideal for use with piezoelectric sensors such as hydrophones and vibration detectors but can also be used in other applications. Surface-mount technology provides small size, yet reliable, low-noise configuration. The SA02 offers high input impedance and low power consumption. The SA02 has a single-ended input and output. The SA02 preamplifier comes standard with a 40dB gain. The gain can be tailored to fit customer specifications.

### FEATURES

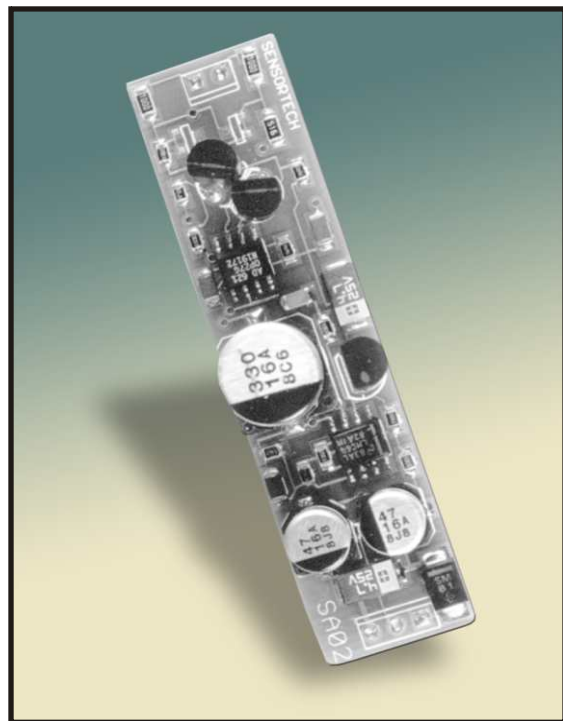
- Low noise figure
- Low power consumption
- High input impedance

### APPLICATIONS

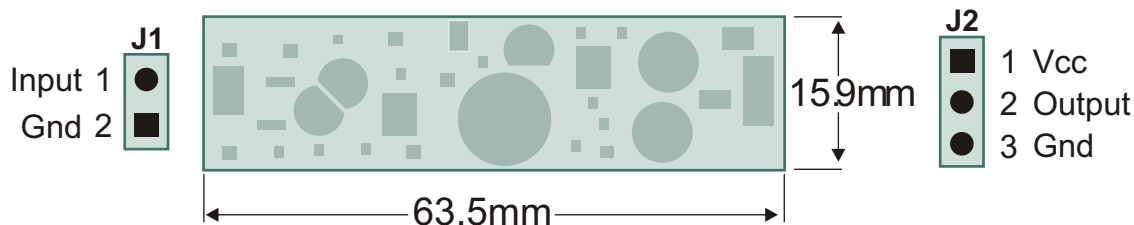
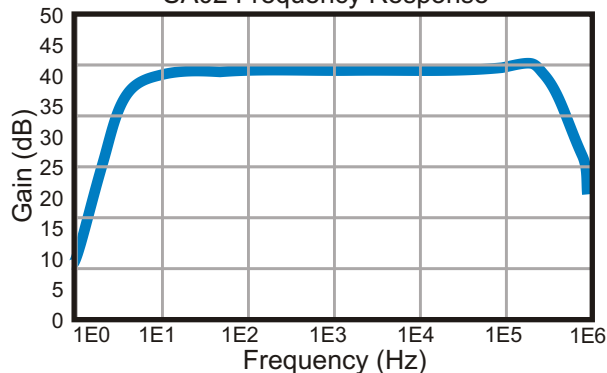
- Modal analysis
- Control systems
- Signal conditioning
- Hydrophones

### SPECIFICATIONS

<b>Gain:</b>	40 dB or Customer Specified
<b>Noise ref. input:</b>	<10 nV $\sqrt{\text{Hz}}$
<b>Input/output:</b>	Single-ended / single-ended
<b>Input impedance:</b>	50 M $\Omega$
<b>Bandwidth:</b>	4 Hz - 250 kHz
<b>Size:</b>	63.5mm x 15.9mm ( 2.5" x 0.625" )
<b>Weight:</b>	6 gms
<b>Supply voltage:</b>	12V
<b>Current (mA@12v):</b>	quiescent <10mA



SA02 Frequency Response



## SA03 - Pre-amplifier differential I/O

## AMPLIFIER & POWER SUPPLIES

### OVERVIEW

SensorTech's preamplifiers have been designed for applications where size and weight are critical but performance cannot be compromised. The SA03 is ideal for use with piezoelectric sensors such as hydrophones and vibration detectors but can also be used in other applications. Surface-mount technology provides small size, yet reliable, low-noise configuration. The SA03 offers high input impedance and low power consumption.

The SA03 has a differential input and output. The SA03 preamplifier comes standard with a 40dB gain. The gain can be tailored to fit customer specifications.

### FEATURES

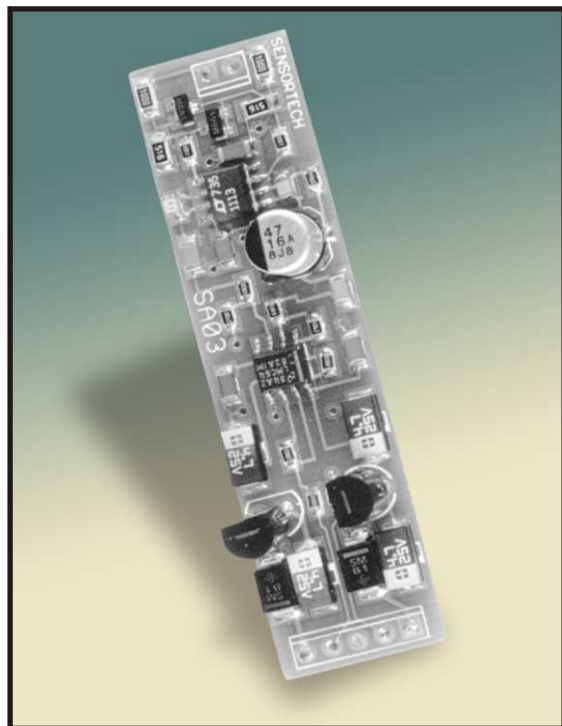
- Low noise figure
- Low power consumption
- High input impedance

### APPLICATIONS

- Modal analysis
- Control systems
- Signal conditioning
- Hydrophones

### SPECIFICATIONS

<b>Gain:</b>	40 dB or Customer Specified
<b>Noise ref. Input:</b>	<20 nV/ $\sqrt{\text{Hz}}$
<b>Input/output:</b>	Differential / differential
<b>Input impedance:</b>	50 M $\Omega$
<b>Bandwidth:</b>	4 Hz - 80 kHz
<b>Size:</b>	57mm x 15mm ( 2.25" x 0.6" )
<b>Weight:</b>	7 gms
<b>Supply voltage:</b>	$\pm 12\text{V}$
<b>Current (mA@12v):</b>	quiescent <0.10mA



SA03 Frequency Response

