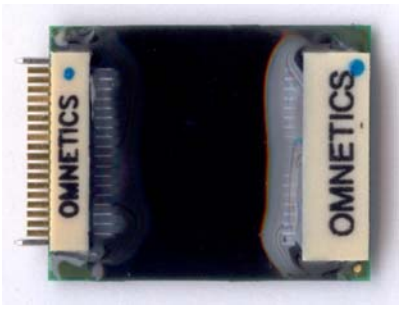
HST/32V-G20 Technical Specifications

CON/32m-V (2x)

HST/32V-G20 (2x)

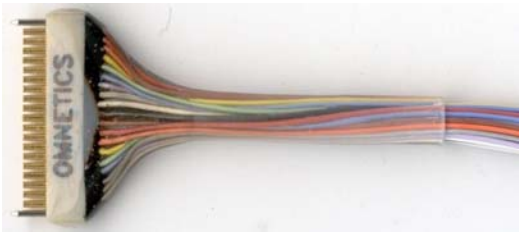


Width
0.68”

Thickness
0.14”

Length
0.93”

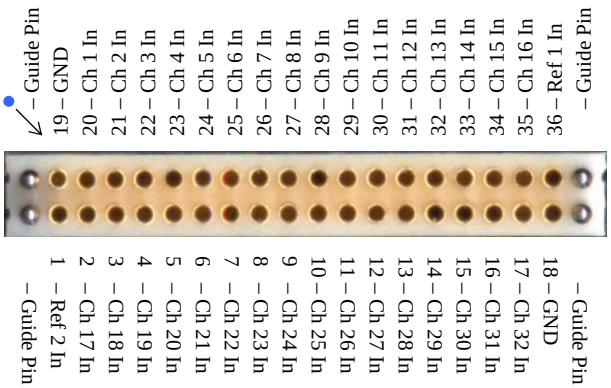
HSC/32V (2x)



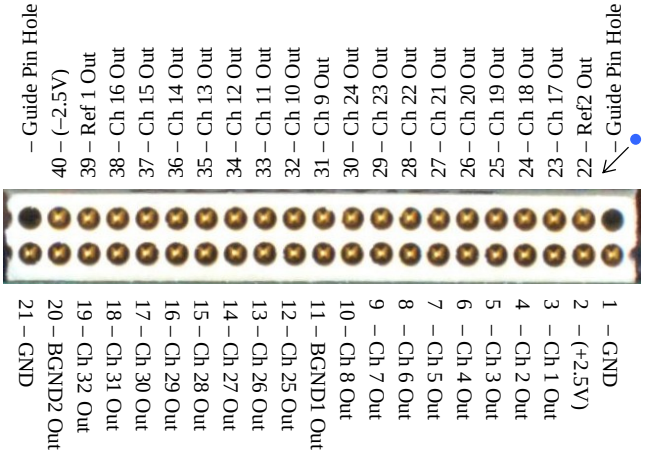
The HST/32V-G20 is a miniature Very Large Scale Integration (VLSI) based headstage amplifier. It contains 34 gain of 20x (G20x) amplifiers and two unity gain amplifiers. Thirty two of the G20x amplifiers (channels 1-32) are designed for recording from high-impedance recording electrodes. The 33rd and 34th G20x amplifier may be used to generate reference signals from de-insulated low-impedance electrodes. These reference signals can be used differentially at the preamplifier level to subtract common mode noise and artifacts from the 32 recording channels. The headstage’s unity gain amplifiers generate “buffered ground” signals that may also be used differentially at the preamplifier level (in place of the “reference” signal).

Pinout Information

Input Connector



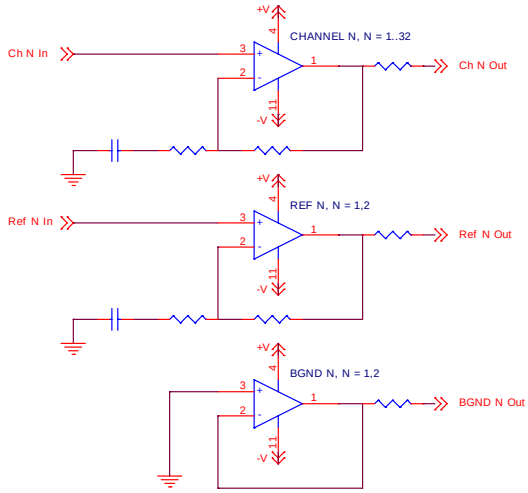
Output Connector



Input connector:	Omnetics A8829-001 ~ Plexon CON/32f-V*
Mate to input connector:	Plexon CON/32m-V (Omnetics A8828-001)
Output connector:	Omnetics A8830-001
Mate to output connector:	Plexon HSC/32V

* The Plexon CON/32f-V (Omnetics A8857-001) is not identical to the input connector Omnetics A8829-001, but both mate with the implant connector Plexon CON/32m-V.

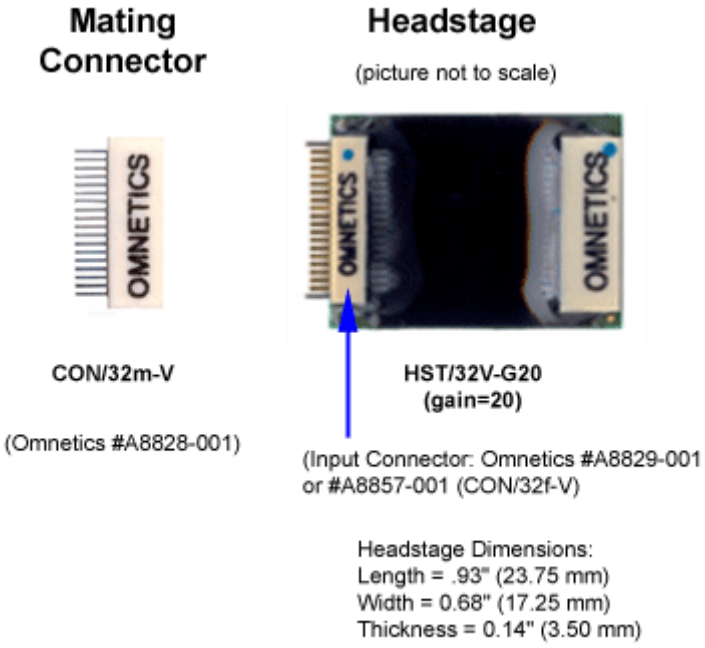
Equivalent Schematic



(Ch N Out – GND) = (Gain)(Filter)(Ch N In – GND)
(Ref N Out – GND) = (Gain)(Filter)(Ref N In – GND)

Specifications

Dimensions:



Supply Voltage - ±2.5 V
Supply Current - 5 mA

Gain - 20x (+26 dB)
Bandwidth - 0.7 Hz – 130 kHz

Frequency Response: