

# A-301 / A-301 HS

High Voltage Amplifier/ Piezo Driver

*Low cost*



Technical Specifications:

Amplifier Section:	A-301	A-301HS
Max. Input Voltage	± 10V	
Max. Output Voltage	± 175 V (350Vptp)	
Max. Current	±60 mA for A-301	±100mA for A-301HS
Bandwidth	Into 1KΩ resistive load	
	A-301:DC-30 kHz	A-301HS-DC-250KHz
Output Power	16 Watt maximum	
DC Gain	20	
Coupling	Input & Output: Direct DC Coupling	
DC Offset	Adjustable to ± 8 Volts + On/Off Switch	
Input Impedence	10 KΩ	
Slew Rate	A-301:30V/μSec	A-301HS:250V/μSec
Output Noise	4 mV PTP max. (0.8 mV RMS max.) (input shorted, 30 KHz. BW)	
Variable Gain Option	0-10X or 0 - 20X or 0-40X available. Please consult factory on this option	
Dimensions	H= 90mm W=134mm L=235mm	
AC Input:		
Line Input Voltage	110/120 V, 60 Hz and 220/230 V, 50 Hz (Switchable by user)	
Line Input Current	0.5 A peak	

The A-301 piezo Driver/Piezo Amplifier is a high Voltage, high speed Bi-polar Piezo Driver / Linear Amplifier for applications where low cost amplifier is needed.

The Piezo Driver / Piezo Amplifier is based on a high voltage, MOSFET amplifier which is capable of driving up to ±175V (350V ptp).

By connecting 2 amplifiers in series, the output voltage may be doubled to 700Vptp.

The amplifier section is very stable and has a low noise output and a very low electrical noise. Compare Our specifications!

Calculating the estimated current needed to drive your load:

$$I_{peak}(A) = 2 \pi F C V_{peak} \text{ (for a Sine Wave)}$$

$$I_{peak}(A) = 4 F C V_{peak} \text{ (for a triangular wave)}$$

$$I_{peak}(A) = C dV/dt \text{ (for square wave or sharp rise time)}$$

F=Maximum frequency (Hz.)

$\pi=3.1415927$

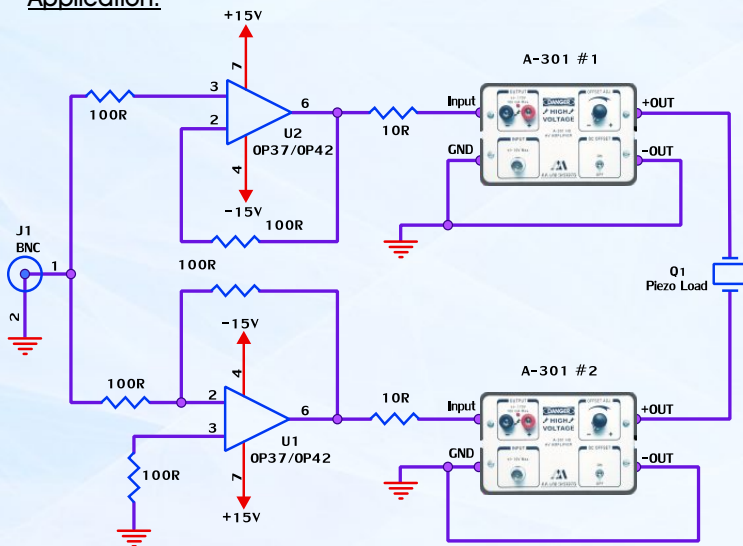
C=Capacitance in Farads

V<sub>peak</sub>=Maximum Voltage you need to drive your Load.

For Resistive Load: V<sub>peak</sub>/R where R is the resistance of your load in Ohms. The current, Voltage and Frequency must be less or equal to the amplifier's specifications.

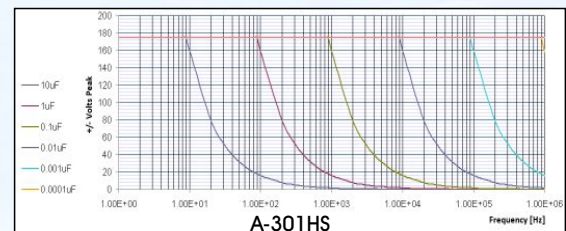
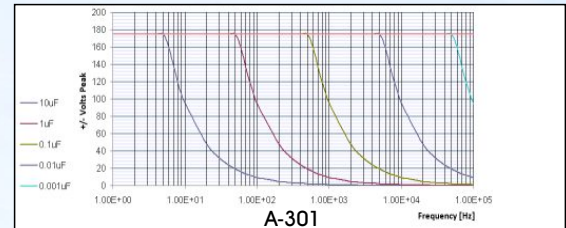
This amplifier is NOT SUITABLE for driving pure inductive loads (i.e. speakers, solenoids, electromagnets etc.)

Application:



2 amplifiers can be connected in series or in parallel in order to double the Output Voltage or Output Current. Series connection (+/- 350V into a floating load = 700V ptp)

Parallel connection is done by adding resistors at the input and at the output. Please consult the factory for parallel connection.



A-301 19" rack enclosure:

Up to 3 A-301 or A-301HS amplifiers can be installed into a 19" rack enclosure. The amplifiers are floating related to the rack and isolated from each other. The user may uninstall the amplifiers from the 19" rack enclosure and use them as stand alone units.



Head office: 33 Hayetzira st. Ramat-Gan 52521, ISRAEL, Tel:972-3-5756327/8 Fax:972-3-5756326  
U.S.A office: 9 Blossom Drive, Kennett Square, PA19348, Tel:(302)478-2881 Fax:(610)444-5544