Tough Bipolar Power Amplifier against High Speed, Broad Range, High Voltage, High Power and Various Loads.

HSA series is a power amplifier which has high speed, broad band (DC to max. 10MHz), and the capability of supplying high voltage and high power. DC+/DC- signal is variable continuously with wide output range of maximum 300Vp-p without switching. Furthermore, as 4 dimensions output is possible, source mode (providing a power to load from a power amplifier in coincidence of voltage polarity and current polarity as normal amplifier) and sink mode (sinking a power from load to power amplifier in reverse current operation) are available. Therefore, it is possible to drive smoothly a capacitive load and an inductive load like a piezo electric component, a solenoid and others. 6 difference models concerning frequency range, output voltage and output current are available as HSA series.

- **Operation region of HSA series**
  (4 dimensions output)

- **Features**
  - **High speed, broad band and high slew rate**
    Frequency range is DC to max.10MHz. Slew rate is max. 5000V/μs. A fast rise time pulse signal and a complicated waveform signal can be amplified with a high fidelity.
  - **High voltage output**
    Max. output voltage is 300Vp-p. Possible to drive piezo actuators and display devices by a big margin.
  - **4 dimensions output (bipolar output)**
  - **Excellent step response**
    Possible to get a clean waveform of few overshoot and ringing.
  - **Two inputs are provided**
    Input is A and B of dual inputs. One touch operation for addition and input change.
  - **DC bias**
    Equipped with DC bias function enabling to add DC to the output.
  - **Low output impedance**
    Enable to get excellent response in capacitive and inductive load.

- **Step response**
  Slew rate which is important when large amplitude output is required, is maximum 5000V/μs. Reproduce a signal in high fidelity by good response for high speed repetitive and high speed transient phenomenon signal.

- **Function of output range shift**
  Equipped with the range shift function which is able to change output range.

- **Others**
  Equipped with DC offset adjustment function, protection circuit, monitor meter & monitor output, output ON/OFF switch and others.

*The above mentioned functions are not equipped with some model.*

Please refer to the specifications as below for the detail functions and the comparison of each model.

**Applications**

- Driving piezoelectric actuator, piezoelectric inverters and others.
- High frequency ripple test of capacitors.
- Drive test of display panel for FED, EL, LCD and others.
- Power boosting of Signal generator.