MODEL AL-50-HF-A HIGH FREQUENCY POWER AMPLIFIERS

The model AL-50-HF-A power amplifiers are wide band, fully complimentary class AB linear power amplifiers. The output impedance of these power amplifiers is close to zero ohm as a result of negative feedback. Our customers use them for plasma excitation, induction heating, EMC testing, EMI testing, magnetic field generation and testing products such as Helmholtz coils, piezo elements, inductors, capacitors. The output power of these units is rated for continuous duty. They output full power in the +0.7 to -0.7 power factor range.

Specifications of model AL-50-HF-A Power Amplifiers

Output:
- Output Power: 50 watts
- Output Volts: 0-28 V rms. adjustable (Optional external output transformers to other volts are available at additional charge.)
- Frequency Range: 5 Hz to 1M Hz
- Max. Output Current: 1.8 A rms.
- Output Distortion: 1% T.H.D. @ mid-band, 2% @ 200K Hz
- Hum and Noise: -60dB below full output
- Output Volt Meter: Front panel analog Meter
- Short Circuit Protection: Input line circuit breaker, Internal output fuse
- Thermal Protection: Auto-reset thermostat prevents heat damage
- Power Factor Range: +0.7 to -0.7 for full power; to zero @ reduced power

Input Signal:
- Input Signal Req.: 0-2 V rms.
- Input Impedance: 2K ohm
- Input Waveform: Sine Wave (Square and triangle waveforms will work at less bandwidth.)

Input Power:
- Power Efficiency: 45% max.
- Input Power Req.: 120 V AC 60 Hz (Default)
  - 230 V AC 60 Hz (at request)
- Input Line Ampere Req.: 2 A @ 120 V AC or 1.1 A @ 230 V AC

Other Specifications:
- Dimensions: 5.25"H X 19"W X 16"D
- Weight: 25 lbs
- Cooling Method: Internal heatsink and force fan (Intake-rear; Output-vent holes on side panels)
- Operating Temp Range: 20 to 140 deg F
- Storage Temp Range: -20 to 170 deg F

Purchase Options (at additional cost):
1. DC Coupling (add “/DC” to the end of model number, e.g. AL-50-HF-A/DC)
   Normally our power amplifiers are AC coupled. They are often supplied along with external output transformer(s) to provide specific voltage range(s) requested by customers. However, the power amplifiers can be made as DC coupled if specified. As a result, the frequency response of the power amplifiers becomes DC to 1.2M Hz at 0-28 V rms.
2. Output Transformers
   The voltage and current ratings of output transformers can go up to 10K V rms. or 800 A rms., depending on the desired frequency range. Consult factory for information on our standard and/or custom output transformers.