**Parameter** | **Specification**
--- | ---
Amplifier Type | Class A
THD | 0.005% @ 1 kHz @ 0 dB (Worst Case THD 0.04%)
Bandwidth | 3 Hz to 120 kHz
Input Sensitivity | 800 mV
Input Impedance | 10 kΩ
SNR | Can Exceed 115 dB w/ careful construction
Power Output | 140 W RMS into 8 Ω per channel w/ ±55 V power supply
 | 200 W RMS into 8 Ω per channel w/ ±68 V power supply

**Design Notes:**
“The input stage and voltage amplifier stage designs are commonly referred to as *fully complementary, or mirror image* topologies. The dual differential input stage (Q1, Q2, Q3, Q4, and associated components) is supplied tail currents from dual constant current sources (Q5, Q6, Q9, Q10, and associated components), with the input stage being totally isolated from the power supply rails by means of the dual cascode stages (Q7, Q8, Q11, Q12, and associated components). The complementary outputs from the input stage are fed to a class-A complementary voltage amplifier stage, with both signal amplification transistors (Q13 and Q16) being collector-loaded with two cascode stages (Q14, Q15, and associated components). The amplifier is compensated with dual two-pole compensation networks (C11, C12, R19, C14, C15, and R21).” (Page 172-177)

“One of the more unique aspects of the Fig. 6-21 topology relates to the bias supplied to the two cascode stages incorporated into the voltage amplifier stage. Note that the bases of Q14 and Q15 receive a *dynamic bias* from the voltage divider network of R36, R37, R38, and R39. This bias comes out to half of the value of the difference between the output rail voltage and the corresponding power supply rail voltages... For discussion purposes, refer to Q14 and its associated bias resistors R37 and R36. During a positive “peak” output signal voltage, the output rail voltage will approach the value of the positive power supply rail voltage. If the signal peak is high enough in amplitude, half of the difference between the output rail voltage and the positive power supply rail voltage (which is Q14’s base voltage) will become small enough to cause Q14 to enter its nonlinear “knee” region of conduction. This conduction will “round off” the peak output signals, and if clipping occurs, the clipping action will be *soft.*” (Page 177-178)