

ST151

100w-RMS audio power amplifier

Supply voltage: +/-40Vdc  
Output power - RMS (40hm): 100W  
Output power - RMS (80hm): 60W  
Frequency response (100W-40hm): 20Hz-20KHz (-0.5dB)  
THD (100W-40hm, 20Hz-20kHz) < 0.1%  
THD (100W-40hm, 1kHz) < 0.01%  
Input sensitivity (100W-40hm): 1Vrms  
Input impedance (1kHz): 10kOhm  
DC offset: max. +/-10mV  
Quiescent current (adjusted with P1): 10mA (3.3mVdc on R14)

Suggested power supply (for one channel):

- 2x28V-AC (loaded voltage) 160VA mains transformer
- 10A-200V rectifier bridge
- 10.000uF 50V ELKO / supply rail

Parts list (for one channel)

Resistor

0.33 5W x4  
6.8 2W x1  
47 0.5W x1  
100 0.5W x3  
220 0.5W x2  
470 0.5W x1  
680 0.5W x1  
820 0.5W x2  
2.2k 0.5W x1  
3.3k 0.5W x2  
6.8k 0.5W x2  
12k 0.5W x1  
15k 0.5W x2

Capacitor

47p 50V x2  
470p 50V x2  
10n 63V MKT x2  
100n 63V MKT x3  
220n 100V MKT x1  
3.3u 50V ELKO (or 16V tantalum) x1  
47u 50V ELKO x2  
100u 16V ELKO x1

Diode

1N4148 x6  
1N4003 x2

Transistor

BC547 x4  
BC557 x1  
BD139 x3  
BD140 x2  
BD249C (or TIP35C) x2  
BD250C (or TIP36C) x2

Other

1k trimmpot (6mm horizontal) x1  
4A fast-blow fuse x2  
fuse holder x2