



This is a current mode class D amplifier. It is capable of over 90% efficiency on 15M with proper tuning. The RFC should have as much inductance as possible as it acts as the current source for the amplifier (wind on FT37-43). The transformer is trifilar, with a 1:1:1 winding ratio. The capacitor between the drains resonates with the transformer (minus the BS170 output capacitance). It might be worthwhile putting a variable in here so that it may be tuned to resonate at the center of the 15M band.

Power output should be approx. 3 watts with a current draw of less than 300mA at 12V.

Second Order Bandpass Filter centered at 21.25MHz with a bandwidth of 6MHz. This was chosen because it is compatible with the current mode class D amplifier. Only filter configurations that present a high impedance to the harmonic frequencies maintain the amplifier's high efficiency.

Zener diodes are to protect the FETs from overvoltage. They should have fairly low capacitance, and a voltage rating around 54 volts.

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