

6W Inverter for MOS Logic supplies

The 6W inverter shown in Figure 1 has been designed to generate the extra power supplies required by popular MOS memories from a normal 5V TTL supply source. It may be used to supply up to eight 2808 read only memories which require supplies of +5V, -5V and +12V, or if the output components of the 12V section are reversed, the circuit will power over ten 5204 ROMs which require +5V and -12V supplies.

The inverter is a simple push-pull circuit which takes advantage of the high current handling capability of the ZTX650 range. It oscillates at a frequency of approximately 25kHz to allow it to use a very small transformer (RM6), and also to render the inverter inaudible. The output characteristics are given in Figures 2 and 3. Output ripple is approximately 150mV peak to peak on both outputs.

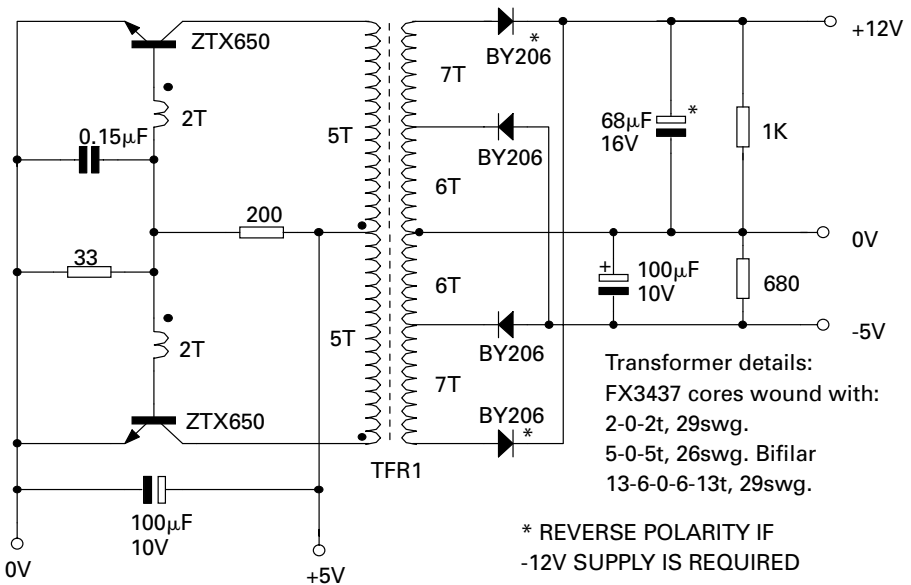


Figure 1
6W Inverter Schematic.

Figure 2
Output characteristics of +12V Supply
against Load Current.

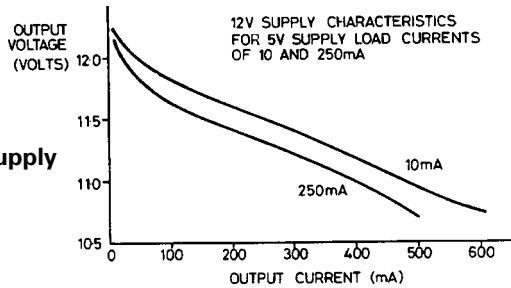


Figure 3
Output characteristics of -5V Supply
against Load Current.

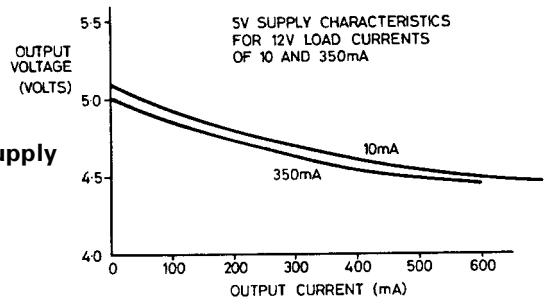


Table 1.
Output Voltage of +12V Supply against
Load Current.

Output Current	Output voltage	Output voltage
10	12.2	12.1
100	11.8	11.6
200	11.6	11.4
300	11.4	11.2
400	11.2	11.0
500	10.8	10.7
600	10.6	-
	10mA load on -5V supply.	250mA load on -5V supply.