

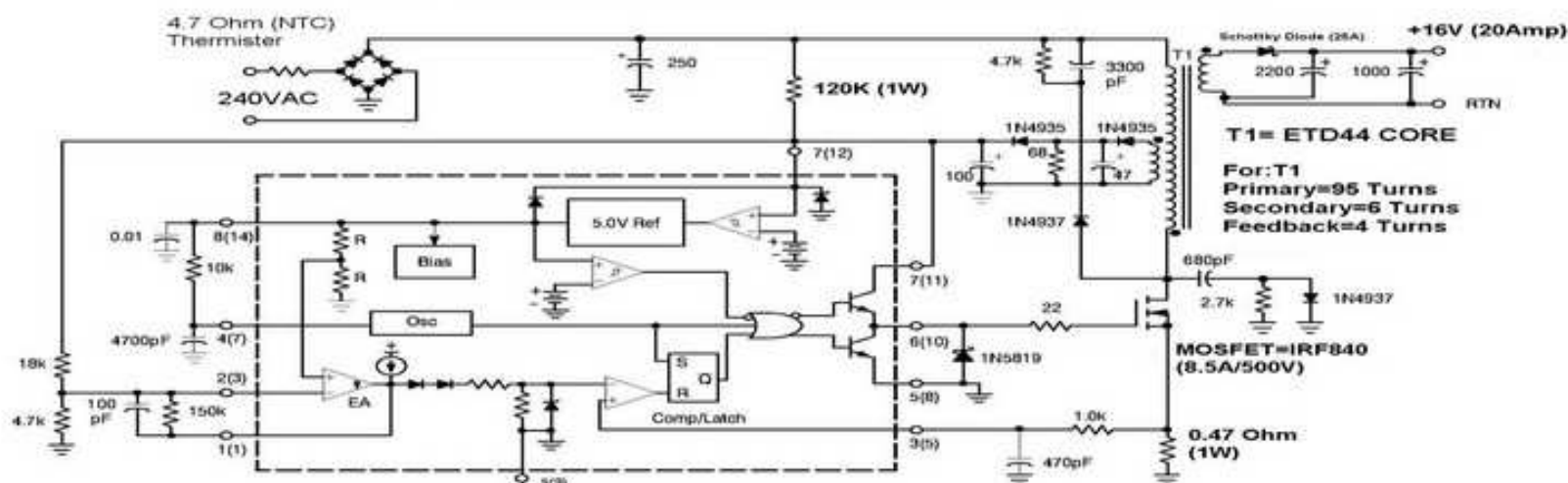
Figure 34. 27 W Off-Line Flyback Regulator

Test	Conditions	Results
Line Regulation: 5.0 V ±12 V	$V_{in} = 95 \text{ to } 130 \text{ Vac}$	$\Delta = 50 \text{ mV or } \pm 0.5\%$ $\Delta = 24 \text{ mV or } \pm 0.1\%$
Load Regulation: 5.0 V ±12 V	$V_{in} = 115 \text{ Vac}$, $I_{out} = 1.0 \text{ A to } 4.0 \text{ A}$ $V_{in} = 115 \text{ Vac}$, $I_{out} = 100 \text{ mA to } 300 \text{ mA}$	$\Delta = 300 \text{ mV or } \pm 3.0\%$ $\Delta = 60 \text{ mV or } \pm 0.25\%$
Output Ripple: 5.0 V ±12 V	$V_{in} = 115 \text{ Vac}$	40 mV _{pp} 80 mV _{pp}
Efficiency	$V_{in} = 115 \text{ Vac}$	70%

All outputs are at nominal load currents, unless otherwise noted

L1 - 15 μ H at 5.0 A, Coilcraft Z7156
L2, L3 - 25 μ H at 5.0 A, Coilcraft Z7157

T1 - Primary: 45 Turns #26 AWG
Secondary ± 12 V: 9 Turns #30 AWG
(2 Strands) Bilfilar Wound
Secondary 5.0 V: 4 Turns (six strands)
#26 Hexfilar Wound
Secondary Feedback: 10 Turns
#30 AWG (2 strands) Bilfilar Wound
Core: Ferroxcube EC35-3C8
Bobbin: Ferroxcube EC35-PCB1
Gap: $\approx 0.10"$ for a primary inductance
of 1.0 mH



Off-Line Flyback Regulator (Freq=40KHz)