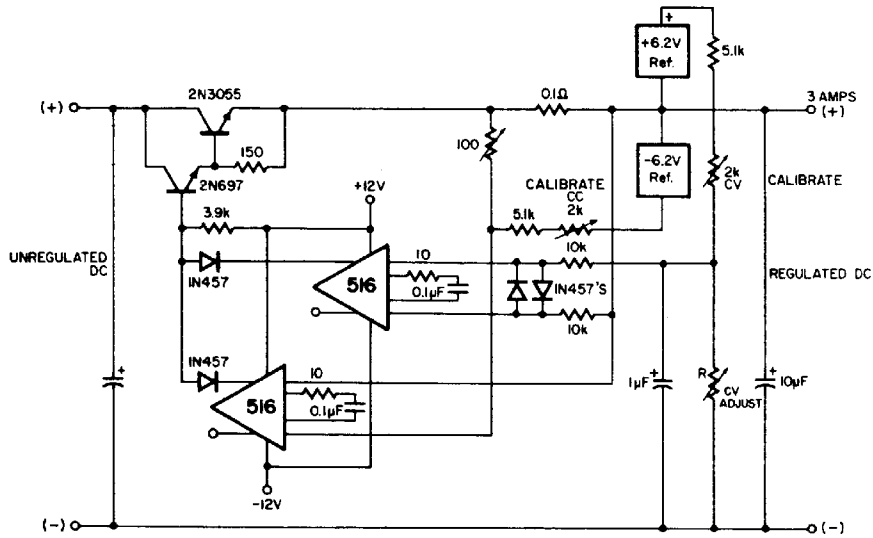


CONSTANT VOLTAGE AND CONSTANT CURRENT REGULATOR

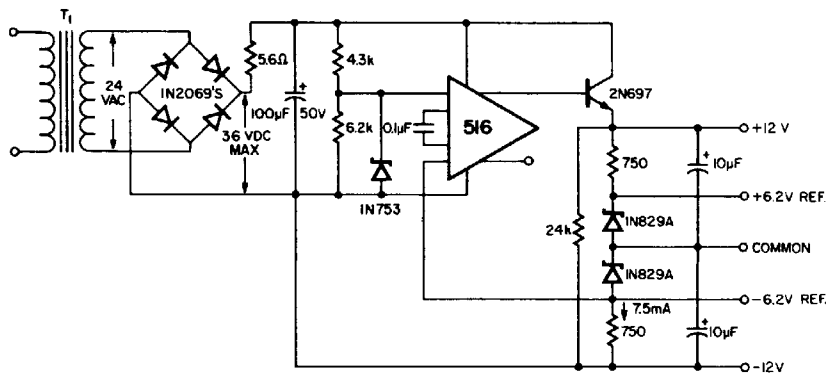


Note: $R \cong 1k$ ohm per maximum output volt, i.e., for 25V, a 25k potentiometer is required.

CV Load Regulation $\leq 0.1\%$ (at 1 ampere full load current and up to 40 volts output voltage)

CV Line Regulation ≤ 1 mV for 10V input change
($E_{in} \geq E_{out} + 2V$)

REFERENCE POWER SUPPLY



This circuit may be used in a laboratory type power supply providing both constant voltage and constant current capability. The 1N829A's are operated at a constant current of 7.5mA and have a voltage temperature coefficient of $0.0005\%/C^\circ$ when operated at this current level. The positive and negative 12V outputs have a current capability of 20mA and may be used to supply the control amplifiers.