

-15 V 1-A REGULATED POWER SUPPLY

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Saturday, 19 April 2008
Last Updated Sunday, 20 April 2008

The supply receives -20 V from the rectifier/filter which is fed to the collector of the Darlington pnp pass transistor, a TIP105. The base drive to the TIP105 is supplied through resistor R5. The base of the TIP is driven from Vz terminal at pin 9, which is the anode of a 6.2-V zener diode that connects to the emitter of the uA723 output control transistor.

The method of providing the positive feedback required for feedback action is shown. This technique introduces positive feedback by increased current flow through resistors R1 and R2 under short-circuit conditions. This forward biases the base-emitter junction of the 2N2907 sensing transistor, which reduces base drive to the TIP105.