

## BIAS SETTING FOR THE AN779H-12

The bias regulator should be checked before installing the RF transistors. Temporarily, connect a diode (1N4001 series or similar) from the base pad, where one of the RF transistors will be mounted, to ground to provide a load for the bias regulator. Connect the diode with the cathode side to ground. With the trim pot, R1, set for minimum resistance (wiper at ground side), apply 12 volts DC to the amplifier. The bias on the base pad should be around 0.5 volts. Adjust the trim pot carefully through its range. It should adjust the bias voltage from approximately 0.5 volts to about 1.0 volts. Careful, the diode may get hot! Now adjust the bias to minimum (bias voltage should be less than 0.6 volts) and then remove the 12 volts DC from the amplifier. Remove the diode and install the RF transistors.

Mount the amplifier on a heat sink with the transistors properly mounted to the heat sink. Apply 12 volts DC to the amplifier and monitor the current draw. With no RF signal applied, adjust the trim pot, R1, until the current draw is 150 milli-amps per device or for a total of 300 milli-amps. The transistors should not be hot to the touch! If so, reduce the current a little. Be careful not to adjust the bias too high. If set too high, the transistors will be turned on completely and may overheat causing possible damage to the RF devices.