The RFA0110-4-10 contains four independent class-A solid-state RF amplifiers and is designed to operate with ISOMET quad-output frequency synthesizers. Each output will deliver in excess of 10 Watts power across a frequency bandwidth of 85 to 135 MHz.

Each amplifier channel requires 0dBm (1mW) RF input at the desired output frequency. There is no gain adjustment. The RF power, amplitude modulation and phase are determined by the input source.

The design includes over temperature and high reflected power protection.

**SPECIFICATIONS**

- **Power Out, each output:** 10 Watts minimum CW into 50Ω
- **Load VSWR:** < 2.5:1 for best results
- **Output RF power variation vs. freq':** ≤ 1 dB over specified bandwidth
- **Spurious output:** Harmonics > 20dB below fundamental
- **Bandwidth:** 85-135MHz minimum
- **RF input:** 3dBm max
- **Gain:** > 40dB
- **Input impedance:** 50 ohm (nominal)
- **RF amplitude rise/fall time:** < 50nsec typical (input dependent)
- **DC power input:** +24V to 28Vdc* at <3A regulated to ± 0.25%
- **Temperature range:** 0°C to 50°C ambient temperature. Integrated water cooled heatsink. Mounting face must not exceed 70°C.

* +28Vdc supply will give increased maximum RF power
Quad RF Amplifier
(Preliminary)

Control signal on 15 pin 'D' type:  Digital Gate (NC or High = On)

Refer application note AN1206 regarding coolant specification

Options →x, multiple combinations possible:
- BR  : Brass water cooled heatsink (water fittings on RF output face)