

### RFA0110-2-20

## **RF Amplifier**



0721

The RFA0110-2 contains a pair of class-A solid-state RF amplifier and is designed to operate with *ISOMET* multi-output frequency synthesizers. Each output will deliver up to 20 Watts power across a frequency bandwidth of 90 to 130 MHz

Each amplifier channel requires up to 0dBm (1mW) RF input at the desired output frequency. There is no gain adjustment. The RF power and amplitude modulation are determined by the input source. The design includes over temperature and high reflected power protection.

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#### **SPECIFICATIONS**

Power Out, each output: 20 Watts minimum CW into  $50\Omega$ 

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

Frequency Range: 90 – 130 MHz, minimum.

RF input: 3dBm max, 0dBm typical

Gain: > 40dB

Input impedance: 50 ohm (nominal)

RF amplitude rise/fall time < 50nsec typical (input dependent)

DC power input: +24V to  $28Vdc^*$  at <6A regulated to  $\pm$  0.25%

Temperature range: 0°C to 60°C ambient temperature.

Integrated water cooled heatsink.

Mounting face must not exceed 70°C.

\* +28Vdc supply will give increased maximum RF power

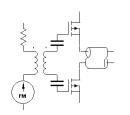
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Quality Assured. In-house: RF & Digital design Software Development OEM manufacture



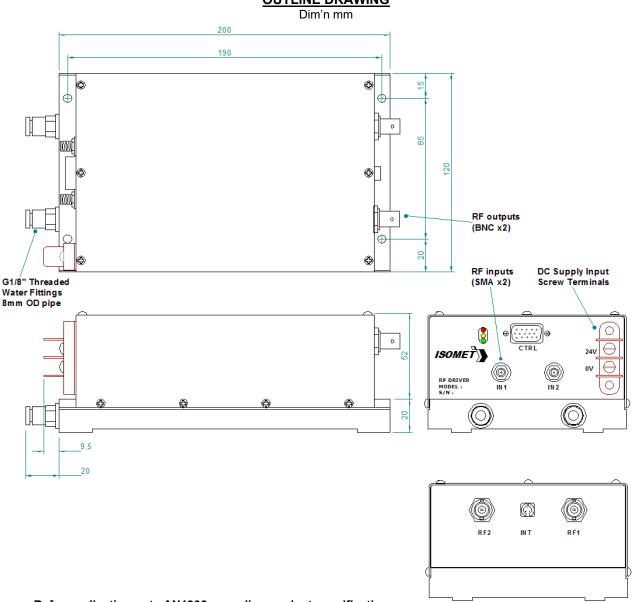
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### **OUTLINE DRAWING**



### Refer application note AN1906 regarding coolant specification

**Options –x**, multiple combinations possible:

- BR : Brass water cooled heatsink (water fittings on RF output face)

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