

RFA080-1-25

RF Amplifier



4020

The RFA080-1 contains a class-A solid-state RF amplifier and is designed to operate with *ISOMET* frequency synthesizers. The output will deliver up to 25 Watts power across a frequency bandwidth of 65 to 95 MHz.

The amplifier 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.

SPECIFICATIONS

Power Out: 25 Watts Maximum CW into 50Ω

Load VSWR: < 2.5:1 for best results

Output RF Power Variation vs. freq': < 1 dB over specified bandwidth

Spurious Outputs: Harmonics > 20dB below fundamental

1dB Bandwidth 65-95MHz 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 \pm 0.25%

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

Mounting face must not exceed 70°C.

* +28Vdc supply will give increased maximum RF power

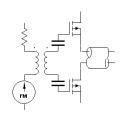
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Quality Assured. In-house: RF & Digital design Software Development OEM manufacture

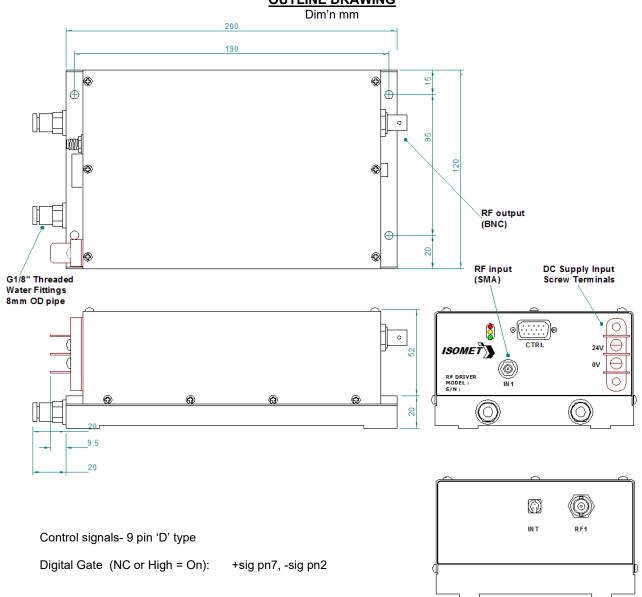


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OUTLINE DRAWING



 $\label{eq:options-x} \textbf{Options-x}, \text{ multiple combinations possible:}$

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

Refer application note AN1906 regarding Coolant Specification

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