

### RFA080-4-5 (-BR)

# Quad RF Amplifier



3120

The RFA080-4-5 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 5 Watts power across a frequency bandwidth of 60 to 100 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.

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#### **SPECIFICATIONS**

Power Out, each output: 5 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

Bandwidth 60-100MHz minimum

RF input: 3dBm max

Gain: > 34dB

Input impedance: 50 ohm (nominal)

RF amplitude rise/fall time < 200/50nsec typical (input dependent)

DC power input: +24V to 28Vdc\* at <5A regulated to  $\pm$  0.25%

Temperature range: 0°C to 50°C ambient temperature.

Integrated water cooled heatsink. Mounting face must not exceed 70°C.

#### Refer application note AN1606 regarding coolant specification

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

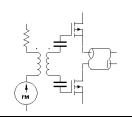
#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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



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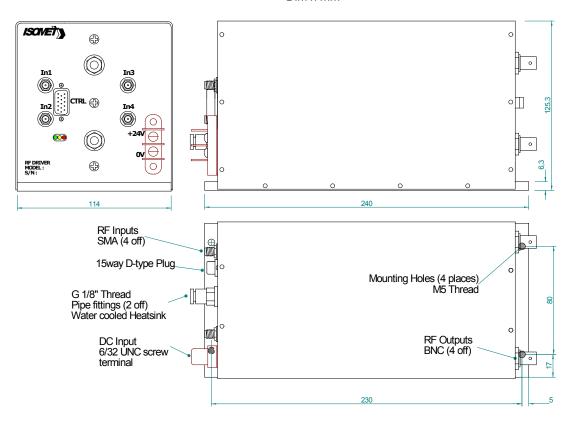
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#### **OUTLINE DRAWING**

Dim'n mm



Control signals on 15 pin high density 'D' type (compatible with iMS4-L(P) J5 output):

pin	signal	pin	signal	pin	signal
1	+5V OUT	6	reserved	11	reserved
2	reserved	7	0V	12	Interlock Monitor OUT
3	reserved	8	reserved	13	reserved
4	0V OUT	9	Amplifier Enable (-Gate) IN	14	reserved
5	reserved	10	+5V out	15	reserved
DO NOT connect to reserved pins					

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

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

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