

RFA0120-1-15

RF Amplifier



0718

The RFA0120-1 contains a class-A solid-state RF amplifier and is designed to operate with *ISOMET* frequency synthesizers. The output will deliver up to 15.0 Watts power across a frequency bandwidth of 100 to 140 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 shut-down.

The driver base is water cooled.

SPECIFICATIONS

Power Out :	15 Watts 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
Bandwidth	100-140MHz
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 60°C ambient temperature. Mounting face must not exceed 70°C.

* +28Vdc supply will give increased maximum RF power

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 ISOMET CORP, 10342 Battlevue Parkway, Manassas, VA 20109, USA..
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Quality Assured.
In-house: RF & Digital design
Software Development
OEM manufacture



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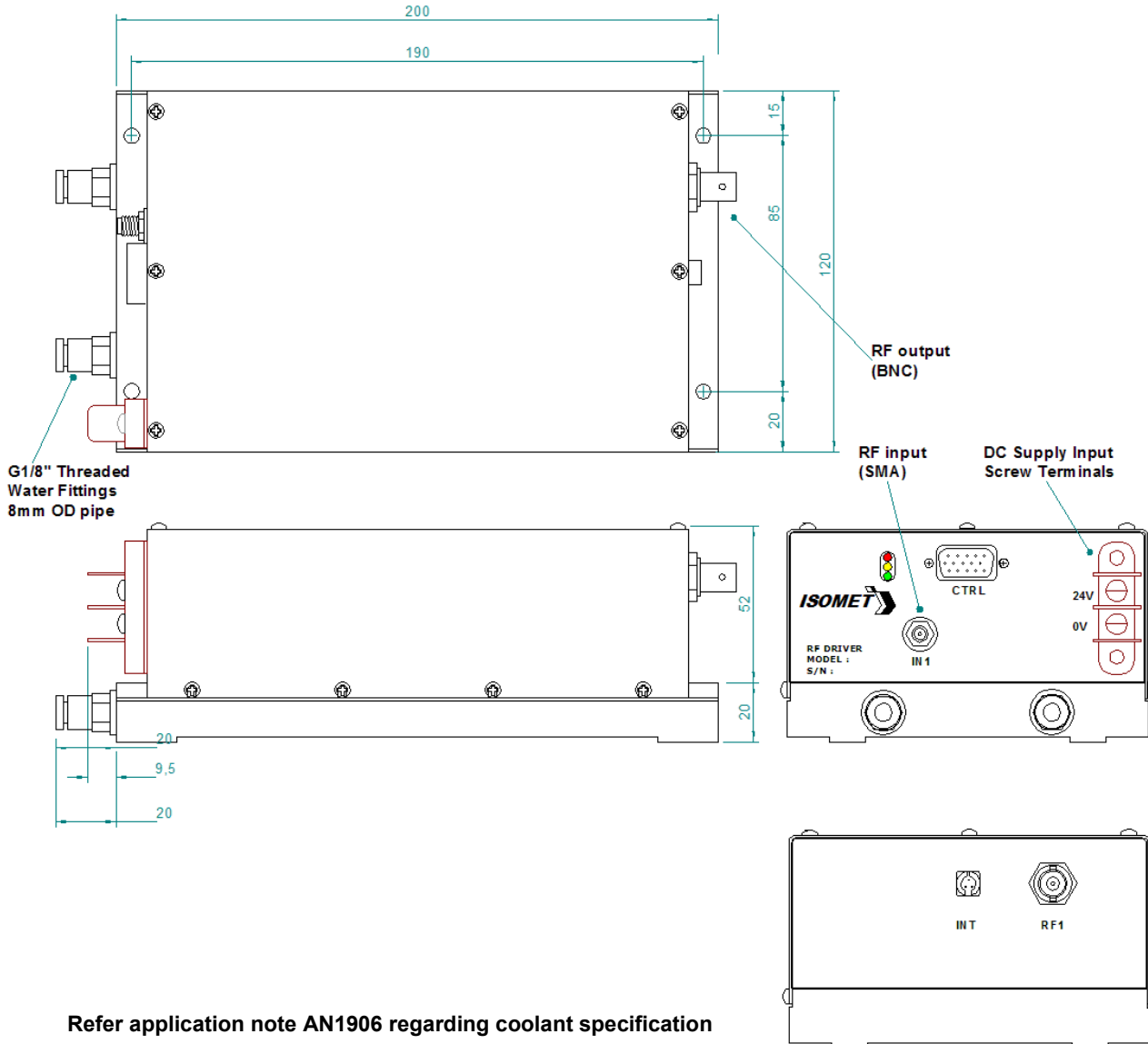
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OUTLINE DRAWING

Dimn: mm



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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