

RFA-1140/2

RF Amplifier

(Phase Delayed Outputs)



902

The RFA1140/2 is a Class-A solid-state amplifier designed to drive Isomet 1207B6-BS, 1208-6BS and 1209-7BS Acousto-Optic Scanners with up to 80 watts (total) of RF power in the 30 to 50 MHz frequency band. The amplifier generates two phase controlled 40 Watt outputs from a single RF frequency source such as the Isomet VCO-200A Voltage Controlled Oscillator. The amplifier includes a frequency monitor output providing a 200mVpp output of the applied drive frequency. A Video modulation input provides high speed control of the RF amplitude via a diode ring modulator. An externally adjustable preset potentiometer sets the maximum gain. A precise internal delay line generates the appropriate output phase delay between the two RF outputs required to beam steer the AO deflectors. The amplifier requires a +24V regulated DC power supply for operation and exhibits a nominal gain of 52dB.

SPECIFICATIONS

Power Out, Each Output:	40 Watts CW into 50Ω
Frequency Response:	25-55 MHz
Flatness:	± 0.5dB
Gain Input to Each Output:	52dB Nominal
Input Impedance:	50Ω Nominal
Output Impedance:	50Ω Nominal
Input VSWR:	<2.0:1
Harmonic Distortion:	>20dB Below Fundamental
Rise/Fall Time:	<200ns
Video Input*:	1V Peak to Peak for 100% depth of Modulation, DC Coupled (Analog)
Power Supply Requirement:	< 12A at +24V Nominal
Monitor Output:	> 200mVpp Output at the Input Frequency
Maximum Allowable Case Temp:	46°C
Minimum Allowable Case Temp:	0°C
Water Cooling:	Maintain Water Flow at Greater than 1 Litre/Minute at <25°C

*TTL Compatibility Available

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

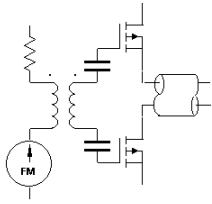
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: RF & Digital design

Software Development

OEM manufacture



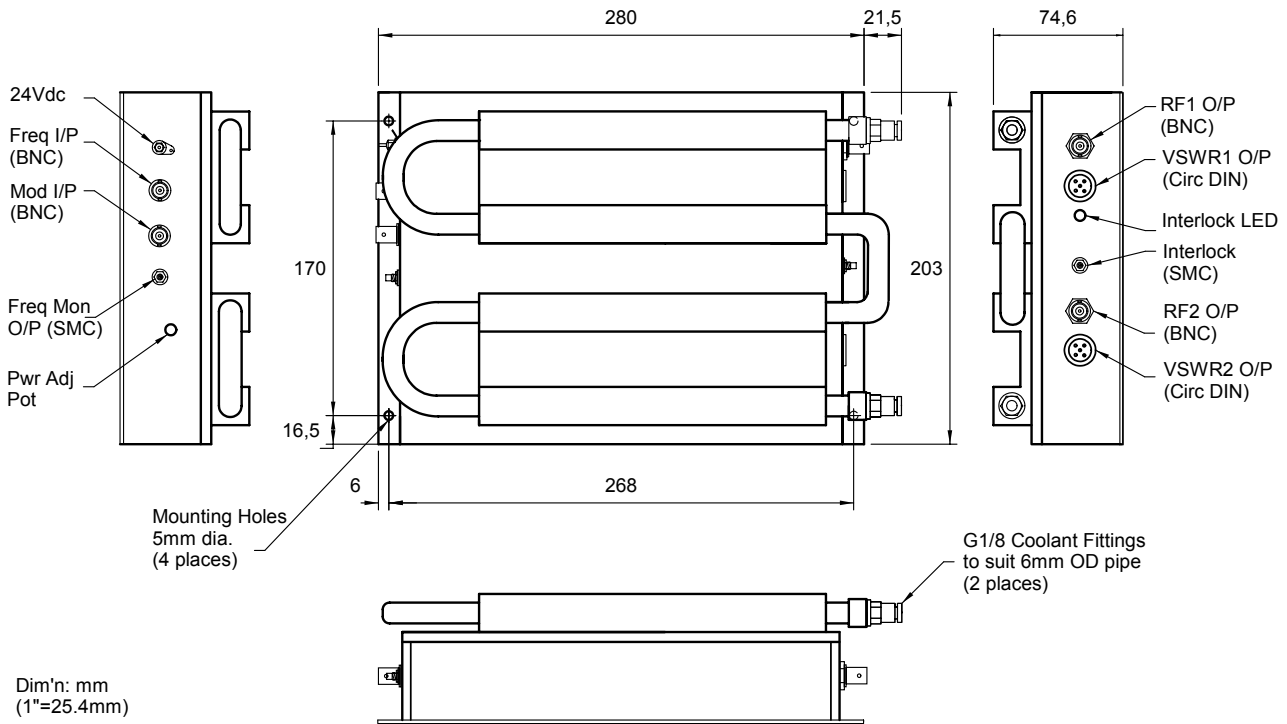
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OUTLINE DRAWING



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