

RFA331-2

FM RF Driver / Amplifier

(Phase Delayed – Dual Output)



902

The RFA331-2 is a combined VCO and power amplifier suitable for driving Isomet beam steered acousto-optic deflectors such as models 1207-6BS, 1208-6BS and 1209-7BS. This driver features buffered inputs for the control of the RF amplitude and frequency. Protection includes an internal over temperature sensor and a transorb spike suppressor. An external interlock (or RF enable) input is provided.

The RFA331-2 operates from a +28Vdc supply (or +24V with reduced RF power). An LED indicates when the RF outputs are 'live'. The maximum RF output power can be adjusted by means of a pre-set potentiometer.

The standard amplifier is supplied with a water cooled base. Alternatively the unit can be supplied with a ground flat base which must be mounted to a suitable forced air or water cooled heatsink. A center mounting point is provided to insure adequate thermal contact.

SPECIFICATION

Power Output	:	40 Watts Max C.W. per channel
Phase delay between channels	:	Factory set
Load Impedance	:	50Ω
Harmonic Distortion	:	>20dB below fundamental
Mismatch tolerance	:	The Driver will not oscillate
Tuning range	:	30-50MHz
Flatness	:	+/-1dB across tuning range
Tuning characteristics	:	Linear frequency vs. tuning voltage Linear < +/- 2% over range
Tuning Voltage	:	0V to 10V
Tuning Voltage I/P Impedance	:	>1KΩ
Tuning Slew Rate	:	>10MHz/μs
Residual FM	:	<10KHz Peak to Peak
Frequency Stability	:	+/- 0.25% From 0° to 60°C
Modulation Control Voltage	:	0.5V to 5V (<0.5V RF O/P off)
Mod. Control Characteristics	:	Pseudo linear RF Output vs. Ampl.Voltage
Mod. Control I/P Impedance	:	> 1KΩ
Enable I/P Volts	:	0V off, +5V on
Enable I/P Impedance	:	>10KΩ
Enable Cont. Characteristics	:	< 5μs settling time, solid state control
RF ON to OFF Ratio	:	40dB below full power
Output switching Speed	:	< 0.2μs Rise/Fall, 0 to 40 Watts
Power Supply	:	+24 to 28Vdc, Transorb protected
Temperature Range	:	0° to 50°C, Thermal Shutdown Interlock
Connections	:	Silk Screen Connector Identities
R.F. Outputs	:	BNC
Control signals -	:	9 pin 'D' type
Tuning Voltage	:	+sig pn1, -rtn pn6
Amplitude Control	:	+sig pn8, -rtn pn3
Enable/Interlock Control	:	+sig pn9, -rtn pn4
Interlock monitor	:	+sig pn7, -sig pn2
Power Input	:	Feed through filter solder tag
Dimensions	:	(See reverse)

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

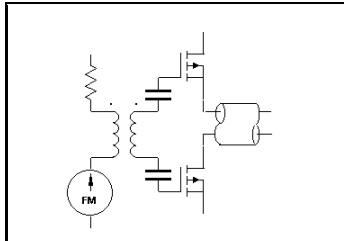
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: RF & Digital design

Software Development

OEM manufacture



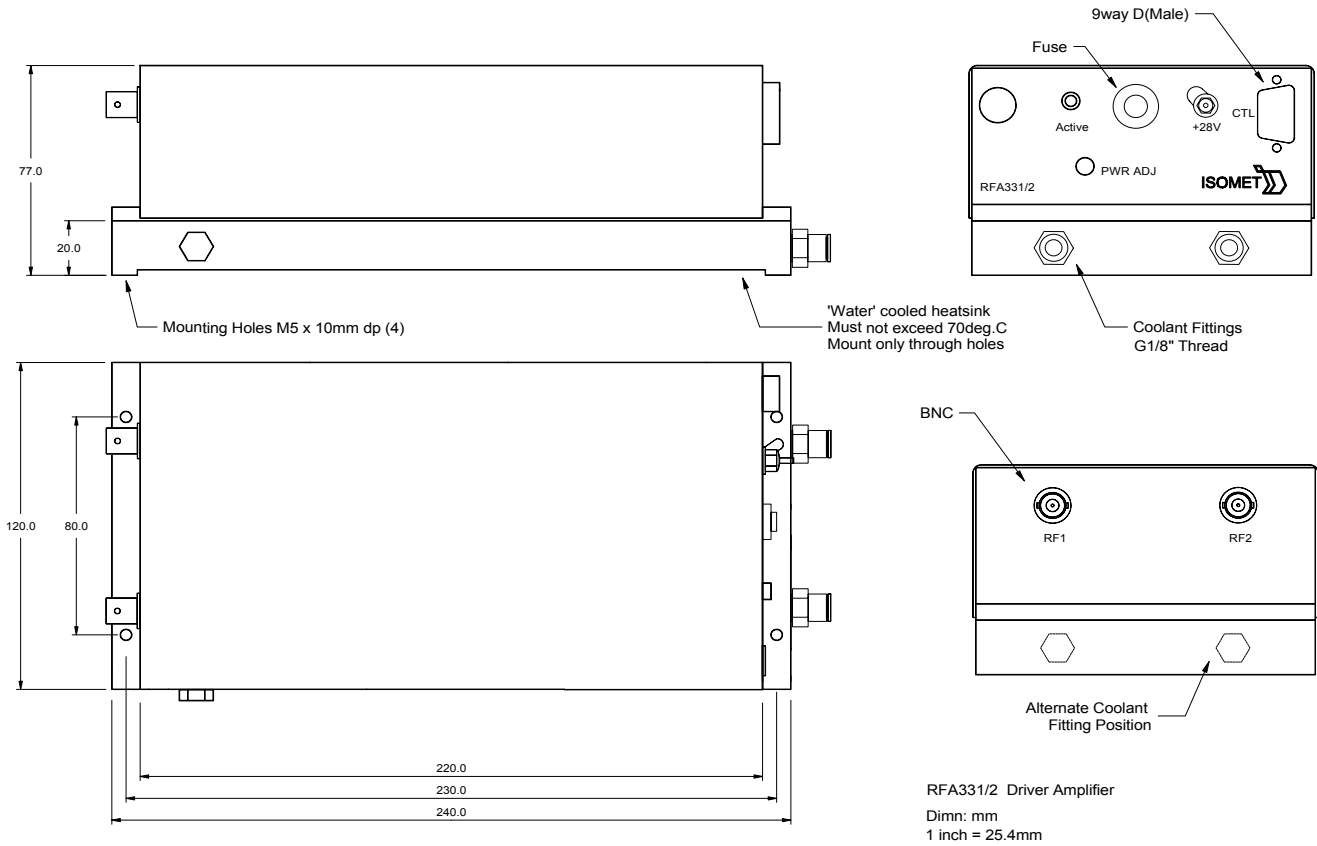
RFA331-2

FM RF Driver / Amplifier (Phase Delayed – Dual Output)



902

OUTLINE DRAWING



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