

RFA2110

RF Driver/Amplifier



1106

The RFA2110 is a combined 110 MHz oscillator and power amplifier suitable for driving Isomet acousto-optic modulators such as the 1211 series. This driver features both digital gate and analog modulation inputs for the control of the RF amplitude. Protection includes an internal over temperature sensor, and a tranzorb over voltage diode on the DC supply input. An external interlock (or RF enable) input is provided.

The RFA2110 will operate from a +24V to +28Vdc supply. LED's indicate the status of the thermal interlocks, DC supply and RF power. The maximum RF output power is adjusted by means of a pre-set potentiometer.

The amplifier includes an integral water-cooled base. The unit can be supplied with the coolant fittings located at the front (RFA2110) or rear (RFA2110-R). Please specify at time of order.

SPECIFICATION

Power Output	:	> 30 Watts Max CW (28V supply) > 25 Watts Max. CW (24V supply)
Load Impedance	:	50Ω
Harmonic Distortion	:	>20dB below fundamental
Mismatch Tolerance	:	The Driver will not oscillate
Center Frequency	:	110 MHz
Frequency stability	:	± 0.003%
Frequency accuracy	:	± 0.005%
Modulation Control Voltage	:	
Digital	:	TTL compatible (> 2.7V, RF O/P=on)
Analog	:	0.0 to 10.0V, 1Kohm i/p impedance (nominal)
RF ON to OFF Ratio	:	40dB below full power
Output Switching Speed	:	< 0.25μs Rise/Fall, 0 to 25 Watts
Interlock	:	Open OFF, closed ON Sink 20mA at 28V
Power Supply	:	+24V to +28Vdc, 0.25% regulation, < 4A
Temperature Range	:	0° to 60°C, Thermal Shutdown Interlock
RF Output	:	BNC
Control signals -	:	9 pin 'D' type Male
Amplitude Control, Digital	:	+sig pn6, -rtn pn7
Amplitude Control, Analog	:	+sig pn8, -rtn pn9
Interlock enable (connect to AO)	:	+sig pn4, -rtn pn5 (closed = on)
Interlock monitor, CMOS compatible	:	+sig pn1, -rtn pn2 (+5V = OK, 0V = fault)
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

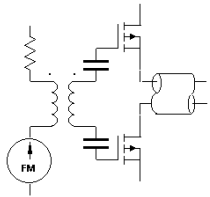
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: RF & Digital design

Software Development

OEM manufacture



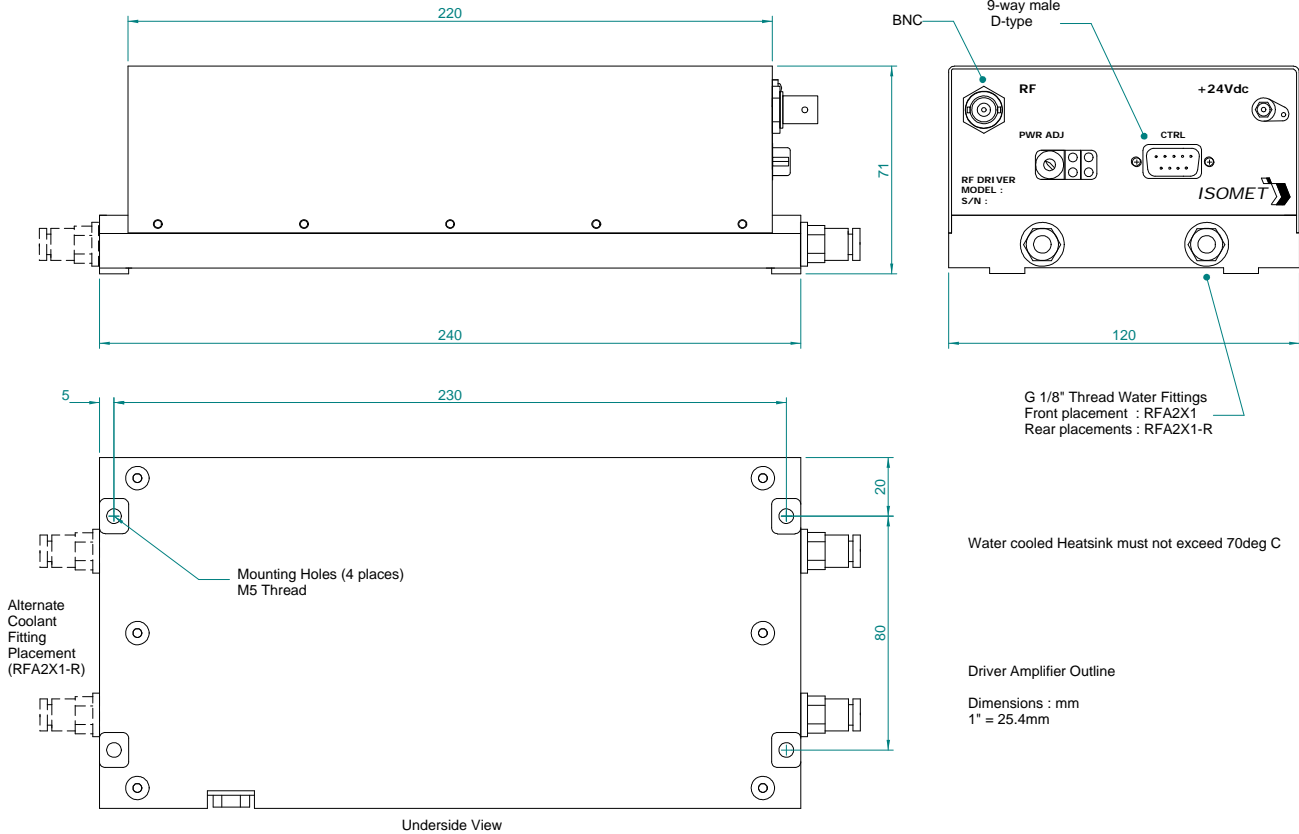
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OUTLINE DRAWING



Dimensions: mm

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