

RFA4060-2H

RF Driver/Amplifier



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The RFA4060-2H is a combined 40/60 MHz oscillator and power amplifier suitable for driving the Isomet High Power Acousto-optic Modulator/Deflector series AOM650. This driver features digital or analog inputs for the control of the RF amplitude and a digital input to select the carrier frequency. The drive frequency can be rapidly switched between 40 and 60MHz for dual spot applications. Protection includes an internal over temperature switch, and a 'TranZorb' over voltage diode on the DC supply input. An external interlock (or RF enable) input is provided.

The RFA4060-2H will operate from a +24V to +28Vdc supply. An LED indicates when the RF outputs are 'live'. The maximum RF output power for each frequency can be adjusted independently by means of pre-set potentiometers.

The amplifier includes an integral water-cooled heatsink.

SPECIFICATION

Power Output	:	> 190 Watts Max CW (28V supply) > 180 Watts Max. CW (24V supply)
Load Impedance	:	50Ω
Harmonic Distortion	:	>20dB below fundamental
Mismatch Tolerance	:	The Driver will not oscillate
Center Frequency	:	40 MHz / 60 MHz
Frequency Select	:	TTL compatible, L=40MHz, H=60MHz
Frequency stability	:	± 0.003%
Frequency accuracy	:	± 0.005%
Modulation Control Voltage	:	
Digital	:	TTL compatible (> 2.7V, RF O/P=on)
(option '-A') Analog	:	0.0 to 10.0V, 600ohm i/p impedance (nominal)
RF ON to OFF Ratio	:	40dB below full power
Output Switching Speed	:	< 0.25μs Rise/Fall, 0 to 50 Watts
Interlock	:	Open OFF, closed ON
	:	Sink 20mA at 12V
Power Supply	:	+24V to +28Vdc, 0.25% regulation, < 16A
Temperature Range	:	0° to 60°C, Thermal Shutdown Interlock
RF Output	:	BNC (2 off)
Power Input	:	Feed through filter solder tag

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

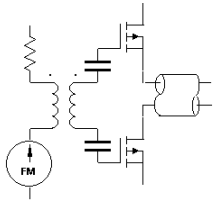
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: RF & Digital design

Software Development

OEM manufacture



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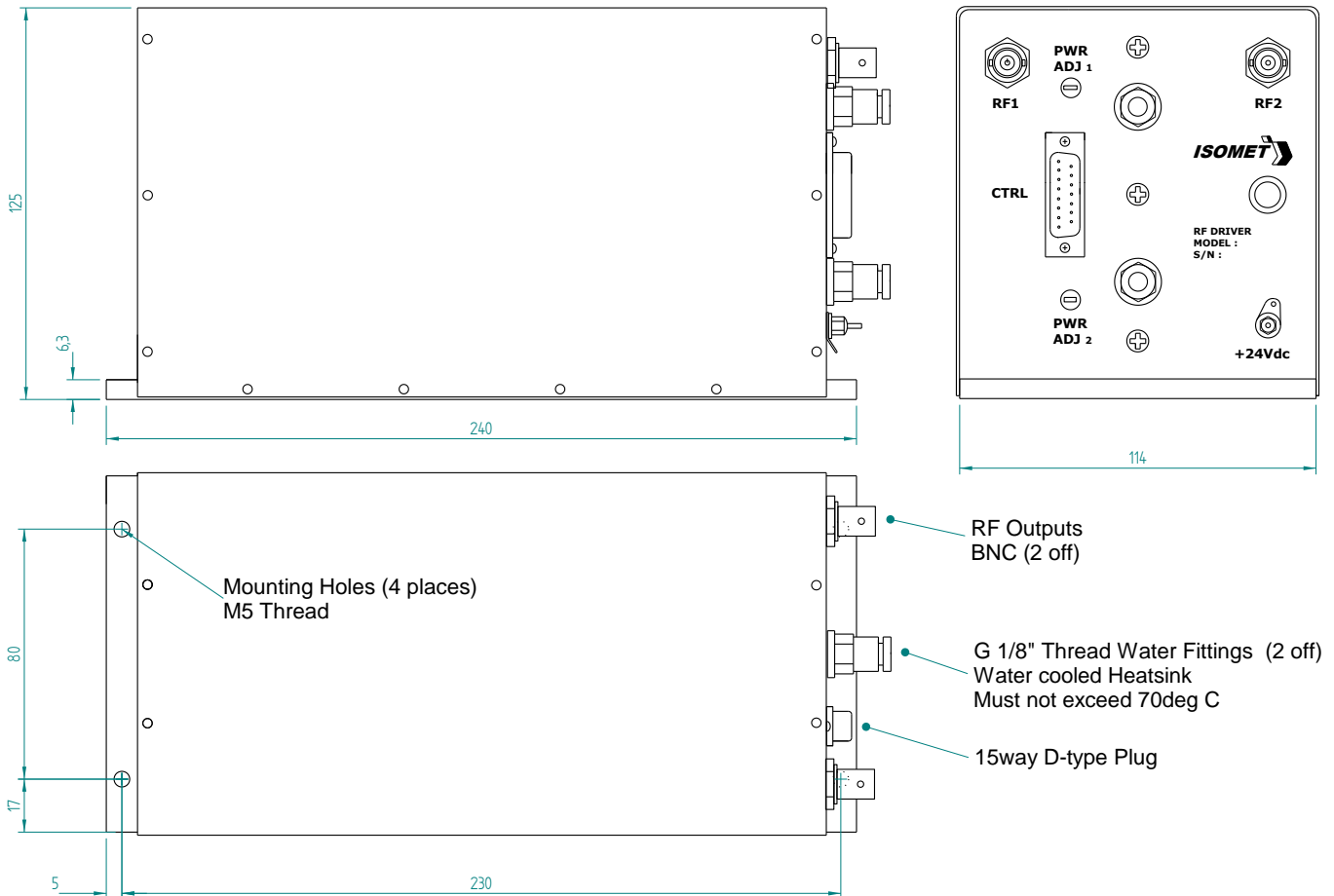
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Control signals -	:	15 pin 'D' type Male
Frequency select, TTL	:	+sig pn8, -rtn pn15 (High=40MHz, Low=60MHz)
Amplitude Control, TTL	:	+sig pn7, -rtn pn14 (High=On, Low=Off)
Interlock enable (connect to AO)	:	+sig pn1, -rtn pn9 (Closed = on)
Interlock monitor, CMOS open drain	:	+sig pn2, -rtn pn10 (Low = OK)

OUTLINE DRAWING

RFA4060-2 Series RF Amplifier Outline

Dimensions : mm
1" = 25.4mm



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