

RFA910-40

RF Driver / Amplifier

(Preliminary)



1106

The RFA910-40 is a combined oscillator and 10W power amplifier suitable for driving Isomet 40MHz acousto-optic modulators and Q-switches such as model series M1134 and Q1133. 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 RFA910-80 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.

This amplifier requires forced air-cooling. An optional fan and cover assembly can be provided. Please specify at time of order using option -F.

SPECIFICATION

Power Output	:	> 12 Watts Max CW (28V supply) > 10 Watts Max. CW (24V supply)
Load Impedance	:	50Ω
Harmonic Distortion	:	>20dB below fundamental
Mismatch Tolerance	:	The Driver will not oscillate
Centre Frequency	:	40.68 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	:	< 0.1μs Rise /Fall time, 0 to 10 Watts
Interlock	:	Open OFF, closed ON
	:	Sink 20mA at 28V
Power Supply	:	+24V to +28Vdc, 0.25% regulation, < 2A
Temperature Range	:	0° to 60°C, Thermal Shutdown Interlock
R.F. Output	:	BNC (SMA option available)
Control signals -	:	9 pin 'D' type
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, TTL compatible	:	+sig pn1, -rtn pn2 (+5V = OK, 0V = fault)
Power Input	:	Feed through filter solder tag
Dimensions	:	(See reverse)

* Other options available 0-1V, 0-5V

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

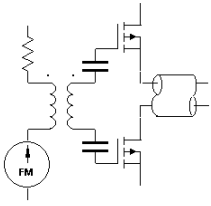
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Quality Assured.

**In-house: RF & Digital design
Software Development
OEM manufacture**



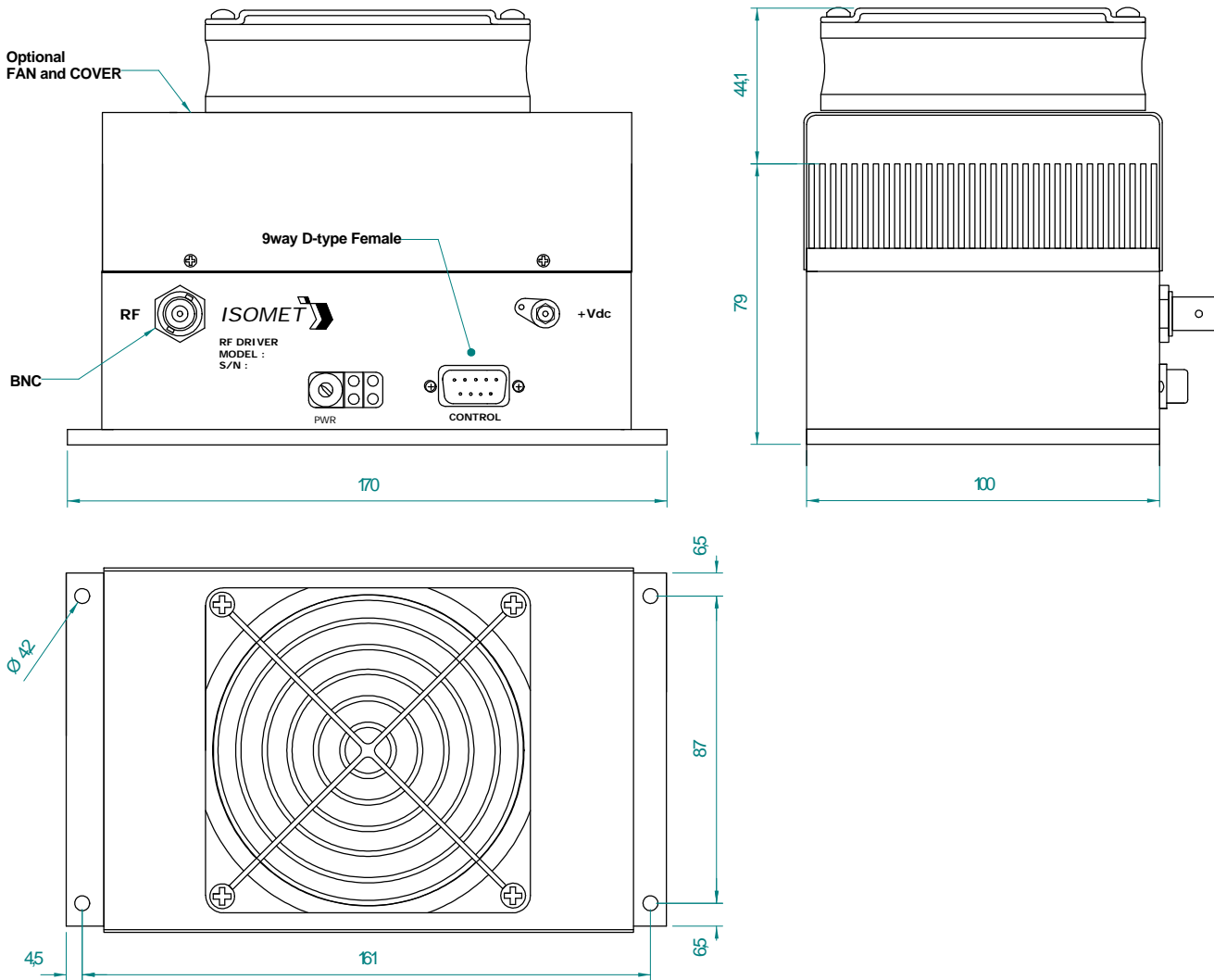
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OUTLINE DRAWING



Model RFA910-40-F shown

Dimensions: mm

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Software Development
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