

# RFJ040-1-15-x

## RF Driver / Amplifier



2324

The RFJ040-1-15 is a combined 40 MHz oscillator and power amplifier suitable for driving Isomet acousto-optic modulators such as the M1377-aQ40 series. This driver features both digital 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 driver will operate from a +24V to +28Vdc supply. LED's indicate the status of the thermal interlocks, DC supply and the RF power activity. The RF output power limit is adjusted by means of a pre-set potentiometer.

The amplifier is conduction cooled through the base and must be mounted to heat conducting surface.

### SPECIFICATION

Power Output	:	17 Watts Max CW (28V supply) 15 Watts Max. CW (24V supply)
Load Impedance	:	50Ω
Harmonic Distortion	:	>20dB below fundamental
Mismatch Tolerance	:	Driver will not oscillate
Centre Frequency	:	40.0 MHz
Frequency stability	:	± 25ppm
Frequency accuracy	:	± 25ppm
Modulation Control Voltage		
	Digital	: TTL compatible (> 2.7V, RF active) SMA connector, 5V maximum
	Analog	: 0.0 to 10.0V, 3Kohm i/p impedance (nominal) SMA connector, 12V maximum
RF ON to OFF Ratio	:	40dB below full power
Output Switching Speed	:	< 50/30 ns Rise/Fall, 0 to 10 Watts
Interlock	:	Open OFF, closed ON (Sink 20mA at Vdc) Binder 3-way connector, pin1 – pin2
Temperature Range	:	0° to 50°C, Thermal Shutdown Interlock
DC Power Input	:	Filtered screw terminals
Power Supply, Vdc	:	+24V to +28Vdc, 1.0% regulation, < 3A

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

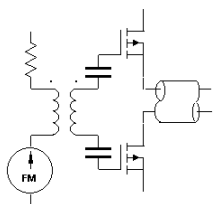
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#### Quality Assured.

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



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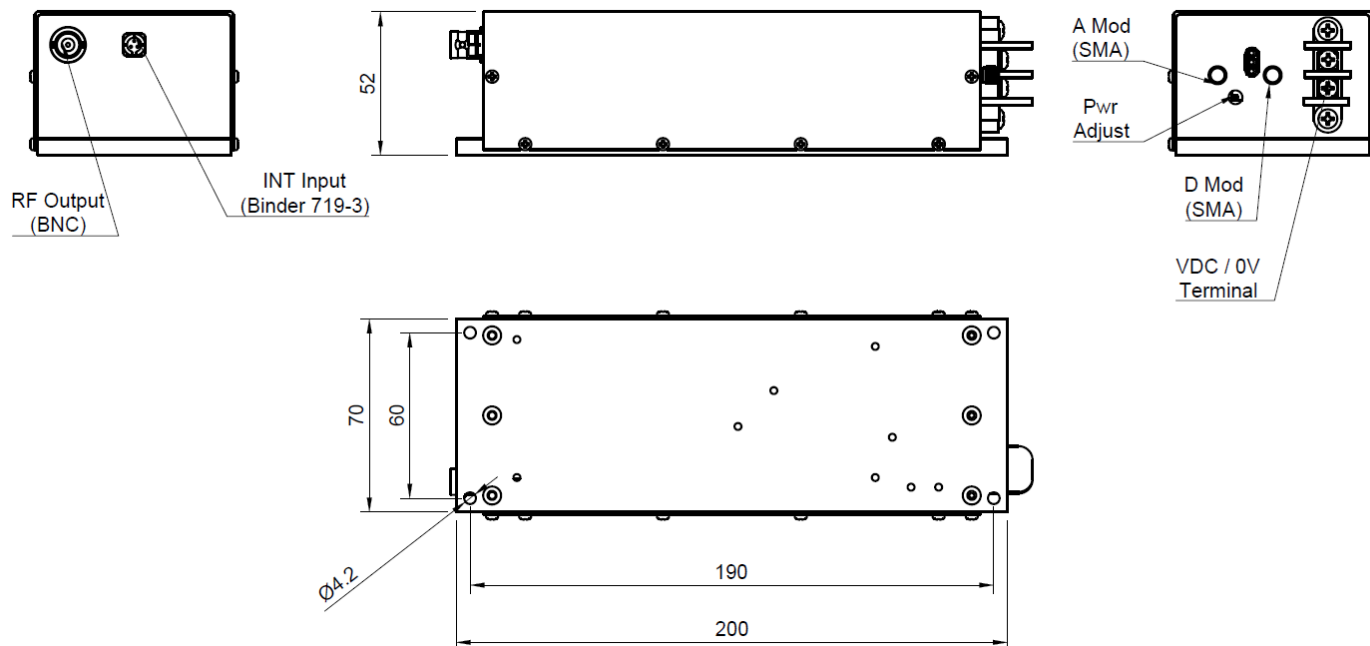
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### OUTLINE DRAWING

Dimn: mm



### OPTIONS -x:

- A : Analog modulation ONLY
- V : 0-5V analog modulation range
- X : 0-10V analog modulation range
- D : Digital modulation ONLY

e.g. RFJ040-1-15-X Analog modulation 0-10V + Digital Modulation  
 RFJ040-1-15-AX Analog modulation only, 0-10V

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