

# RFJ040-1-15

## RF Driver / Amplifier



2822

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 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 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**



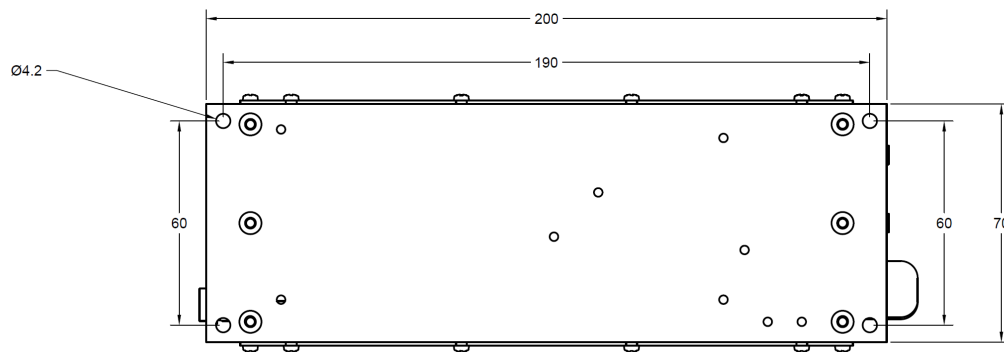
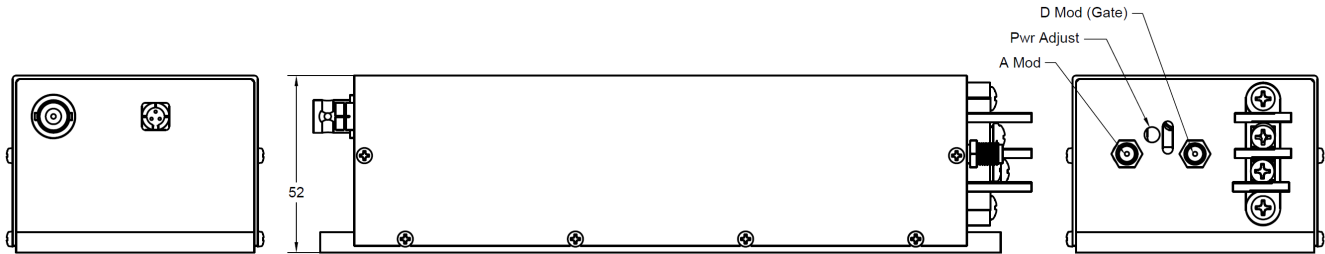
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### OUTLINE DRAWING



### OPTIONS

- A : Analog modulation only
- D : Digital modulation only
- V : 0 - 5V analog modulation range

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