

# RFJ080-1-25-x

## RF Driver / Amplifier



2324

The RFJ080-1-25 is a combined 80 MHz oscillator and power amplifier suitable for driving Isomet acousto-optic modulators requiring high peak powers for duty cycled operation. 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	:	28 Watts Max CW (28V supply) 25 Watts Max. CW (24V supply)
Load Impedance	:	50Ω
Harmonic Distortion	:	>20dB below fundamental
Mismatch Tolerance	:	Driver will not oscillate
Centre Frequency	:	80.0 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 20 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, < 4A

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

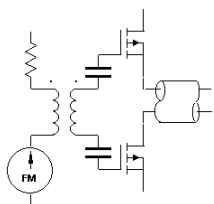
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#### Quality Assured.

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



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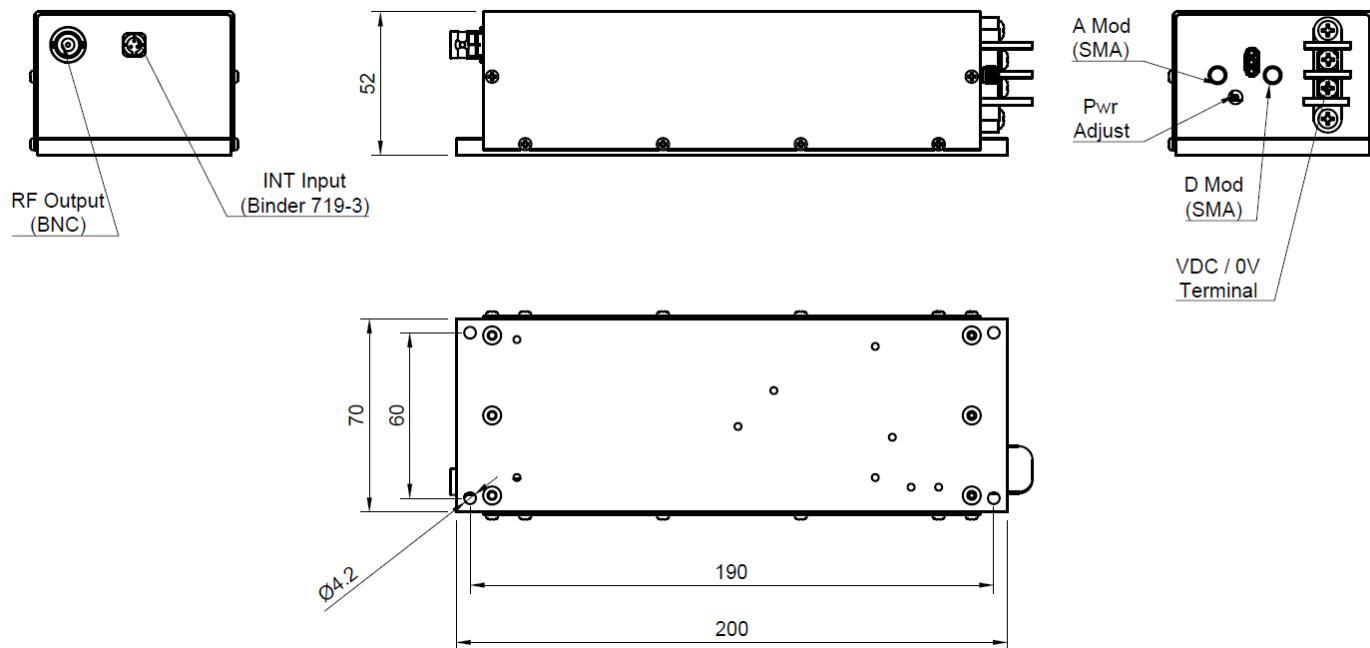
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### OUTLINE DRAWING

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. RFJ080-1-25-X Analog modulation 0-10V + Digital Modulation  
 RFJ080-1-25-AX Analog modulation only, 0-10V

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