The RFA960-FC is a combined oscillator and 60W power amplifier suitable for driving Isomet acousto-optic modulators and Q-switches. 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 RFA960-FC 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 standard amplifier requires forced air-cooling. An optional fan and cover assembly (-F) or a water cooled top plate (-W) can be provided. Please specify these options at order.

### Freq Option

<table>
<thead>
<tr>
<th>RFA960-FC</th>
<th>-</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.0MHz</td>
<td>24</td>
<td>F</td>
</tr>
<tr>
<td>27.12MHz</td>
<td>27</td>
<td>W</td>
</tr>
<tr>
<td>40.00MHz</td>
<td>40</td>
<td>B</td>
</tr>
<tr>
<td>40.68MHz</td>
<td>41</td>
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<tr>
<td>50.00MHz</td>
<td>50</td>
<td></td>
</tr>
</tbody>
</table>

### SPECIFICATION

- **Power Output**: > 65 Watts Max CW (28V supply)  
  > 60 Watts Max. CW (24V supply)
- **Load Impedance**: 50Ω
- **Harmonic Distortion**: >20dB below fundamental
- **Mismatch Tolerance**: The Driver will not oscillate
- **Centre Frequency, FC**: see table
- **Frequency stability**: ± 0.003%
- **Frequency accuracy**: ± 0.005%
- **Modulation Control Voltages**
  - **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, < 7A
- **Temperature Range**: 0º to 60ºC, Thermal Shutdown Interlock
- **R.F. Output**: SMA (or BNC if specified)

* Other options available 0-1V, 0-5V
RFA960-FC-x
RF Driver / Amplifier

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

Model RFA960-40-F shown
Dimensions: mm