

## 620c/630c -110

# ISOMET

### **RF Tuneable Driver**

1106

The 630c-110 Modulator/Deflector Driver, is a modular, swept-frequency RF power source specifically designed to operate with Isomet acousto-optic off-axis deflectors such as the OAD948 series. The driver accepts a tuning voltage between approximately +0 volts and +10 volts and provides an RF output to the acousto-optic deflector at the tuned frequency. The driver also accepts a video input signal to control the amplitude of the RF output. The start frequency corresponding to a tuning voltage of 0.0 volts is defined by the frequency offset potentiometer (FRQ OS). This permits adjustment of the start frequency from approx 70-95MHz. A secondary low level output signal is provided at the tuned operating frequency. This can be used for monitoring or feedback purposes.

#### **SPECIFICATIONS**

Oscillator Type: Varactor-tuned thin film hybrid

Amplifier Type: Broadband Class A

Output RF Power:  $\geq$  1.5 Watt Output Impedance:  $\geq$  0.0 nominal

Load VSWR: < 2.5:1 for best results

Frequency monitor output (FMON): 100mV pp, 50 ohm

RF Power Variation vs.Frequency:  $\leq 1 \text{ dB}$ 

Spurious Outputs: Harmonics > 20dB below fundamental

Tuning Range: 75 to 150MHz Maximum 80 to 140MHz Specified

Tuning Voltage (Vt): 0 to 10V for specified tuning range Tuning Linearity: <-+/- 1.5% over specified tuning range

Tuning Voltage Impedance: 1 Kohm (nominal)
Tuning Slew Rate > 10 MHz/µs

Residual FM: < 10 KHz peak-to-peak

Frequency Stability: ±0.25%

Video Input Voltage (MOD):-

(630C) Analogue option: 0-1V for 100% depth of modulation, DC coupled

(620C) Digital option: TTL line driver compatible, positive logic

 $\begin{array}{ll} \mbox{Input Impedance:} & 50\Omega \mbox{ source} \\ \mbox{RF On-Off Ratio:} & > 40 \mbox{ dB} \end{array}$ 

DC Power Input: +24Vdc or +28Vdc at < 700 mA regulated to  $\pm 0.25$ %

Temperature Range: 0°C to 60°C ambient, temperature at

mounting face must not exceed 70°C

Mounting Orientation: Any

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

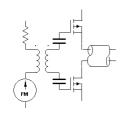
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Quality Assured.

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

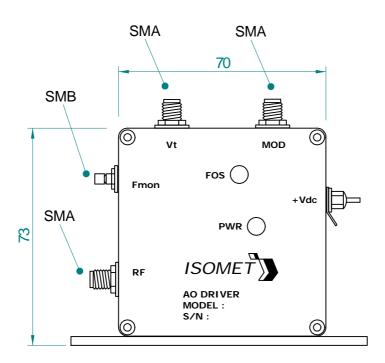


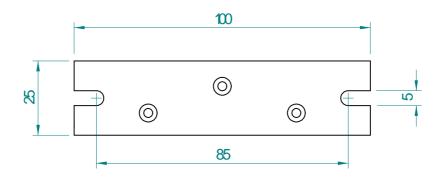
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#### **OUTLINE DRAWING**





Dim'n: mm

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