

620c/630c -80

ISOMET

RF Tuneable Driver

1007

The 630c-80 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 1205C-2 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 55-65MHz. 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

 $\begin{array}{ll} \text{Output RF Power:} & \qquad & \underline{>} \ 1.5 \ \text{Watt} \\ \text{Output Impedance:} & \qquad & 50 \Omega \ \text{nominal} \end{array}$

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: 55 to 110MHz Maximum 60 to 100MHz as specified

Tuning Voltage (Vt):

0 to 10V for specified tuning range

-+/- 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 ± 0.25 %

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

mounting face must not exceed 70°C

Mounting Orientation: Any

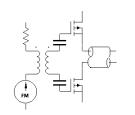
ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

E-mail: ISOMET@ ISOMET.COM Web Page: WWW.ISOMET.COM

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



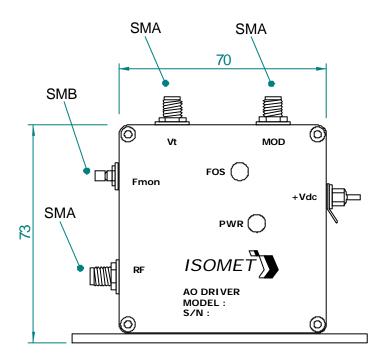
620c/630c -80

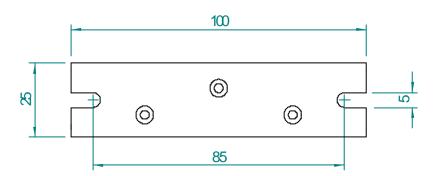
RF Tuneable Driver



1007

OUTLINE DRAWING





Dim'n: mm

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

E-mail: ISOMET@ ISOMET.COM Web Page: WWW.ISOMET.COM

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