

620A or 630A-6-40



RF Tuneable Driver

(Preliminary)

1213

The 620A/630A-40 is a modular VCO based frequency source specifically designed to operate with Isomet acousto-optic deflectors, modulators and frequency shifters. The driver generates an output frequency proportional to the input tuning voltage with a pseudo linear response between 0V and +10 volt. The driver also features a modulation input signal to control the amplitude of the RF output. The start frequency is adjustable and is set by the frequency offset potentiometer (FRQ OS). A secondary low level output signal is provided at the tuned operating frequency. This can be used for monitoring or feedback purposes. A Class-A power amplifier is integrated into the driver.

SPECIFICATIONS

Oscillator Type: Varactor-tuned thin film hybrid

Amplifier Type: Broadband Class A

Output RF Power: ≥ 6 Watt Output Impedance: 50Ω nominal

Load VSWR: < 2.5:1 for best results

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

< 1 dB RF Power Variation vs. Frequency:

Spurious Outputs: Harmonics > 20dB below fundamental

Tuning Range: 28 to 54MHz, maximum

30 to 50MHz, standard factory setting 0 to 10V for specified tuning range Tuning Voltage (Vt): <+/- 1.5% over specified tuning range

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

Residual FM: < 10 KHz peak-to-peak

Frequency Stability: ±0.25%

Video Input Voltage (MOD):-

Tuning Linearity:

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

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

Input Impedance: 50Ω source RF On-Off Ratio: > 40 dB

DC Power Input: +24Vdc or +28Vdc at < 1A regulated to \pm 0.25%

Temperature Range: 0°C to 50°C ambient.

Temperature at mounting face must not exceed 60°C

Mounting Orientation: Any

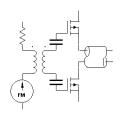
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In-house: RF & Digital design **Software Development OEM** manufacture



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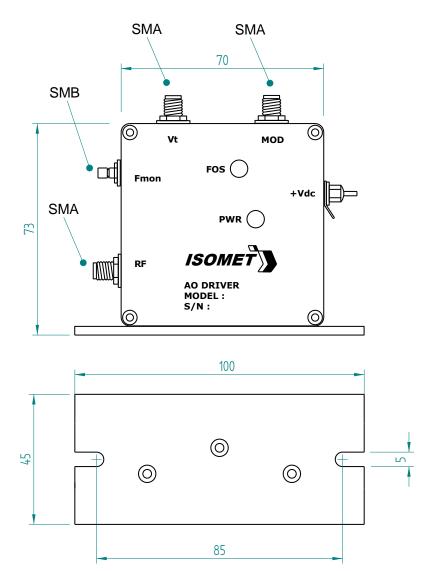


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OUTLINE DRAWING



Dim'n: mm

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