

# D324/D334

## Tunable RF Driver



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The D324/D334 Modulator/Deflector Driver, is a modular, swept-frequency RF power source specifically designed to operate with Isomet acousto-optic devices such as the 1212-2-949 and 1250c-868. 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 125-175MHz. An internal 1/256 divider provides a TTL output signal at 1/256 of 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:	≥ 1.0 Watt
Output Impedance:	50Ω nominal
Load VSWR:	< 2.5:1 for best results
Frequency monitor output (FMON):	TTL compatible @ 1/256 of output frequency
RF Power Variation vs. Freq.:	≤ 1 dB
Spurious Outputs:	Harmonics > 20dB below fundamental
Tuning Range:	100 to 200 MHz Maximum 125 to 175 MHz 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	> 5 MHz/μs
Residual FM:	< 10 KHz peak-to-peak
Frequency Stability:	±0.25%
Video Input Voltage (MOD):-	
(D334) Analogue option:	0-1V for 100% depth of modulation, DC coupled
(D324) 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 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

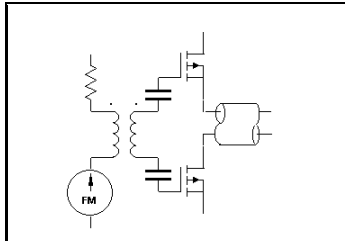
E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

**Quality Assured.**

**In-house: RF & Digital design**

**Software Development**

**OEM manufacture**



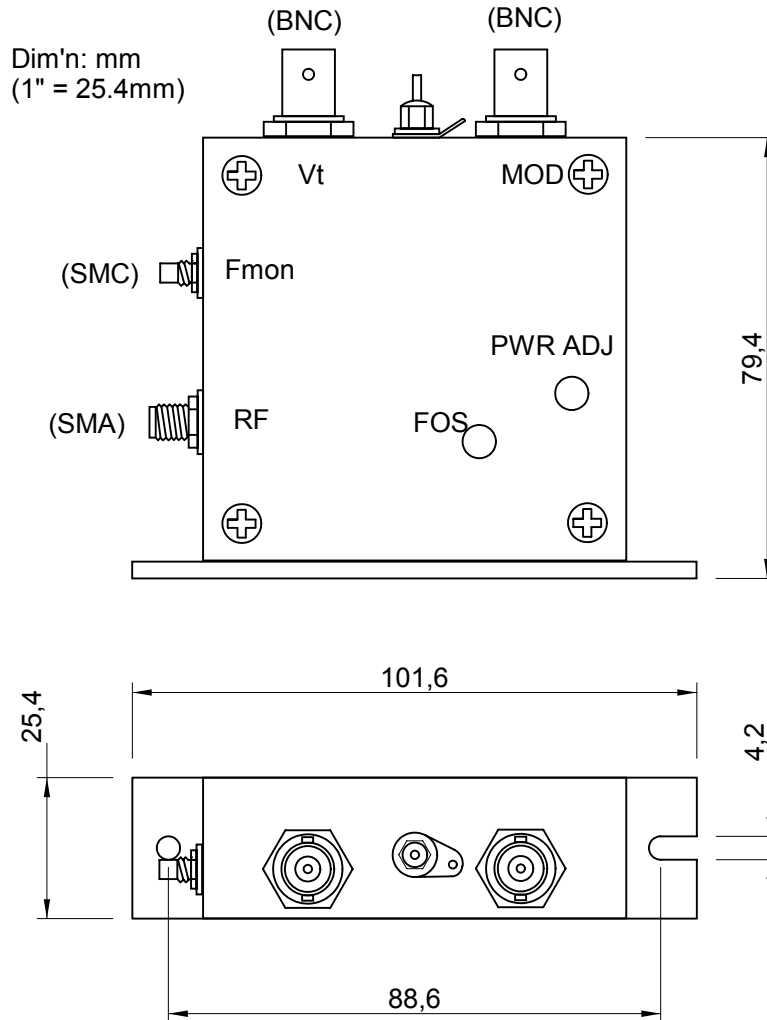
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### OUTLINE DRAWING



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