

D300 Series

Tunable RF Driver



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The D300 family of drivers are electronically tunable RF generators designed for use with the ISOMET 1205 and 1206 acousto-optic Bragg cells.

Contained in each driver is a varactor-tuned oscillator and a class-A power amplifier. The oscillator features good tuning linearity and a fast slew rate. Although not temperature stabilized, the oscillator frequency stability is satisfactory for many linear scan and random access applications. Typical applications include the dynamic facet error correction of a rotating polygon mirror.

All models of the D300 require DC power from an external, regulated power supply.

SPECIFICATIONS

Oscillator Type:	Varactor-tuned, emitter-coupled transistor
Amplifier Type:	Broadband Class A
Output RF Power:	≥ 1.0W
Output Impedance:	50Ω (Nominal)
Load VSWR:	< 2.5:1 for best results
Output RF Power Variation vs.	
Frequency:	≤ 1dB
Spurious Outputs:	Harmonics > 20dB below fundamental
Tuning Characteristic:	Linear frequency vs. tuning voltage
Tuning Voltage:	≅ +4V to +17V
Tuning Linearity:	± 1% from best-fit straight line over specified tuning range
Tuning Voltage Impedance:	Drive from low impedance source, 50Ω or less
Tuning Slew Rate:	> 10MHz/μs
Residual FM:	< 10KHz peak to peak
Frequency Stability:	± 0.25% from 0° to +60°C
DC Power Input:	+28VDC at 600mA regulated to ± 0.25%
Temperature Range:	0°C to 60°C Ambient, Temperature at mounting face must not exceed 70°C
Mounting Orientation:	Any
Dimensions:	See Outline (reverse side)

MODELS	D301B	D302B
Frequency Range	57-103MHz	82-138MHz
Scale Factor	3MHz/V	4MHz/V

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

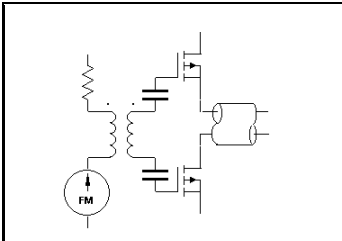
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: RF & Digital design

Software Development

OEM manufacture

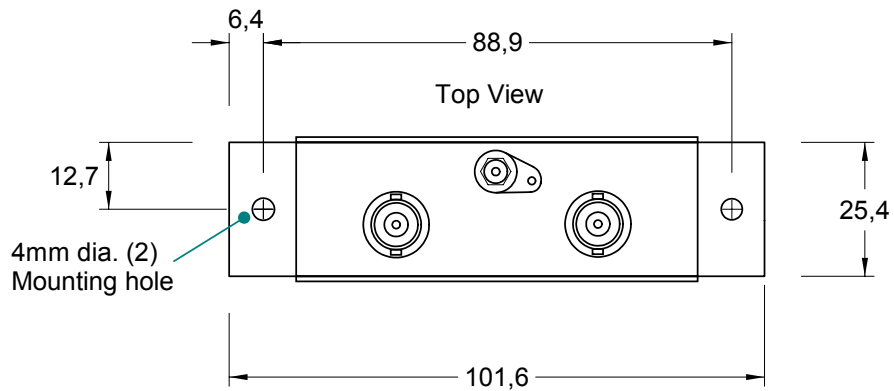
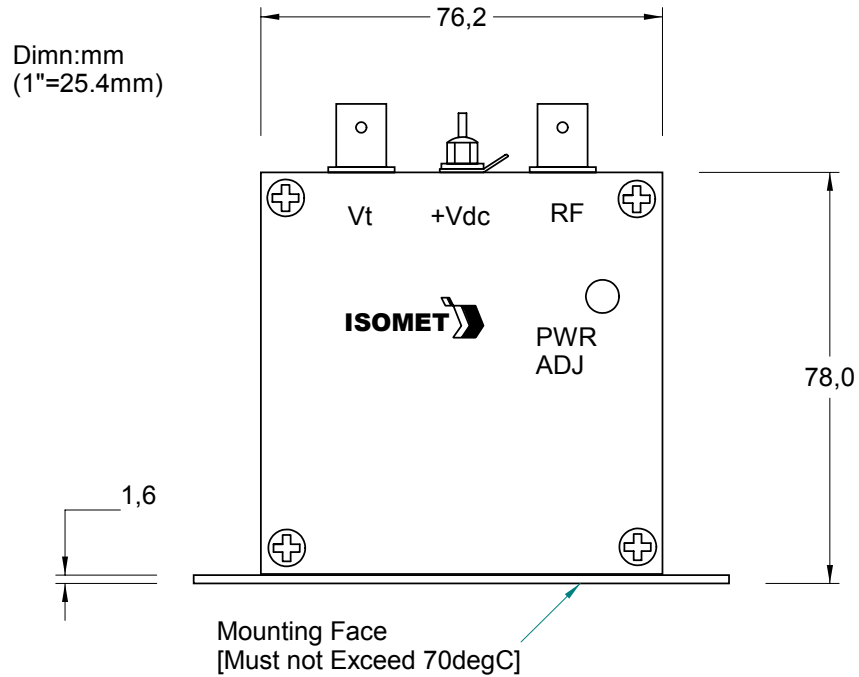


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OUTLINE DRAWING



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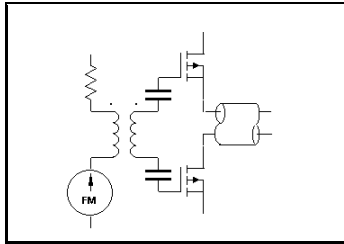
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