

D321-BS/D331-BS

Tuneable RF Driver

(Phase Delayed - Dual Output)



1106

The Model D3x1-BS Deflector Driver is a class A solid-state RF source designed to drive *ISOMET* beam steered Acousto-Optic Scanners with up to 3.6 Watts total power in the 30 to 60 MHz frequency band.

The driver features a 0 to +10 volts tuning voltage input and provides an RF output to the acousto-optic deflector at the tuned frequency. The driver accepts a video input signal to control the amplitude of the RF output. A low power frequency monitor output is also provided and can be used for monitoring or feedback purposes. The driver has two 1.8 Watt RF outputs. Maximum gain is externally adjustable via a pre-set potentiometer. An internal delay line introduces a phase offset between the RF outputs and is specific to the AOD type and wavelength.

SPECIFICATIONS

Oscillator Type:	Varactor-tuned thin film hybrid
Power Out, Each Output (X1,X2 (DLY)):	1.8 Watts Maximum CW into 50Ω
Phase delay between outputs:	AO Deflector dependant
Load VSWR:	< 2.5:1 for best results
Frequency monitor output (FMON):	200mVp-p, 50ohm
Output RF Power Variation vs.Freq:	≤ 1 dB
Spurious Outputs:	Harmonics > 20dB below fundamental
Tuning Range:	30-50MHz or 40-60MHz **
Tuning Voltage (Vt):	0 to 10V for specified tuning range
Tuning Linearity:	< +/- 1% over specified tuning range
Tuning Voltage Impedance:	600 ohm (nominal)
Tuning Slew Rate	> 10 MHz/μs
Residual FM:	< 10 KHz peak-to-peak
Frequency Stability:	±0.25%
Video Input Voltage (MOD):-	
Analogue option: (D331-BS)	0-1V ***, DC coupled
Digital option: (D321-BS)	TTL line driver, positive logic
Input Impedance:	50Ω source
RF ON-OFF Ratio:	> 37dB
RF Amplitude rise/fall time	< 5nsec
DC Power Input:	+24Vdc* at 1.0A regulated to ± 0.25% -12V to -15Vdc at 0.2A regulated to ± 0.25%
Temperature Range:	0°C to 60°C ambient, temperature at Mounting face must not exceed 70°C
Mounting Orientation:	Any

* +28Vdc positive supply can be used

** Other ranges available within 30 -60MHz limits

*** 0-5V option available

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

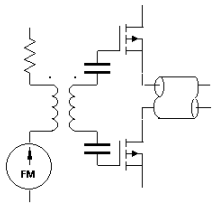
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Quality Assured.

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



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Tunable RF Driver

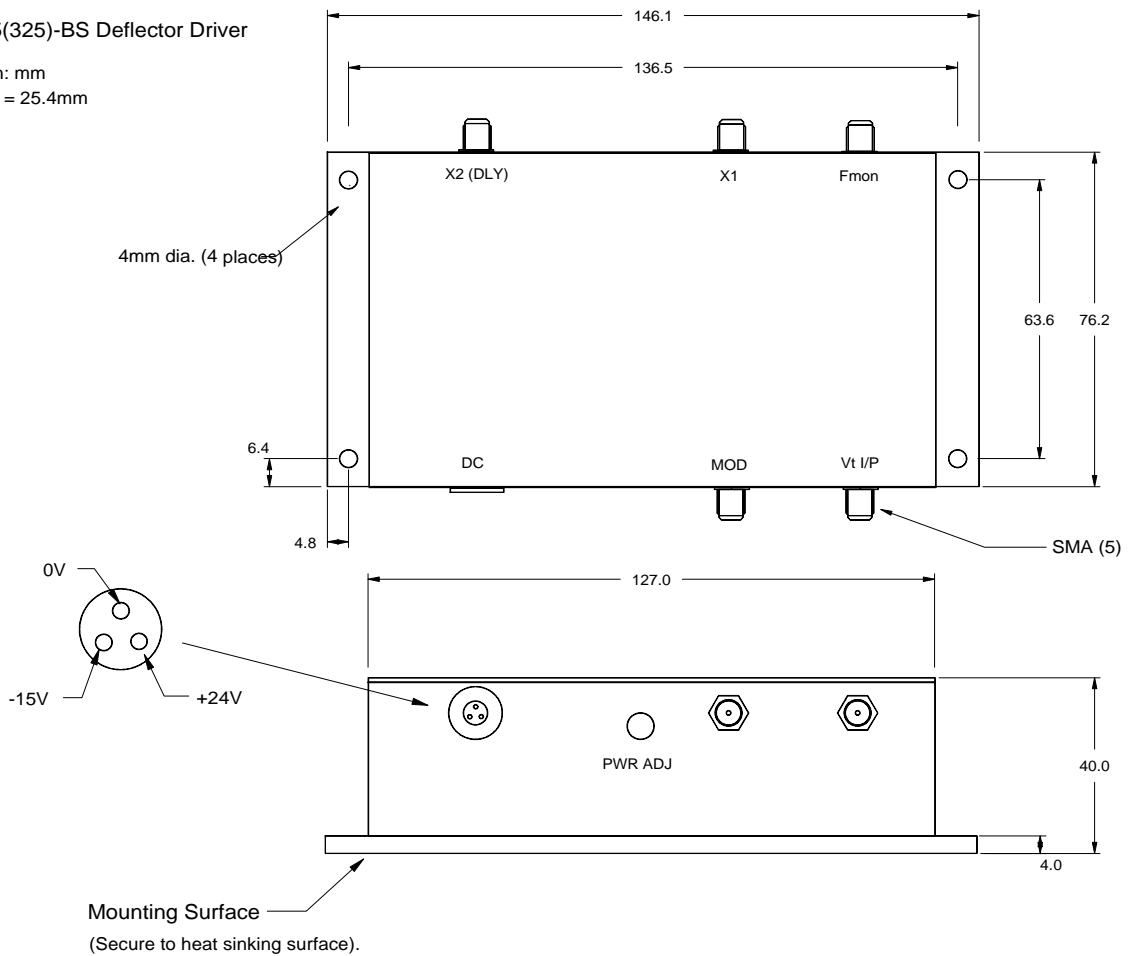
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OUTLINE DRAWING

D335(325)-BS Deflector Driver

Dim'n: mm
1 inch = 25.4mm



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