

D323-BS/D333-BS

Tuneable RF Driver

(Phase Delayed - Dual Output)



1106

The Model D3x3-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 70 to 140 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 1.6 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: | 75-125MHz or 90-130MHz ** |
| 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 | > 20 MHz/μs |
| Residual FM: | < 10 KHz peak-to-peak |
| Frequency Stability: | ±0.25% |
| Video Input Voltage (MOD):- | |
| Analogue option: (D333-BS) | 0-1V ***, DC coupled |
| Digital option: (D323-BS) | TTL line driver, positive logic |
| Input Impedance: | 50Ω source |
| RF ON-OFF Ratio: | > 40 dB |
| 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 70 -140MHz limits

*** 0-5V option available

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

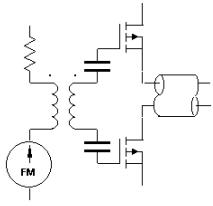
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Quality Assured.

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



D323-BS/D333-BS



Tunable RF Driver

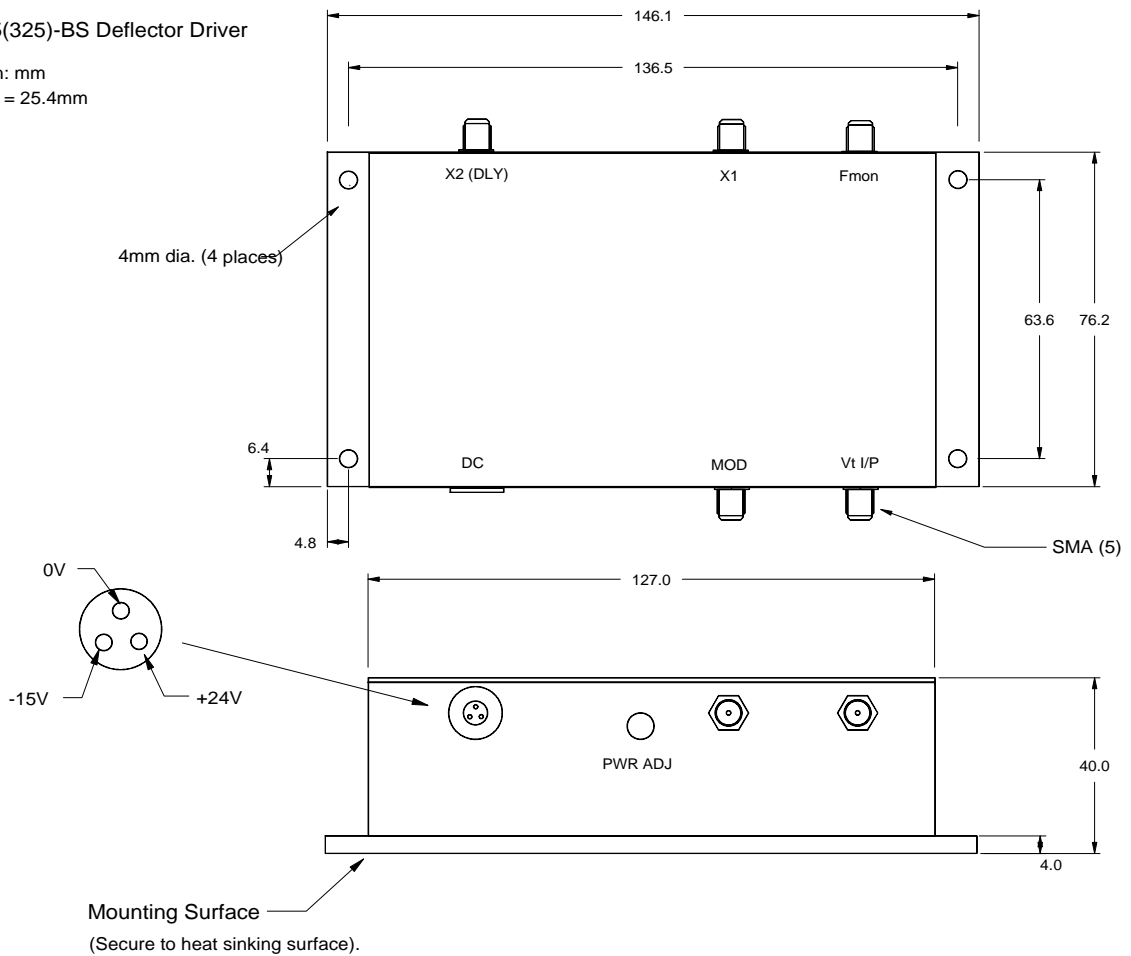
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OUTLINE DRAWING

D335(325)-BS Deflector Driver

Dim'n: mm
1 inch = 25.4mm



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Software Development

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