

225B-180 / 235B-180

RF Driver



902

The 225B-1-180 (Digital Modulation) / 235B-1-180 (Analog Modulation) Drivers are designed to operate with Isomet 180MHz AO modulators for high speed control of laser beam intensity.

Contained in these Drivers are a free-running quartz crystal carrier-frequency oscillator, a wideband balanced diode ring modulator, and a broadband Class A amplifier. Under control of the video input signal, the balanced ring modulator impresses the modulating video on the carrier. The resulting double sideband AM signal is amplified in the broadband Class A amplifier.

Efficient heat transfer from the driver requires that the mounting base be attached to an external heat sink not exceeding 70°C in temperature. Regulated DC power must be supplied by the user.

SPECIFICATIONS

Output impedance:	50Ω Nominal
Load Mismatch VSWR:	2:1 Max
RF On-Off Ratio:	40dB
Digital Input Model 225B-180 or Analog Input: Model 235B-180	TTL compatible, Positive logic RF on $\geq +2.75V$ (15mA), RF Off $\leq 0.3V$ 0 - 1V for 100% depth of modulation
Frequency Accuracy:	$\pm 0.005\%$
Frequency Stability:	$\pm 0.003\%$
DC Power Input:	+24V or +28Vdc regulated to $\pm 0.25\%$, <500mA
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.

PERFORMANCE

<u>Model</u>	<u>Center Frequency</u>	<u>Minimum RiseTime / Modulation BW</u>	<u>RF Drive Power</u>	<u>Use With Modulator</u>
2x5B-180	180MHz	3ns / 100MHz	>1W (24Vdc) >1.2W(28Vdc)	1212

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

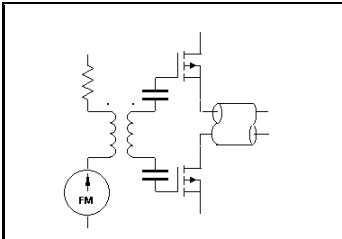
E-mail: ISOMET@ISOMET.COM Web Page: WWW.ISOMET.COM

Quality Assured.

In-house: RF & Digital design

Software Development

OEM manufacture



225B-180 / 235B-180

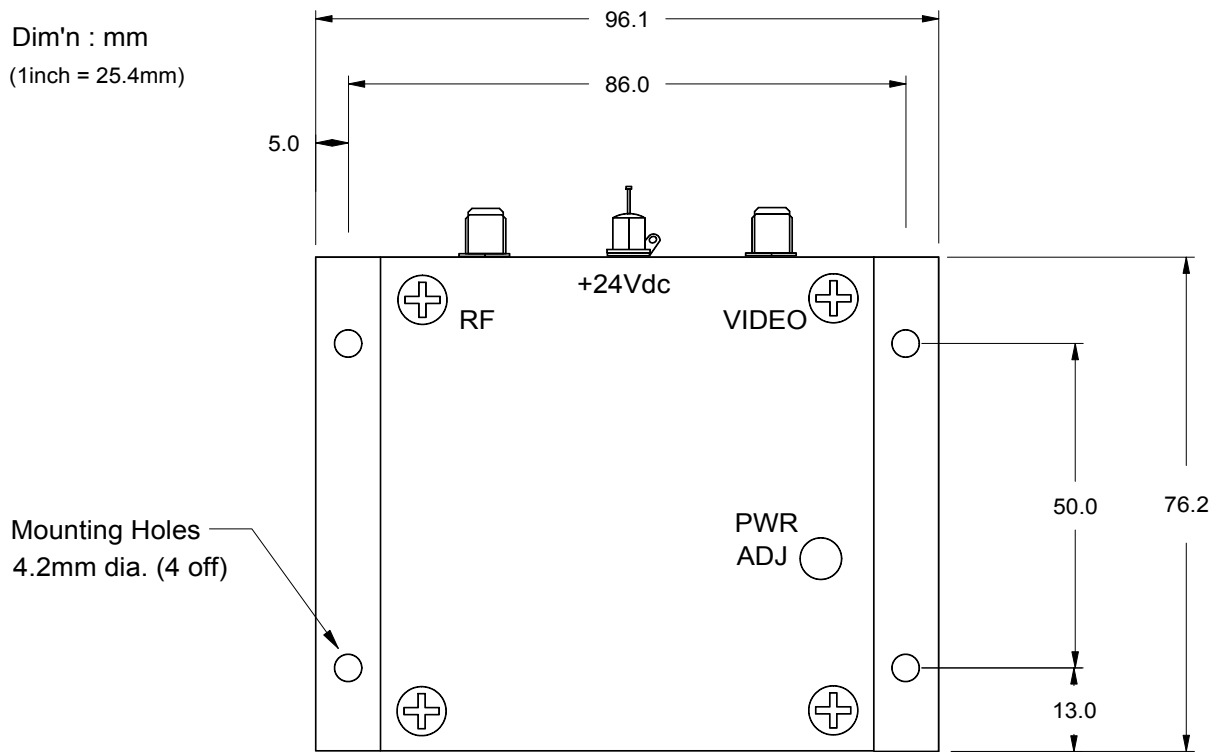


RF Driver

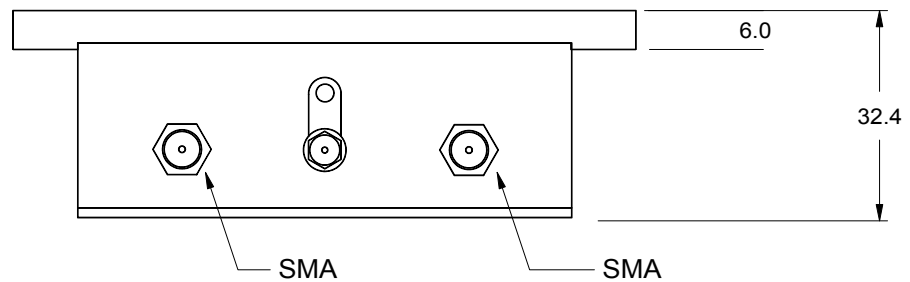
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OUTLINE DRAWING

Dim'n : mm
(1inch = 25.4mm)



Mounting Holes
4.2mm dia. (4 off)



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