

522F/532F/552-x Series

Amplitude Modulation RF Driver



PRELIMINARY

The 5x2F series dual modulation drivers are compatible with Isomet 80MHz AO modulators and compact Q-switches. These RF drivers include a precision crystal oscillator, wideband mixer, high speed RF switch and power amplifier stage. Separate modulation inputs enable simultaneous analog (level) and digital (On:Off) amplitude control. Drivers can be factory configured for either or both modulation input controls (see options).

Active modulation	Model	Modulation Input
Analog	522F-	0 - 1V * , 50ohm
Digital	532F-	5V logic compatible
Dual	552F-	both, as above

Efficient heat transfer from the driver is required. The mounting surface must be attached to an external heat sink. The supply to the 5x2F-2 driver is internally regulated and thus will accept a wide DC power input range. The DC input is not internally regulated on versions 5x2F-L, F-4, F-7.

SPECIFICATIONS

Output impedance:	50Ω Nominal
Load Mismatch VSWR:	2:1 Max
<u>Analogue Input:</u>	0 - 1V * for 100% depth of modulation
RF output analog mod'n On-Off Ratio:	>40dB
<u>Digital Input:</u>	> 2.7V = ON, < 0.8V = OFF
RF output digital mod'n On-Off Ratio:	>60dB
Frequency Accuracy:	± 25ppm
Frequency Stability:	± 25ppm
DC Power Input: 5x2F-L	+15Vdc regulated to ± 1%, < 400mA
5x2F-2	+22 to +30Vdc regulated to ± 1%, < 500mA
5x2F-4	+24/+28Vdc regulated to ± 1%, < 500mA
5x2F-7	+24/+28Vdc regulated to ± 1%, < 800mA
Temperature Range:	0°C to 60°C ambient, temperature at mounting face must not exceed 60°C.

PERFORMANCE

Model	Centre Frequency	Minimum Rise Time	RF Drive Power	Supply
5x2F-L	80MHz	6nsec	>1.6 W	+15V
5x2F-2	80MHz	6nsec	>2.7 W	+22 to +30V
5x2F-4	80MHz	6nsec	>4.0 W >3.5 W	+28V +24V
5x2F-7	80MHz	6nsec	>7.0 W >6.0 W	+28V +24V

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

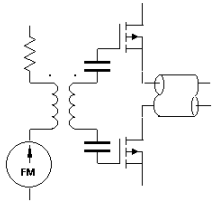
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Quality Assured.

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



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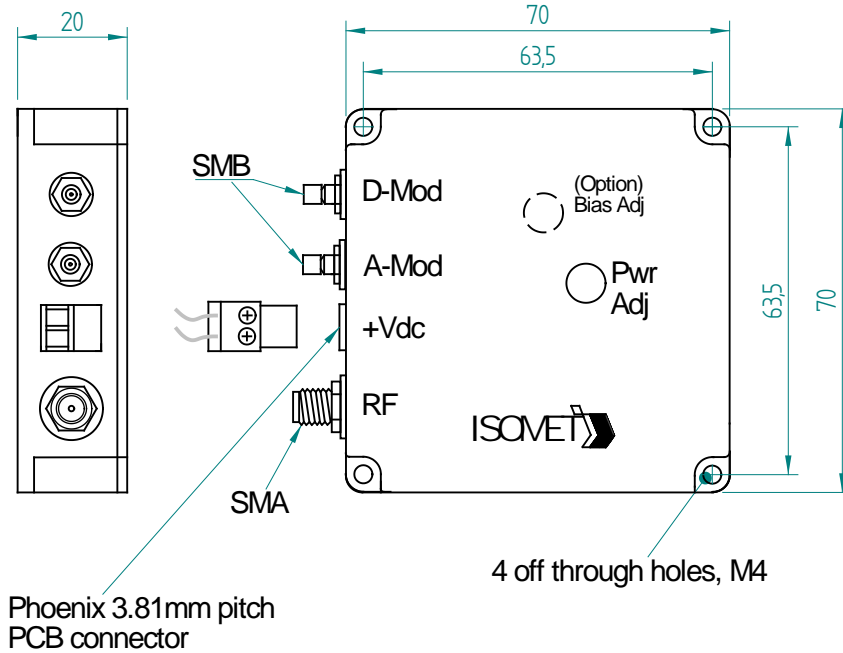
Amplitude Modulation RF Driver



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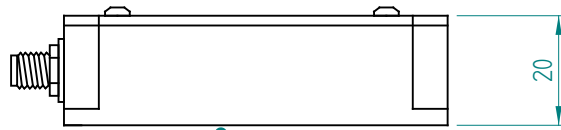
OUTLINE DRAWING

Dim'n: mm



Phoenix 3.81mm pitch
PCB connector

4 off through holes, M4



Mounting surface to Heatsink
Apply Thermal Compound
Max. Temp 60deg C

* Options

Modulation BIAS adj pot
0-5V analog modulation
0-10V analog modulation

Add suffix

'-B'
'-V'
'-X'

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