



521F/531F/551-x Series 40MHz Modulator Driver



3424

The 5x1F series dual modulation drivers are compatible with Isomet 40MHz 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
Digital	521F-	5V logic compatible
Analog	531F-	0 - 1V *, 50ohm
Dual	551F-	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 5x1F-2 driver is internally regulated and thus will accept a wide DC power input range. The DC input is not internally regulated on versions 5x1F-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: 5x1F-L	+15Vdc regulated to ± 1%, < 400mA
5x1F-2	+22 to +30Vdc regulated to ± 1%, < 500mA
5x1F-4	+24/+28Vdc regulated to ± 1%, < 500mA
5x1F-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
5x1F-L	40MHz	10nsec	>1.5W	+15V
5x1F-1	40MHz	10nsec	>1.5W	+24V
5x1F-2	40MHz	10nsec	>2.7W	+22 to +30V
5x1F-4	40MHz	10nsec	>3.5W / 4.0W	+24V / +28V
5x1F-7	40MHz	10nsec	>6.0W / 7.0W	+24V / +28V

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



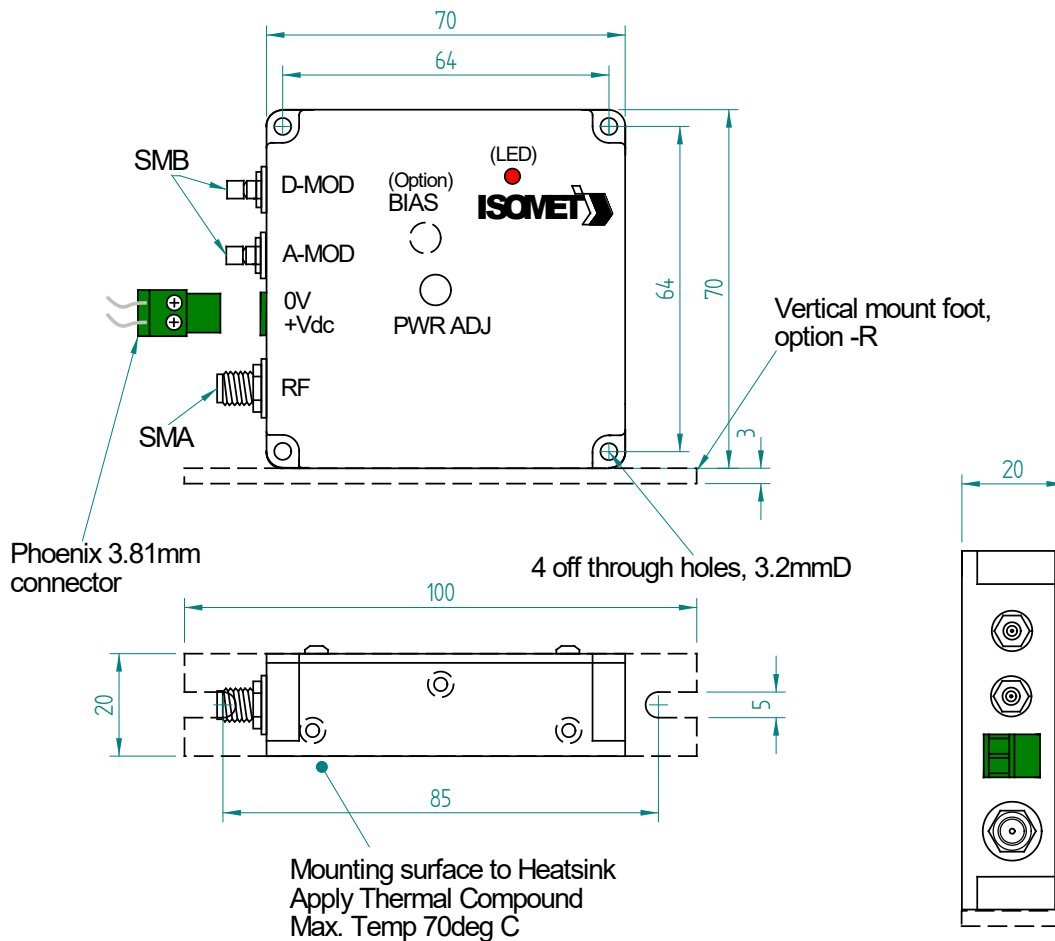
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OUTLINE DRAWING

Dim'n: mm



Options:

Add suffix'es (-x)

Modulation BIAS adj pot
Heatsink with fan
Vertical mount foot
0-5V analog modulation
0-10V analog modulation

'-B '
'-F '
'-R '
'-V '
'-X '

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