

524F/534F/554-x Series



3424

150MHz Modulator Driver

The 5x4F series dual modulation drivers are compatible with Isomet 150MHz AO modulators and frequency shifters. These RF drivers include a precision crystal oscillator, wideband mixer, high speed RF switch and power amplifier stage. Separate modulation inputs enable simultaneous analog (proportional) 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	52 4 F-	5V logic compatable
Analog	5 34 F-	0 - 1V *, 50ohm
Dual	5 54 F-	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 5x4F-2 driver is internally regulated and thus will accept a wide DC power input range. The DC input is not internally regulated on versions 5x4F-L, F-4, F-7.

SPECIFICATIONS

 $\begin{array}{ll} \mbox{Output impedance:} & \mbox{50}\Omega\mbox{ Nominal} \\ \mbox{Load Mismatch VSWR:} & \mbox{2:1 Max} \end{array}$

Analogue Input: 0 - 1V * for 100% depth of modulation

RF output analog mod'n On-Off Ratio: >40dB

Digital Input: > 2.7V = ON, < 0.8V = OFF

RF output digital mod'n On-Off Ratio: >50dB

Frequency Accuracy: \pm 25ppm Frequency Stability: \pm 25ppm

DC Power Input: 5x4F-L +15Vdc regulated to \pm 1%, < 400mA

 $\begin{array}{lll} 5x4F-2 & +22 \text{ to } +30 \text{Vdc regulated to } \pm 1\%, < 500 \text{mA} \\ 5x4F-4 & +24/+28 \text{Vdc regulated to } \pm 1\%, < 500 \text{mA} \\ 5x4F-7 & +24/+28 \text{Vdc regulated to } \pm 1\%, < 800 \text{mA} \\ \end{array}$

Temperature Range: 0°C to 60°C ambient, temperature at

mounting face must not exceed 60°C.

PERFORMANCE

Model	Centre <u>Frequency</u>	Minimum <u>Rise Time</u>	RF Drive <u>Power</u>	Supply
5x4F-L	150MHz	6nsec	>1.5W	+15V
5x4F-2	150MHz	6nsec	>2.2W	+22 to +30V
5x4F-4	150MHz	6nsec	>4.0W >3.5W	+28V +24V
5x4F-7	150MHz	6nsec	>6.0W >5.0W	+28V +24V

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

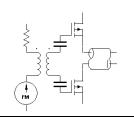
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Quality Assured.

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



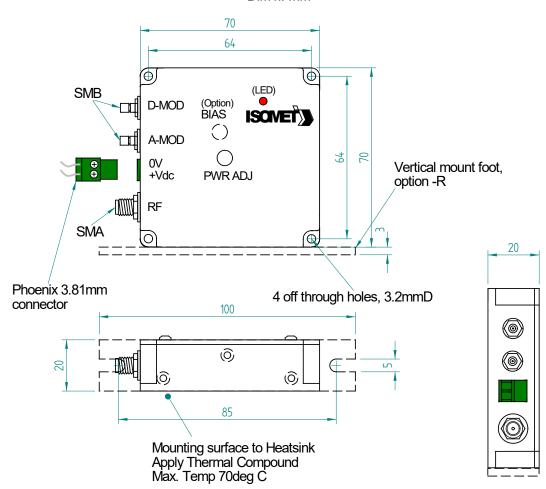
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OUTLINE DRAWING

Dim'n: mm



Options:

Add suffix'es (-x)

Modulation BIAS adj pot	' -B '
Heatsink with fan	'-F'
Vertical mount foot	' -R '
0-5V analog modulation	' -V '
0-10V analog modulation	' -X '

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