



# 524F/534F/554-x-175 Series **ISOMET**



## 175MHz Modulator Driver

4821

These dual modulation drivers are compatible with Isomet 175MHz AO modulators and frequency shifters. The design includes 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	524F-	5V logic compatible
Analog	534F-	0 - 1V *, 50ohm
Dual	554F-	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 version 5x4F-4.

### PECIFICATIONS

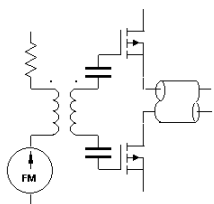
Output impedance:	50Ω Nominal
Load Mismatch VSWR:	2:1 Max
<u>Analogue Input:</u>	0 - 1V * for 100% depth of modulation
RF output analog mod'n On-Off Ratio:	>40dB
<u>Digital Input:</u>	> 2.7V = ON, < 0.8V = OFF
RF output digital mod'n On-Off Ratio:	>50dB
Frequency Accuracy:	± 25ppm
Frequency Stability:	± 25ppm
DC Power Input:	
5x4F-2	+22 to +30Vdc regulated to ± 1%, < 500mA
5x4F-4	+24/+28Vdc regulated to ± 1%, < 500mA
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
5x4F-2-175	175MHz	6nsec	>2.2W	+22 to +30V
5x4F-4-175	175MHz	6nsec	>4.0W >3.5W	+28V +24V

**ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE**  
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**Quality Assured.**  
 In-house: RF & Digital design  
 Software Development  
 OEM manufacture



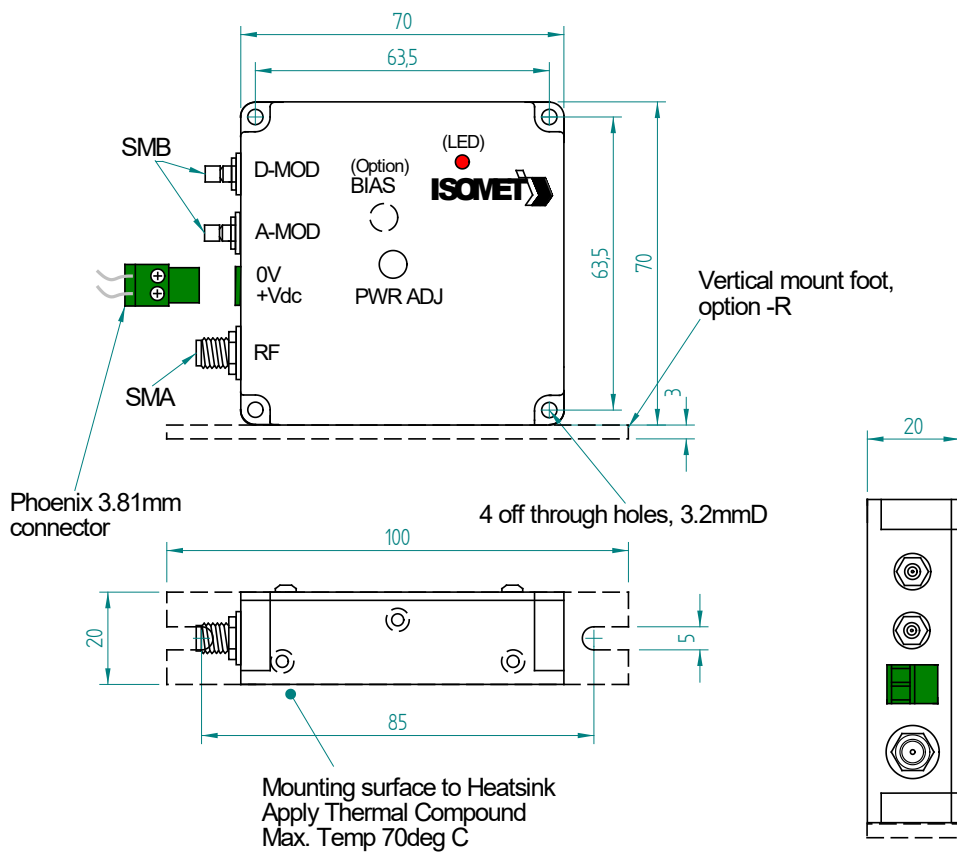
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## OUTLINE DRAWING

Dim'n: mm



### Options:

### Add suffix'es (-x)

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

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

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In-house: RF & Digital design  
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