



## 523F/533F/553-x Series 110MHz Modulator Driver



4821

The 5x3F series dual modulation drivers are compatible with Isomet 110MHz 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	523F-	5V logic compatible
Analog	533F-	0 - 1V *, 50ohm
Dual	553F-	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 5x3F-2 driver is internally regulated and thus will accept a wide DC power input range. The DC input is not internally regulated on versions 5x3F-L, F-4, F-6.

### 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: 5x3F-L	+15Vdc regulated to ± 1%, < 400mA
5x3F-2	+22 to +30Vdc regulated to ± 1%, < 500mA
5x3F-4	+24/+28Vdc regulated to ± 1%, < 500mA
5x3F-6	+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
5x3F-L	110MHz	6nsec	>1.5W	+15V
5x3F-2	110MHz	6nsec	>2.2W	+22 to +30V
5x3F-4	110MHz	6nsec	>4.0W >3.5W	+28V +24V
5x3F-7	110MHz	6nsec	>6.0W >5.0W	+28V +24V

#### ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

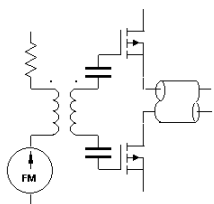
ISOMET CORP, 5263 Port Royal Rd, Springfield, VA 22151, USA.

Tel: (703) 321 8301 Fax: (703) 321 8546

E-mail: [ISOMET@ISOMET.COM](mailto:ISOMET@ISOMET.COM) Web Page: [WWW.ISOMET.COM](http://WWW.ISOMET.COM)

#### Quality Assured.

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



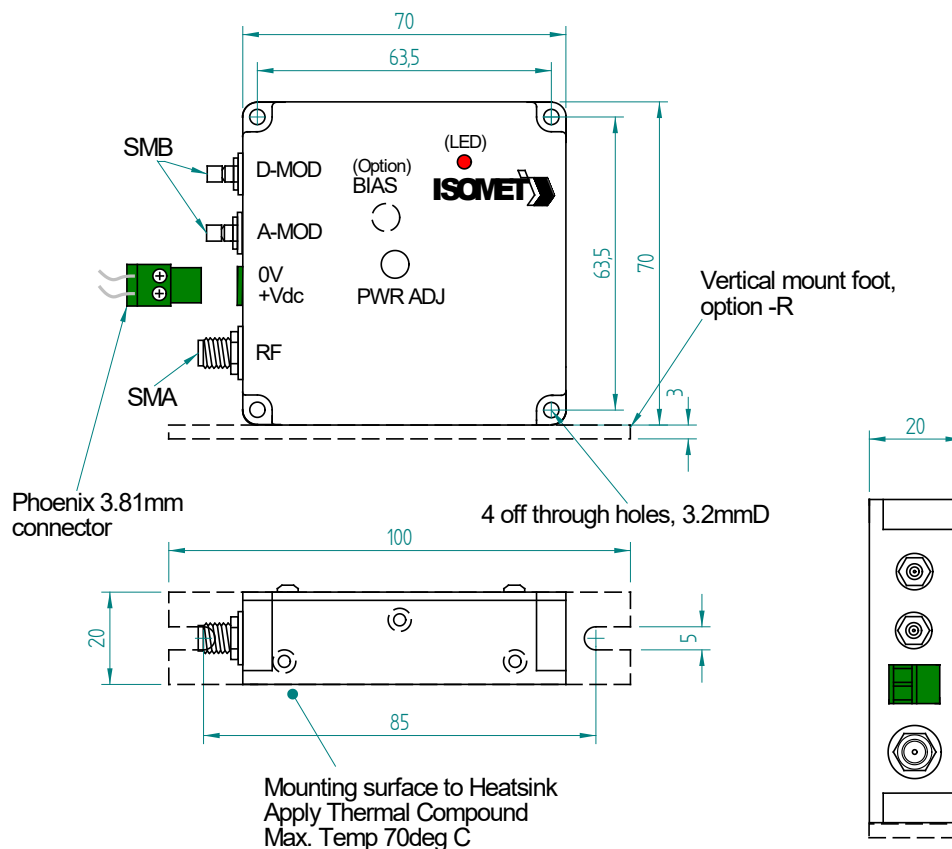
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## OUTLINE DRAWING

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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