

522F/532F/552-x Series



80MHz Modulator Driver

4821

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
Digital	5 2 2F-	5V logic compatable
Analog	5 3 2F-	0 - 1V *, 50ohm
Dual	5 5 2F-	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

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

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: >60dB

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

DC Power Input: 5x2F-L +15Vdc regulated to \pm 1%, < 400mA

5x2F-2 +22 to +30Vdc regulated to \pm 1%, < 500mA 5x2F-4 +24/+28Vdc regulated to \pm 1%, < 500mA 5x2F-7 +24/+28Vdc regulated to \pm 1%, < 800mA

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
5x2F-L	80MHz	6nsec	>1.6W	+15V
5x2F-2	80MHz	6nsec	>2.7W	+22 to +30V
5x2F-4	80MHz	6nsec	>4.0W >3.5W	+28V +24V
5x2F-7	80MHz	6nsec	>7.0W >6.0W	+28V +24V

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

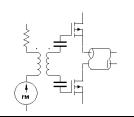
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Quality Assured.

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



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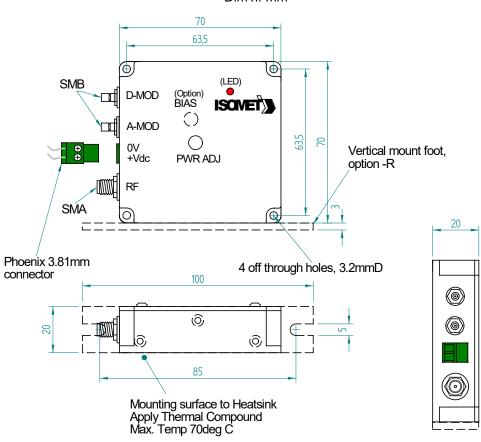


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OUTLINE DRAWING

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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