

RF2/RF3/RF5-xxxT-1(-2)-



RF Tuneable Driver

(Preliminary)

1125

The RF2, RF3 and RF5- series single output, frequency tuneable RF drivers are compatible with Isomet AO deflectors and frequency shifters. These drivers accept a tuning voltage between approximately 0 to +10 volts to control the frequency and up to two modulation signals to control the amplitude. The start frequency, corresponding to a tuning voltage of 0.0 volts, is defined by the frequency offset potentiometer (FOS). This also permits manual adjustment of the frequency. A secondary fixed amplitude low level frequency monitor output (Fmon) is provided for monitoring or feedback purposes.

Specifications

Oscillator Type:	Varactor-tuned thin film hybrid
Amplifier Type:	Broadband Class A
Output RF Power 'T-1:	≥ 1 Watt
'T-2:	≥ 2 Watt
Output Impedance:	50 Ω nominal
Load VSWR:	< 2.5:1 for best results
Frequency monitor output (Fmon):	300mVpp nominal, 50ohm
RF Power Variation vs. Frequency:	≤ 1 dB
Spurious Outputs:	Harmonics >20dB below fundamental
Tuning Voltage (Vt):	0 to 10V for specified tuning range
Tuning Linearity:	<+/- 2.5% over specified tuning range
Tuning Voltage Impedance:	1 Kohm (nominal)
Tuning Slew Rate	> 10 MHz/ μ s
Residual FM:	< 10 KHz peak-to-peak
Frequency Stability:	$\pm 0.25\%$

	Model	Power	Frequency range	Specified Range
	xxxT			
RF2				
(or)	- 200T	-2	145-260 MHz	150-250 MHz
RF3	- 300T	-2	190-360 MHz	200-300 MHz
(or)	- 350T	-1	220-500 MHz	250-450 MHz
RF5				

Factory fitted modulation options:

Active modulation	Model	Signal Input	ON-OFF ratio
Digital (DMOD)	RF2 -	5V logic compatible	>37dBc
Analog (AMOD)	RF3 -	0 - 1V *, 50ohm	>37dBc
Dual	RF5 -	Both the above (SMB #2 fitted)	>48dBc

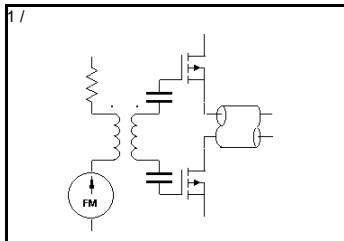
DC Power Input: +24Vdc or +28Vdc at < 500 mA regulated to $\pm 0.25\%$
 Temperature Range: 0°C to 60°C ambient, temperature must not exceed 70°C

Order example: RF3-200T-2-R analog modulation,150-250MHz, vertical mount *

*See options table

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



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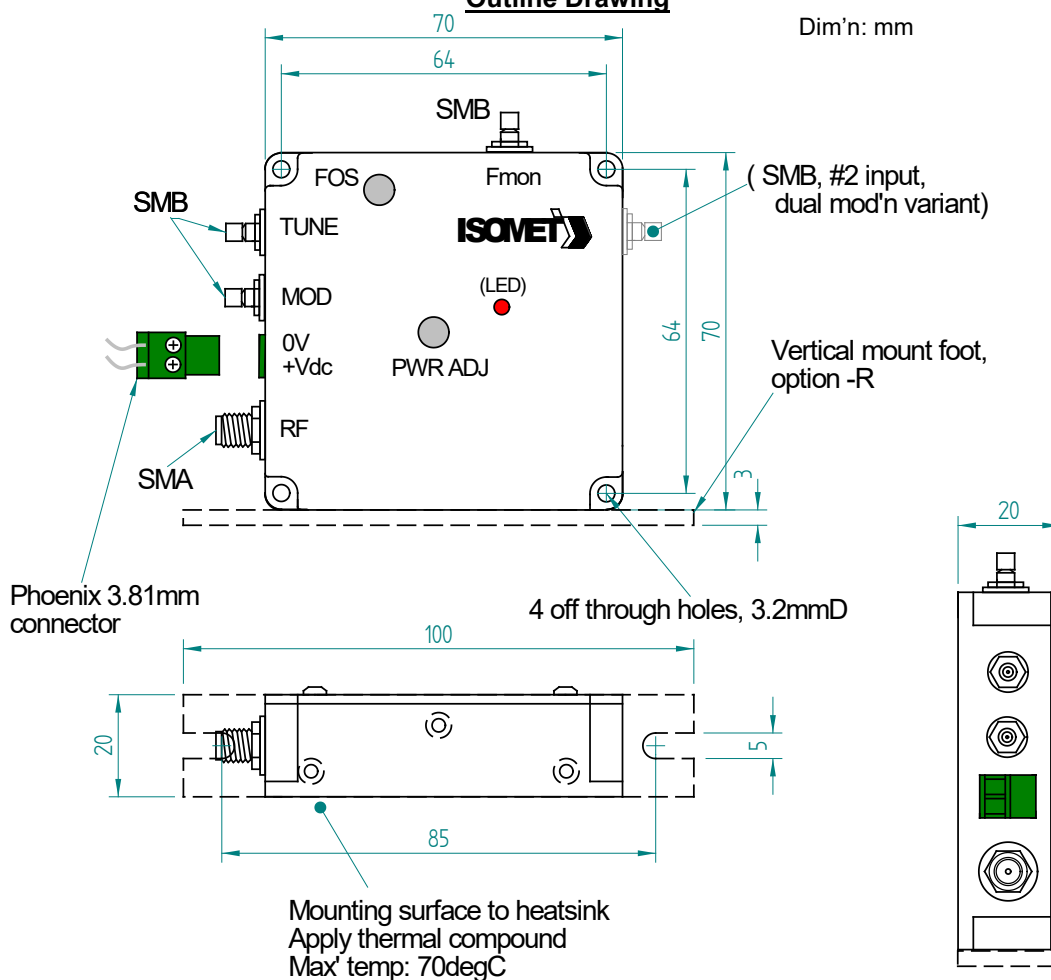


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Outline Drawing



Mounting

Any orientation. The mounting surface must be attached to an external heat sink. Efficient heat transfer from the driver is required.

Options:

Heatsink with fan
Vertical mount foot
0-5V analog modulation
0-10V analog modulation

Add suffix'es (- #)

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

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