

RG5-040-1-1 Series

40MHz Modulator Driver



2324

These small format dual modulation drivers are compatible with Isomet 80MHz 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 only	RG2-	5V logic compatible
Analog	RG3-	0 - 1V*, 50ohm
Dual	RG5-	both, as above

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

SPECIFICATIONS

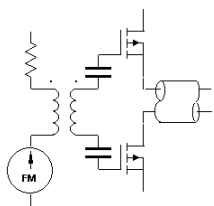
Output impedance:	50Ω Nominal
Load Mismatch VSWR:	2:1 Max
<u>Analogue Input:</u>	0 - 1V * for 100% depth of modulation
RF output analog mod'n On-Off Ratio:	>40dB
<u>Digital Input:</u>	> 2.7V = ON, < 0.8V = OFF
RF output digital mod'n On-Off Ratio:	>60dB
Frequency:	40.00MHz
Frequency Accuracy:	± 25ppm
Frequency Stability:	± 25ppm
DC Power Input: RGxL-	+12V to 15V dc regulated to ± 1%, < 400mA
RGx-	+22 to +30Vdc regulated to ± 1%, < 500mA
Temperature Range:	0°C to 60°C ambient, temperature at mounting face must not exceed 60°C.

PERFORMANCE

Model	Minimum Rise Time	RF Drive Power	Supply
RGxL-040-1-1	10nsec	>1.0 W	+12V to +15V
RGx-040-1-1	10nsec	>2.2 W	+22V to +28V

ALL SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
 ISOMET CORP, 10342 Battleview Parkway, Manassas, VA 20109, USA.
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Quality Assured.
 In-house: RF & Digital design
 Software Development
 OEM manufacture



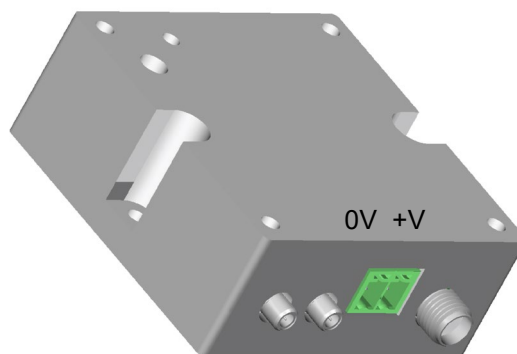
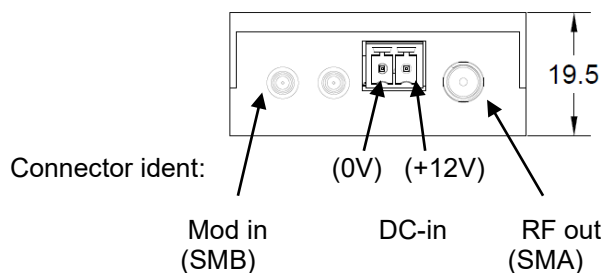
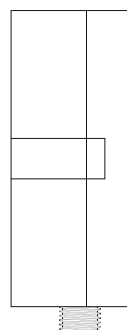
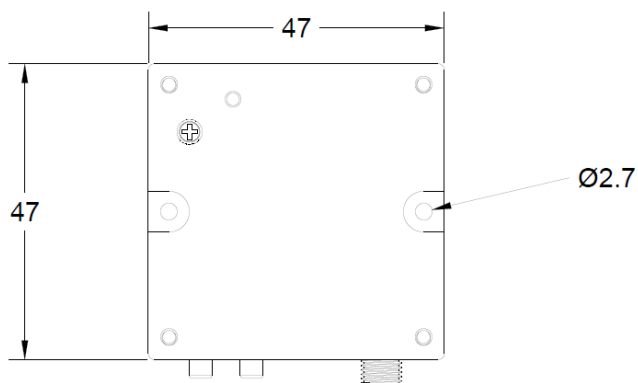
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OUTLINE DRAWING

Dimensions: mm
2x mounting holes on case C/L. Diameter 2.7mm, 40mm centre to centre spacing.



RF output = SMA
Modulation Input(s) = SMB (x1 or x2)
DC input = Phoenix 3.81mm push fit. Mating connectors provided

* Options

0-5V analog modulation
0-10V analog modulation

Add suffix

'-V'
'-X'

E.g. RG5L-040-1-1V : Dual modulation model, 12V supply, 0-5V analog

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