

WR-12 Receiver, 71 to 76 GHz, 3 dB Noise Figure, 18 dB Gain

Description:

Model SSR-7430533018-12-SR1 is a WR-12 integrated receiver module for communication systems. The receiver has a typical conversion gain of 18 dB with a typical Noise Figure of 3 dB in the frequency range of 71 to 76 GHz. The required LO power is +5 dBm between frequencies of 11.67 and 12.67 GHz. The RF receive port is WR-12 Waveguide with UG-387/U Flange while the LO and IF port is female SMA connectors. Other port configurations, are also available under different model numbers.



Features:

- Good Gain Flatness and Noise Figure
- Built in x6 LO Multiplier
- Fully Integrated Module

Applications:

- Communication Systems

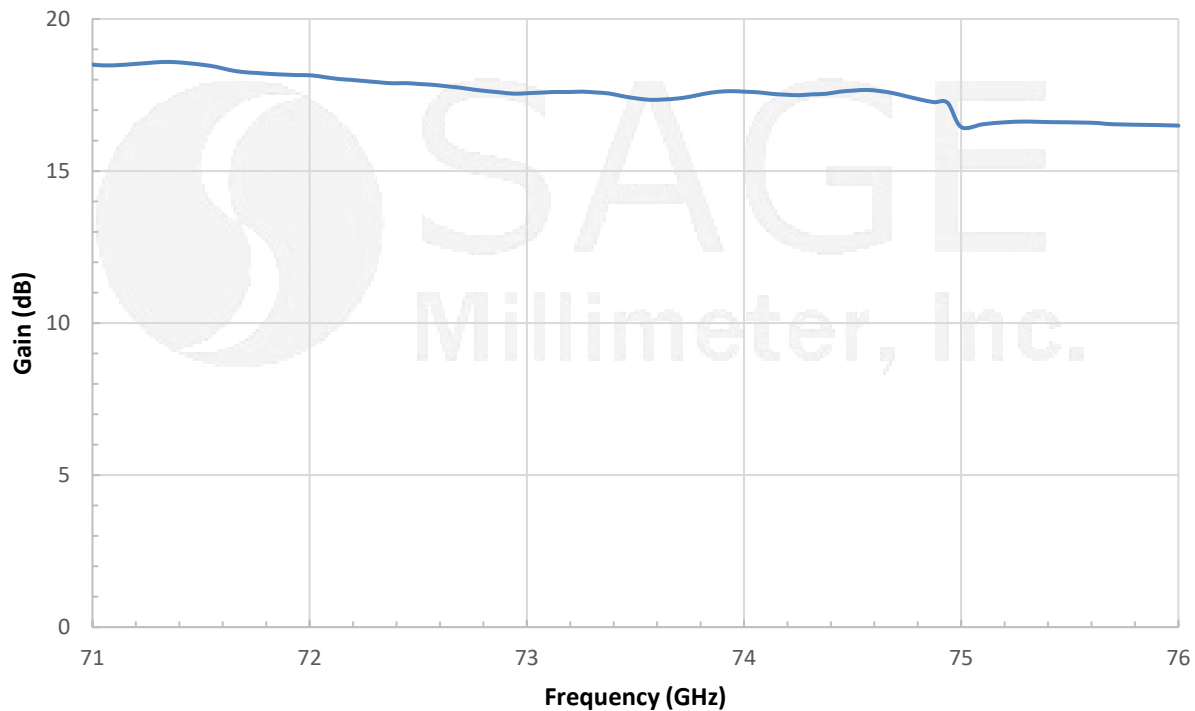
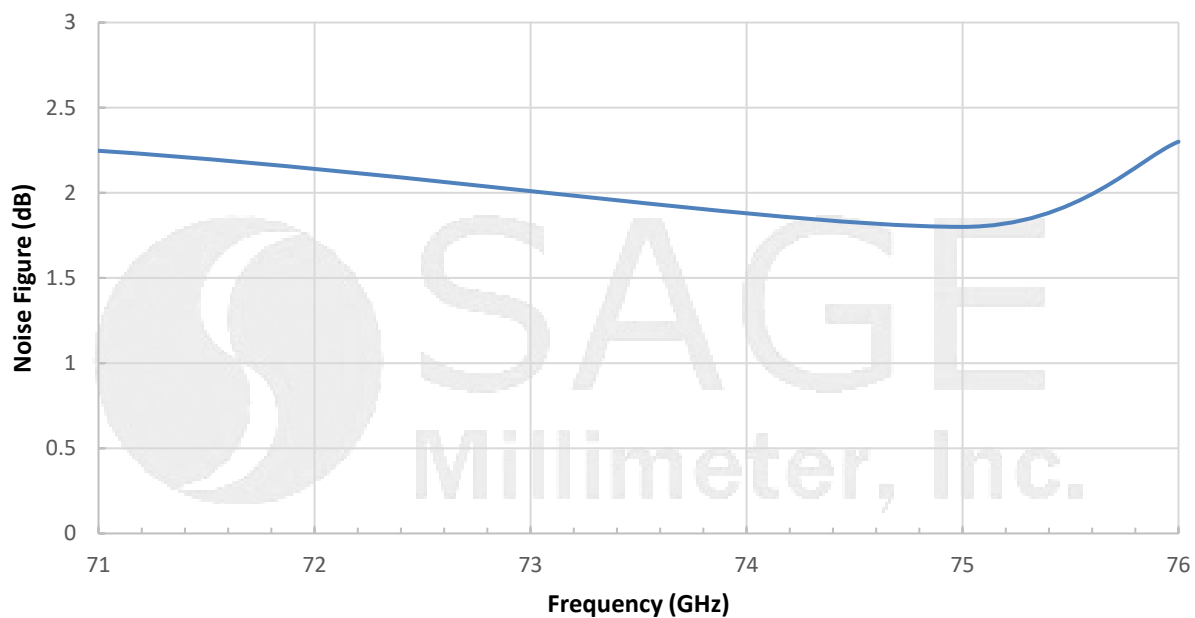
Electrical Specifications:

Parameter	Minimum	Typical	Maximum
RF Input Frequency	71 GHz		76 GHz
RF Input Power			+5 dBm
IF Output Frequency	DC		6 GHz
LO Frequency	11.67 GHz		12.67 GHz
LO Input Power		+5 dBm	+15 dBm
Conversion Gain		18 dB	
Noise Figure		3 dB	
Input P _{1dB}		-25 dBm	
Bias Voltage	+6 V _{DC}	+8 V _{DC}	+15 V _{DC}
Bias Current		180 mA	
Specification Temperature		+25 °C	
Operating Temperature	0 °C		+50 °C

Mechanical Specifications:

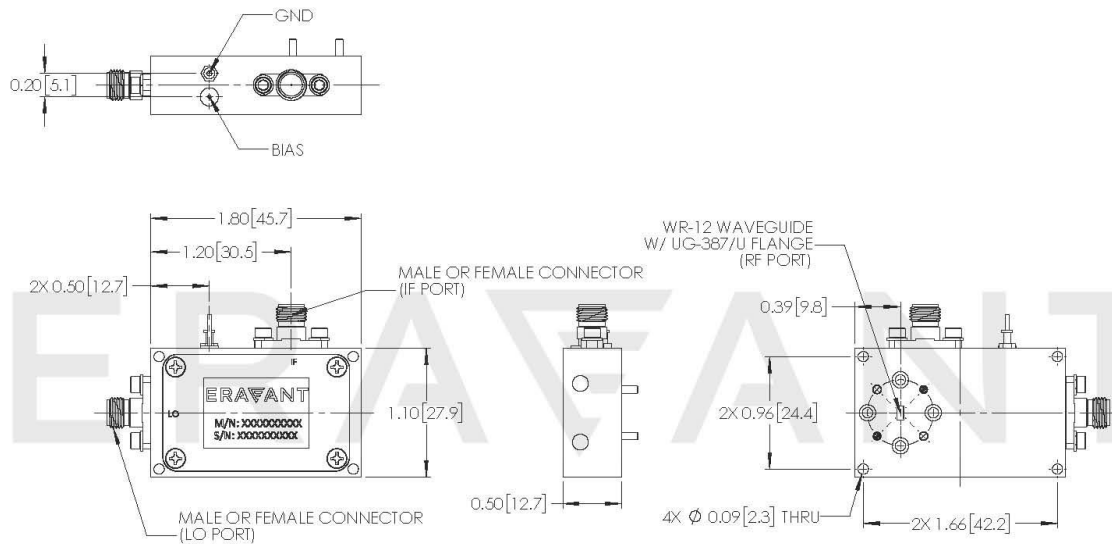
Item	Specification
RF Port	WR-12 Waveguide with UG-387/U Flange
LO Port	SMA (F)
IF Port	SMA (F)
Bias	Solder Pin
Case Material	Aluminum
Finish	Gold Plated
Weight	2.0 Oz
Size	1.10" (W) X 1.80" (L) X 0.50" (H)
Outline	SR-SE-2

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**WR-12 Receiver, 71 to 76 GHz, 3 dB Noise Figure, 18 dB Gain****Gain vs. Frequency**Bias: +8 V_{DC}/190 mA**Noise Figure vs. Frequency**Bias: +8V_{DC}/190 mA

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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Note:

- Eravant reserves the right to change the information presented without notice.
- Other mechanical configurations are available under different model numbers.

Caution:

- Exceeding absolute maximum ratings shown will damage the device.
- The device is static sensitive. Always follow ESD rules when working with the device.
- The case temperature of the device shall never exceed +50 °C. Use proper heatsink or fan if necessary.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **Eravant torque wrench, model SCH-08008-S1, is highly recommended.**

