

LNA1716X-4.4GHz-5.0GHz-A

C-Band Super Low Noise LNA with Field Replaceable RF Connectors

Features and Benefits

4.4 to 5.0GHz Frequency Range
Gain Flatness <±0.5dB
Typical N.F. <0.6dB
Typical Gain 43dB
+32dBm IP3
+12V to +15V 125mA Low DC power consumption
Internal DC regulator
Internal Bias Tee at output
Hermetic Seal Option
Advance PHEMT Technology
Reverse Voltage Protection
MIL-883, MIL45208 construction and reliability

Picture



Typical Applications

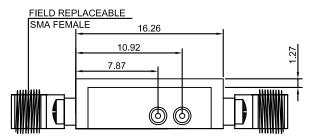
Radar SATCOM Microwave Radio Systems Receiver Front End Test Equipment Telemetry

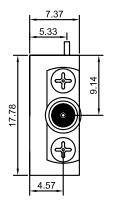
Description

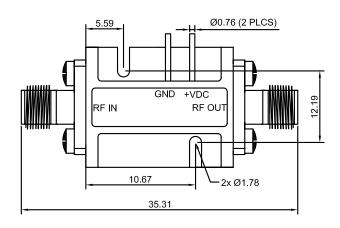
The LNA1716X-4.4GHz-5.0GHz-A is a Low Noise Amplifier with super low noise figure (<0.6dB) and high IP3 of +32dBm. Lower NF options are also available with custom flatness, VSWR, P1dB, and outline. An internal Bias Tee at the output allows for biasing via output coaxial connector / cable.

Mechanical Drawing & Pin Connections

Drawing No:MD17004-2







Unit: mm 1mm=0.0394 inch

DynamicEngineers, Inc.

Revision: 1

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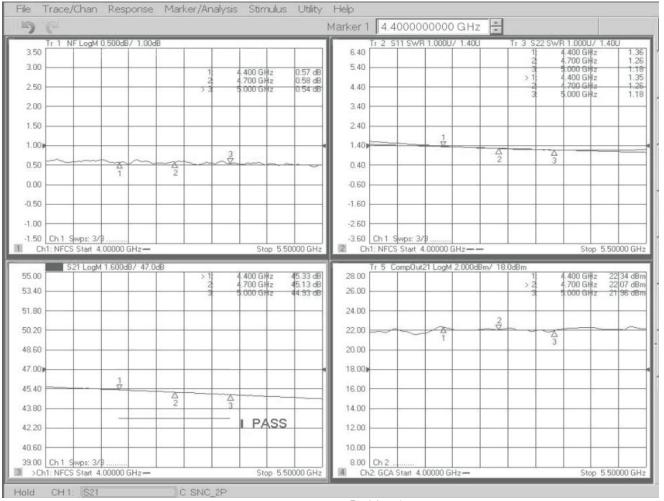
Key Specifications at 23°C

Parameter		Value			Note
	Min.	Тур.	Max.		
Frequency	4.40		5.00	GHz	Customizable
Gain	43	45	47	dB	Customizable
Gain Flatness	-	±0.5	±0.8	dB	Customizable
In/Out VSWR	-	1.40	1.40	-	Customizable
Output P1dB	+20	+22	-	dBm	Customizable
DC Power	+11	+12	+16	V@mA	@175 mA
Noise Figure	-	0.6	1.2	dB	Lower NF available

Absolute Maximum Ratings

Parameter	Min.	Max.	Unit	Note
Operating Temperature (Case)	-54	+85	$^{\circ}$	95% humidity, non-condensing
Storage Temperature (Case)	-54	+115	$^{\circ}$	95% humidity, non-condensing
RF Input Power	-	16	dBm	CW
Die Junction Temp (Tj)	-	+150	$^{\circ}$ C	For GaAs devices
Positive Supply Voltage		+16	V	At +V DC Pin
Negative Voltage	-	-10	V	Reverse Voltage

Typical Measured Data



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