APT4-18004000-2708-D20

18 to 40 GHz Wide Band Low Noise Amplifier

Typical Key Parameters at 23°C

Parameter	Unit	Minimum	Typical	Maximum	Notes
Frequency	GHz	18	-	40	Customizable
Gain	dB	39	41	-	Customizable
Gain Flatness	dB	-	±2.5	-	Customizable
In/Out VSWR	-	-	2.3	2.5	Customizable
Output P1dB	dBm	+8	+10	-	Customizable
Input Power	dBm	-50	-	+10	Customizable
DC Power	V@mA	+11	+12	+24	@145mA
Noise Figure	dB	-	2.5	3.0	23°C
Outline/Package	-	-	-	-	D20

Absolute Maximum Ratings*

Parameters	Unit	Minimum	Maximum	Notes
Operating Temperature (Case)	°C	-40	+70	95% humidity, non-condensing
Storage Temperature (Case)	°C	-54	+85	95% humidity, non-condensing
RF Input Power	dBm	-	+16	CW
Die Junction Temp (Tj)	°C	-	+150	For GaAs devices
Positive Supply Voltage	V	-	+16	At +V DC terminal
Negative Voltage	V	-	-10	Reverse Voltage

Product Features

- Frequency Range = 18 to 40.0 GHz
- **Typical Noise Figure = 2.5 dB**
- Typical Gain = 41 dB
- Gain Flatness < ± 2.5 dB Typical
- Internal DC regulator
- Reverse Voltage Protection
- State-of-the-Art PHEMT Technology
- MIL-883, MIL-45208 construction and reliability

Product Description

This model is a wideband, medium gain low noise amplifier with good Flatness across the band. It is designed mainly for wideband telecommunications, such as for Military and Space, Point-to-Point Radios and Test Equipment. The input signal can be as large as +16 dBm.

Application

- Wideband Communication Systems
- Military & Space
- Point-to-Multi-Point Radios
- Test Instrumentation

** Stresses above those listed under "Absolute Maximum Rating" may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability. All STANDARD units are packaged in Aluminum housings that are layered with electroless Nickel and then plated with Gold to eliminate contamination of other adjacent electronic components.*

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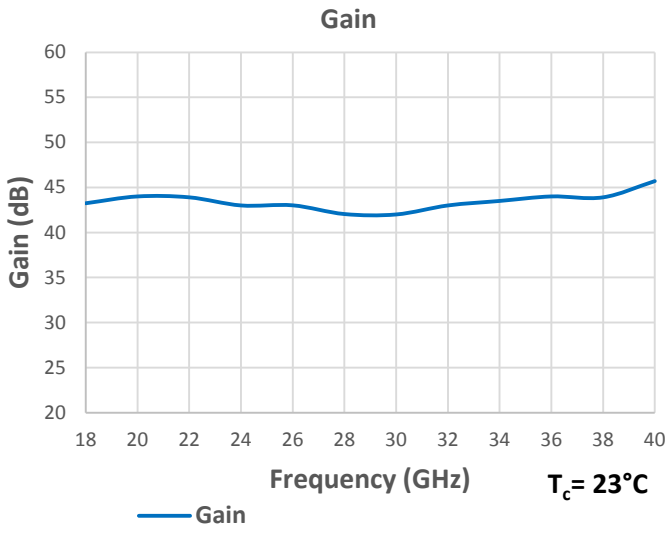
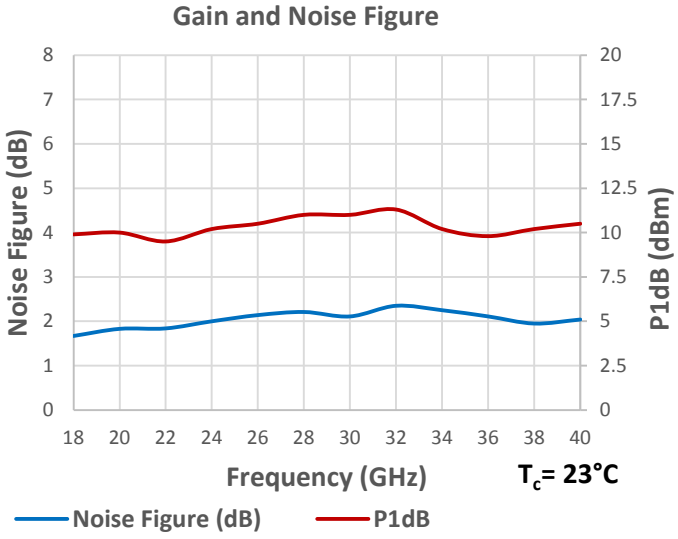
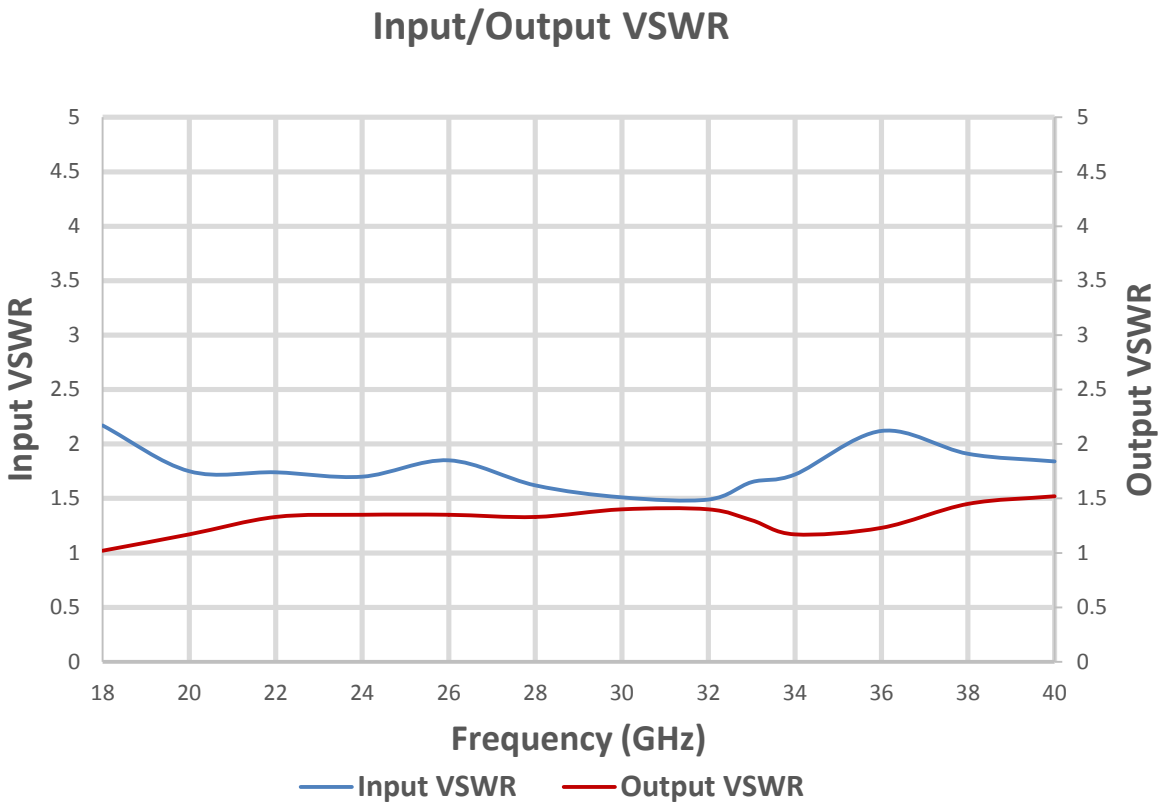
Typical Data at 23°C







Outline Drawing