



Product Features

- Frequency Range = 8 to 12 GHz
- **Noise Figure Typical: 0.5 dB**
- Gain Min: 20 dB
- Gain Flatness: $< \pm 1.0$ dB
- Low current consumption, 35mA
- State-of-the-Art PHEMT Technology
- MIL-883, MIL-45208 construction and reliability
- Internal DC regulator allows supply voltage from +15 VDC
- Small drop-in package with field replaceable connectors

Product Description

The APT2-08001200-0605-D2 is from our line of affordable low noise amplifiers. This is 8-12 GHz, 10dBm amplifier with 20 dB gain and 0.5 dB noise figure. Used for a wide range of design applications and architectures is suitable for Military and Commercial applications. All our low noise amplifiers come with a 3-year warranty.

Applications

- Military Surveillance
- SATCOM Systems
- Radar Systems
- Test Equipment

Typical Key Parameters at 23°C

Parameters	Unit	Min	Typical	Max	Notes
Frequency	GHz	8.0	-	12.0	Customizable
Gain	dB	20	-	-	Customizable
Gain Flatness	dB	-	-	± 1.0	Customizable
In/Out VSWR	-	-	1.5:1	2.0:1	Customizable
P@1dB	dBm	+5	+8	-	Customizable
DC Power	V@mA	+12	-	15	@35 mA
Noise Figure	dB	-	0.5	0.6	Customizable
Outline/Package	-	-	-	-	D2
Connectors (in/Out)	SMA Female/SMA Female				

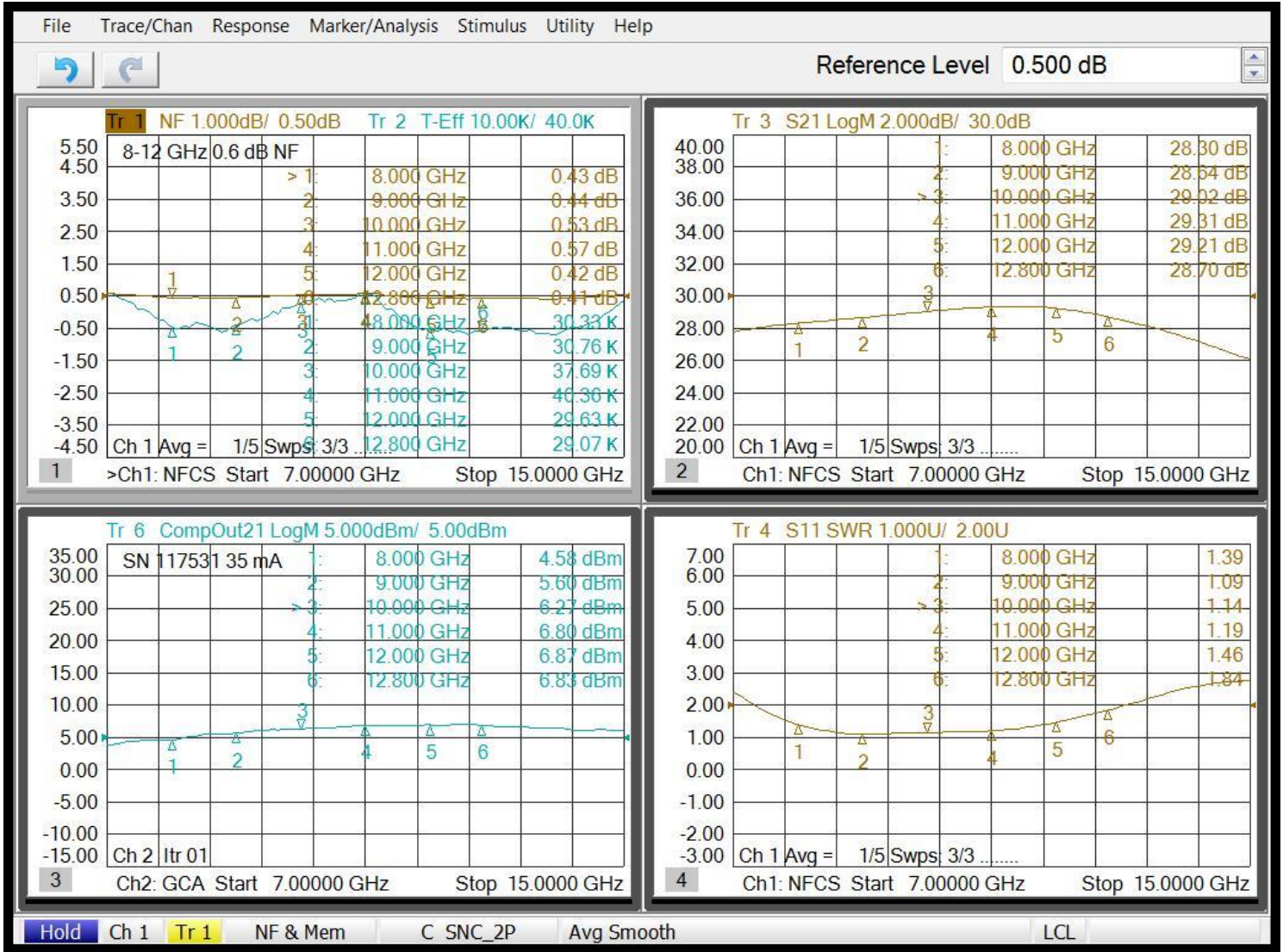
Noise Figure degrades below 800 MHz

Absolute Maximum Ratings*

Parameters	Unit	Min	Max	Notes
Operating Temperature (Case)	°C	-55	+85	95% humidity, non-condensing
Non-Operating Temperature (Case)	°C	-55	+85	95% humidity, non-condensing
RF Input Power	dBm	-	+13	CW
Die Junction Temp (Tj)	°C	-	+150	For GaAs devices
Positive Supply Voltage	V	-	+24	At +V DC terminal
Negative Voltage	V	-	-10	Reverse Voltage

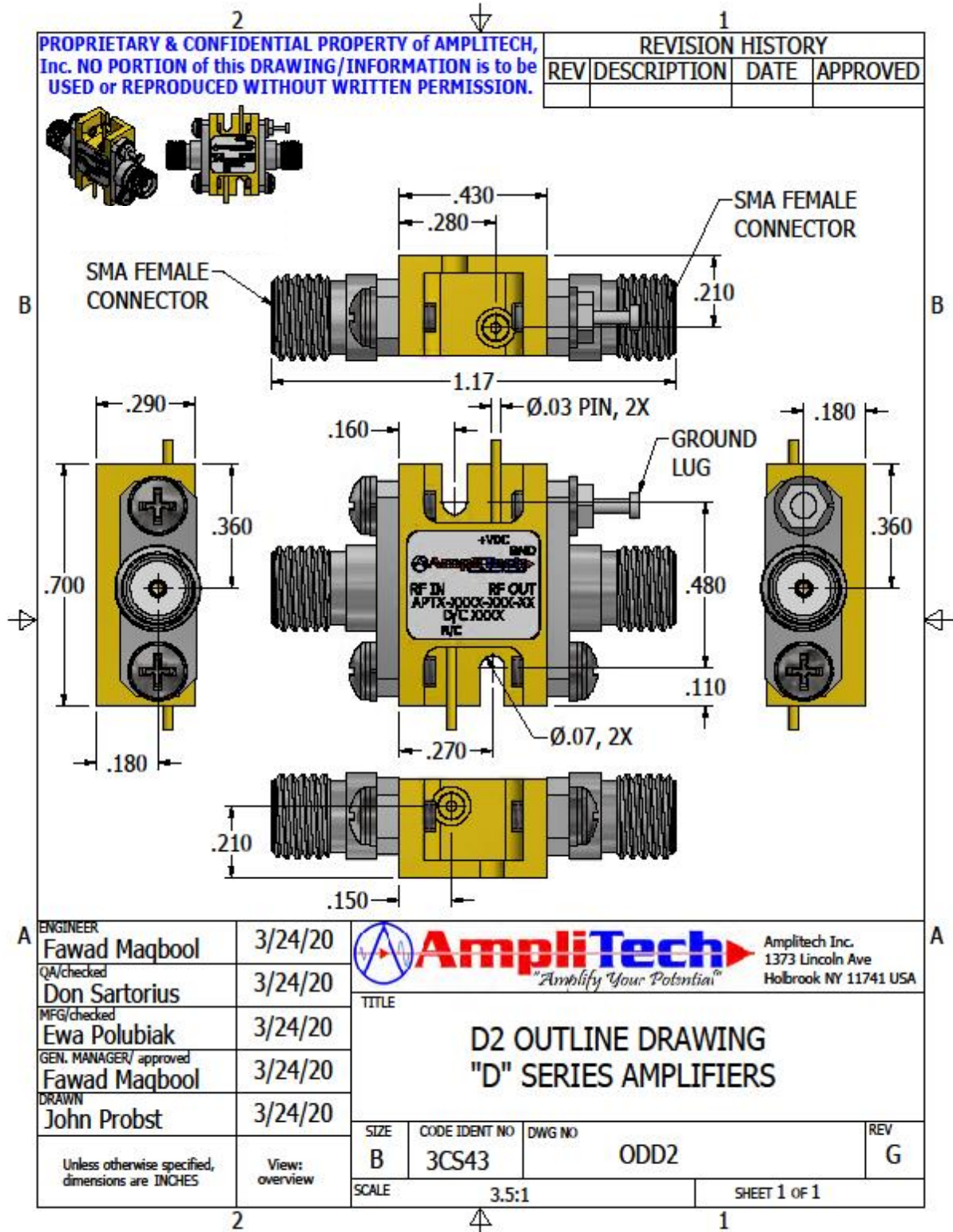
* Stresses above those listed under "Absolute Maximum Rating" may cause permanent damage to the device. This is a stress rating only and functional operation of the device at these or any other conditions above those indicated in the operational sections of this specification is not implied. Exposure 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.

Typical Data at 23°C



Data taken with Agilent N5242 PNA-X Vector Network Analyzer

Outline Drawing



Note: Custom outline options available