



#### Typical Key Parameters at 23°C

Parameters	Unit	Min	Typical	Max	Notes	
Frequency	GHz	0.5	-	18	Customizable	
Gain	dB	35	-	-	Customizable	
Gain Flatness	dB	-	-	±2.5	Customizable	
In/Out VSWR	-	2.5:1	-	2.5:1	Customizable	
P@1dB	dBm	+10	-	-	Customizable	
DC Power	V@mA	+15	-	-	@250mA	
Noise Figure	dB	-	-	2.0*	Customizable	
Outline/Package	-	-	-	-	D4	
Connectors (in/Out)	SMA Female/SMA Female					

\*Noise Figure degrades below 1000 MHz\*

## Absolute Maximum Ratings\*

Parameters	Unit	Min	Max	Notes
Operating Temperature (Case)	°C	-50	+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

## **Product Features**

- Frequency Range = 0.5 to 18.0 GHz
- Max Noise Figure: 2.0 dB
- Min Gain: 35 dB
- Max Gain Flatness: < ±2.5 dB
- Min Output Power (P@1dB): +10 dBm
- State-of-the-Art PHEMT Technology
- MIL-883, MIL-45208 construction and reliability
- Internal DC regulator allows supply voltage from +15 VDC

### Product Description

The APT4-00501800-2010-D4 is from our line of affordable low noise amplifiers. This is a 0.5-18 GHz amplifier with 35 dB gain and 2.0 dB noise figure. And 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**

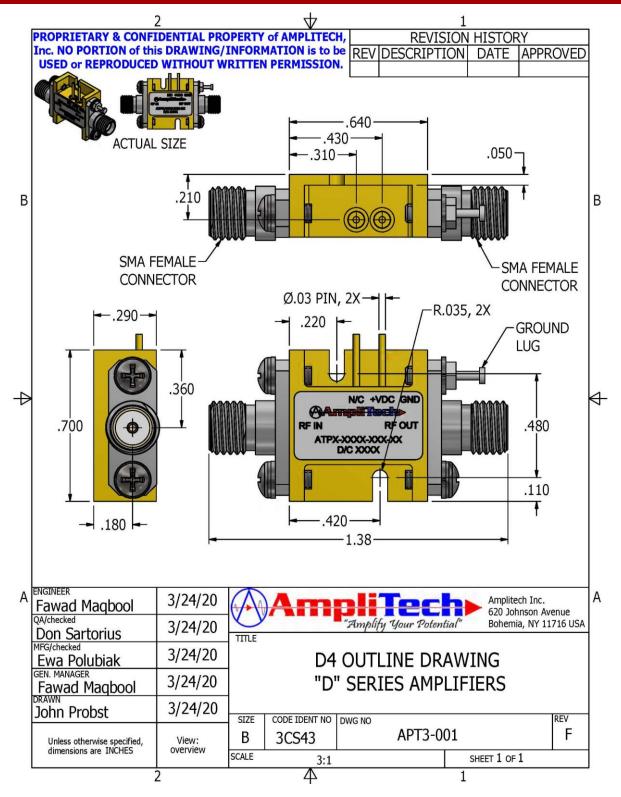
- ECM Testing
- Instrumentation
- SATCOM Systems
- Radar Systems
- Test Systems

\* 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.



Low Noise Amplifier

# **Outline Drawing**



Note: Custom outline options available