



Typical Key Parameters at 23°C

Parameters	Unit	Min	Typical	Max	Notes
Frequency	GHz	18	-	26.5	Customizable
Gain	dB	45	-	-	Customizable
Gain Flatness	dB	-	-	±2	Customizable
In/Out VSWR	-	-	-	2.3:1	Customizable
P@1dB	dBm	+10	-	-	Customizable
DC Power	V@mA	+15	-	-	@200mA
Noise Figure	dB	-	-	1.9	Customizable
Outline/Package	-	-	-	-	D22
Connectors (in/Out)	K Female/K Female				

Absolute Maximum Ratings*

Parameters	Unit	Min	Max	Notes
Operating Temperature (Case)	°C	-40	+70	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.

Product Features

- Frequency Range = 18 to 26.5 GHz
- Max Noise Figure: 1.9 dB
- Min Gain: 45 dB
- Max Gain Flatness: ± 2 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 APT22-18002600-1910-D22 is a broadband high gain low noise amplifier. This is a 18-26.5 GHz amplifier with 45 dB gain and 1.9dB noise figure. It is designed mainly for wideband telecommunications, such as for Military and Space, Point-to-Point Radios and Test Equipment. All our low noise amplifiers come with a 3-year warranty.

Applications

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



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Model No.: APT22-18002600-1910-D22	Tested By: EP
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IMPORTANT – MUST USE HEAT SINK IF CASE TEMPERATURE EXCEEDS 50°C

Specifications at 23°C			
Frequency:	18 – 26.5 GHz	Output Power @ 1dB Comp. Pt:	+ 10 dBm
Gain:	45 dB min.	Voltage/Current: DC Power	15 VDC @200 mA, nom.
Gain Flatness:	± 2.0 dB max	Measured Current:	222 mA
VSWR Input:	2.3:1	Max. Noise Figure:	1.9 dB
VSWR Output:	2.3:1 Z=50 Ohms	Outline:	D22

Note: Test data taken with case temperature of +23 °C

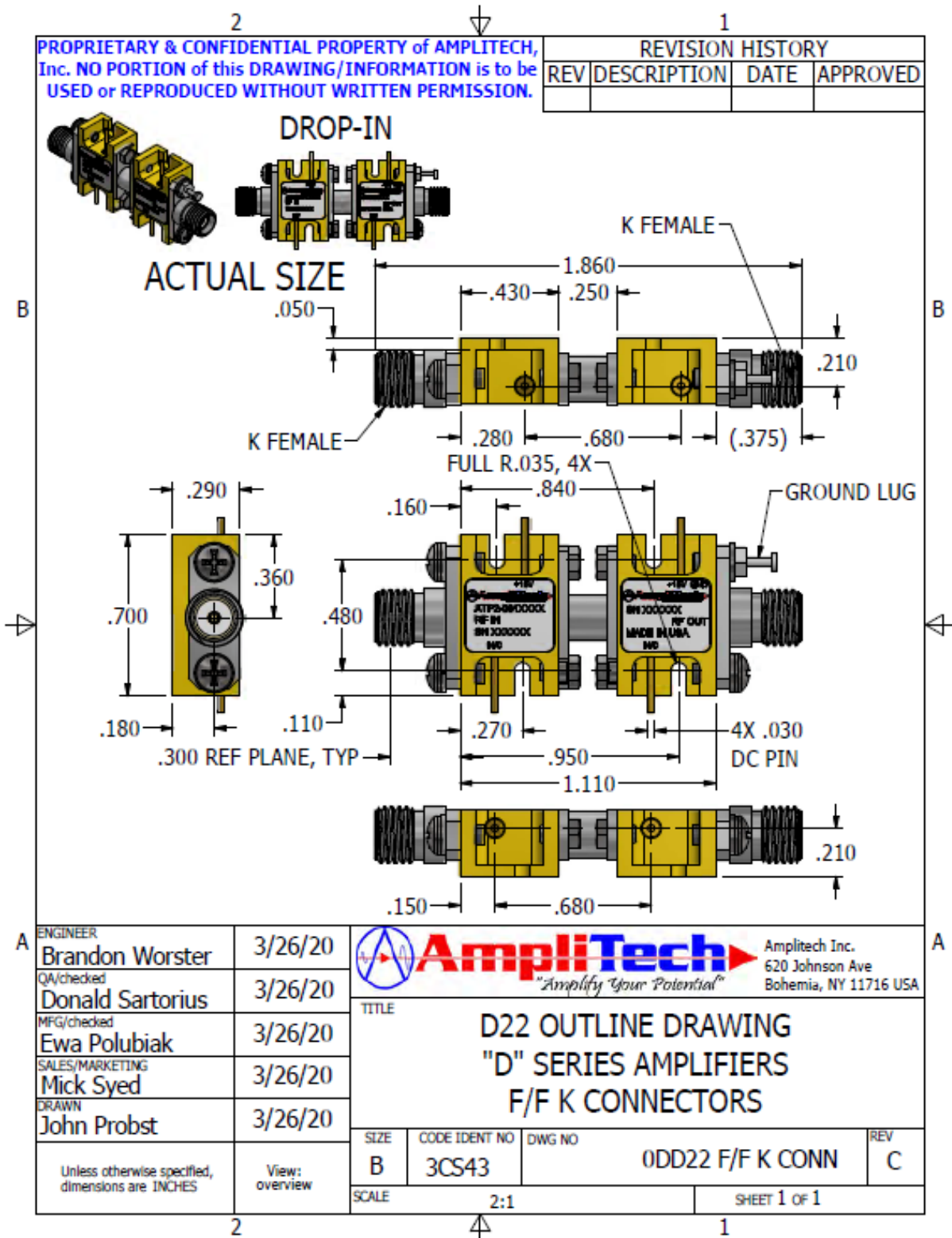
Frequency (GHz)	Gain (dB)	VSWR		Noise Figure (dB)	Output Power @ 1dB Comp. (+dBm)
		In	Out		
18	48.3	1.13	1.09	1.55	12
20	50.4	1.12	1.34	1.68	14
22	47.8	1.19	1.40	1.71	14.5
24	50.7	1.27	1.46	1.82	13
26.5	49.8	1.31	1.37	1.82	12

Data taken at 23°C unless otherwise stated.

COMMENTS: Do not apply DC Voltage to the INPUT. The maximum RF CW Input to the unit is +15 dBm.

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Outline Drawing



Note: Custom outline options available