

L-Band Waveguide Low Noise SATCOM Amplifier APTW4-01500160-30K10-WR650-D6



Features

- 1.5 to 1.6 GHz Frequency Range
- WR650 waveguide input
- **30K Noise Temperature (0.4 dB)**
- 55 dB typical Gain
- Gain Flatness ± 0.5 dB typ
- Internal DC Regulator
- Reverse Voltage Protection
- MIL-883, MIL-45208 construction and reliability

Applications

- Telecommunications
- SATCOM
- GPS
- Military

Product Description

The APTW4-01500160-30K10-WR650-D6 is a high gain ultra low noise amplifier with good Flatness and excellent Insertion Loss and Return Loss. It is designed mainly for TELECOM and SATCOM applications, such as Satellite Phones, Satellite Radios and military devices for communication across land, air and sea. It is also instrumental to GPS carriers all over the world.

Key Specifications at 23°C

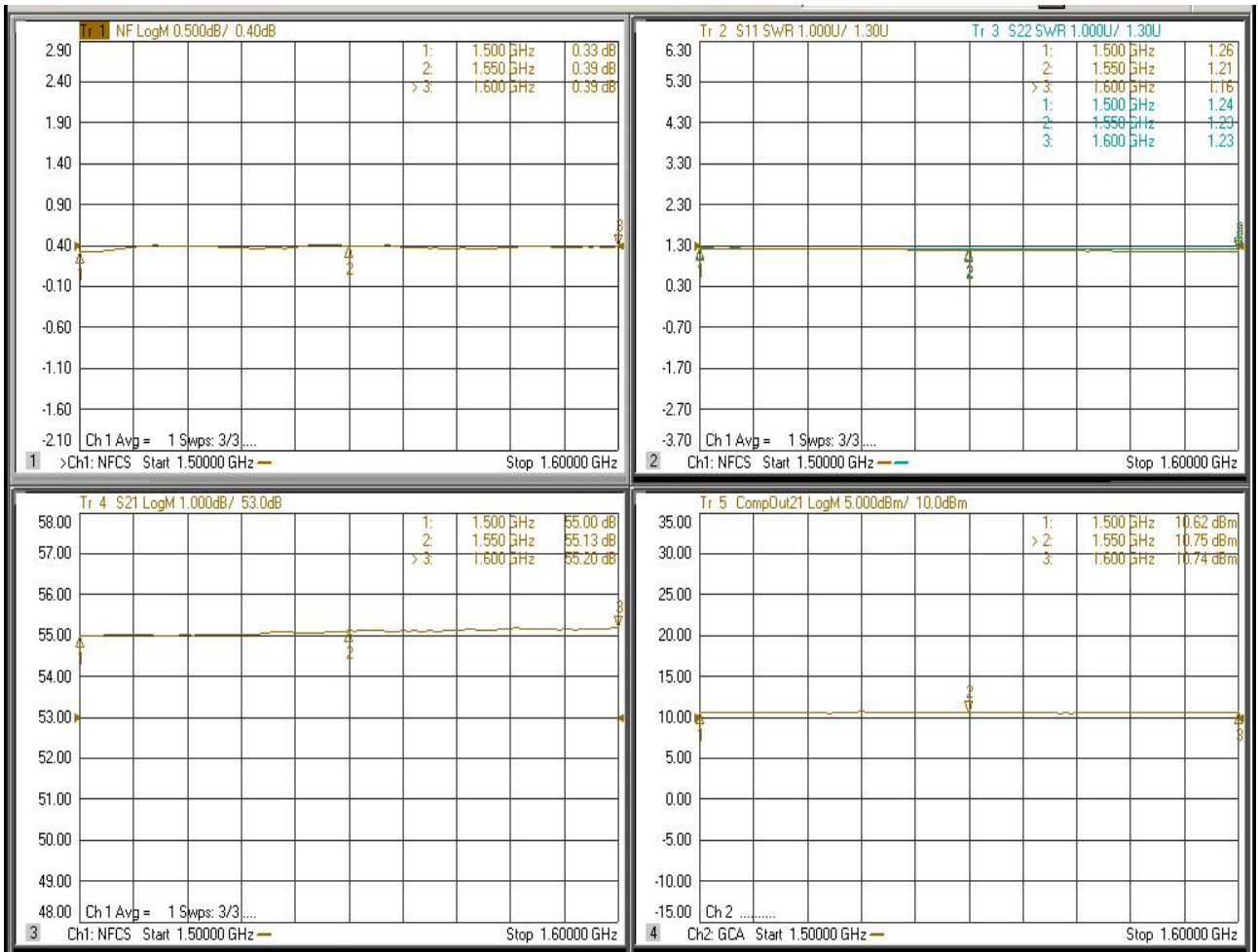
Parameter	Unit	Minimum	Typical	Maximum	Notes
Frequency	GHz	1.5	-	1.6	Customizable
Gain	dB	50	55	-	Customizable
Gain Flatness	dB	-	± 0.5	± 0.3	Customizable
In/Out VSWR	:1	-	1.25	1.3	Customizable
P@1dB	dBm	+10	10.6	-	Customizable
DC Power	V@mA	+12	+15	+16	@130mA
Noise Figure	dB	-	0.39	0.43	@23°C
Outline/Package	-	-	-	-	WR650+D6

Absolute Maximum Ratings*

Parameter	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

*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.

Typical Measured Data



Outline Drawing

