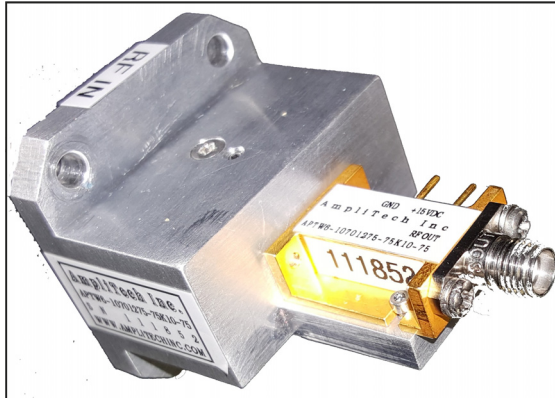


Ku-Band Waveguide Low Noise SATCOM Amplifier APTW6-10701275-75K10-WR75-D6



Applications

- Satellite Broadcasting
- Radar
- Telemetry

Features

- 10.7 to 12.75 GHz Frequency Range
- WR75 waveguide input
- **65K Noise Temperature (0.88 dB)**
- 65 dB typical Gain
- Gain Flatness ± 0.75 dB typ
- Internal DC Regulator
- Reverse Voltage Protection
- MIL-883, MIL-45208 construction and reliability
- Compact size
- Weatherproof
- No isolator for best performance
- Pressurizable to 5 psi

Product Description

The APTW6-10701275-75K10-WR75-D6 is a high gain low noise amplifier with surprisingly good flatness and excellent Insertion Loss and Return Loss due to our unique non-isolator design. It's primary use is for SATCOM applications, such as for military and civil Satellite Downlinks. This particular frequency range is also widely used for Direct Broadcasting of Radio and TV in Europe.

Key Specifications at 23°C

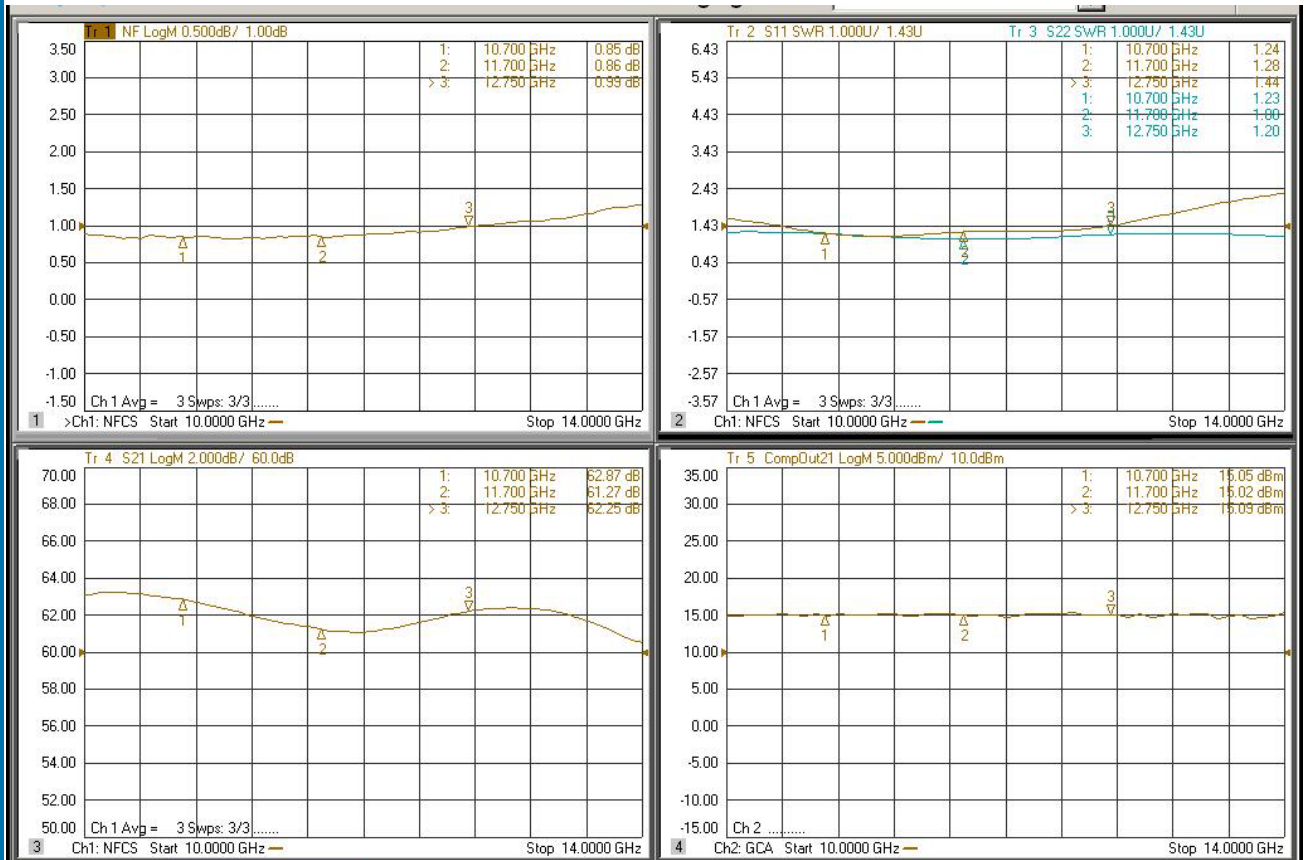
Parameter	Unit	Minimum	Typical	Maximum	Notes
Frequency	GHz	10.70	-	12.75	Customizable
Gain	dB	60	65	-	Customizable
Gain Flatness	dB	-	± 0.75	± 1.0	Customizable
In/Out VSWR	:1	-	1.3	1.5	Customizable
P@1dB	dBm	+10	+15	-	Customizable
DC Power	V@mA	+12	+15	+16	@240mA
Noise Figure	dB	-	0.88	1.0	@23°C
Outline/Package	-	-	-	-	WR75+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

