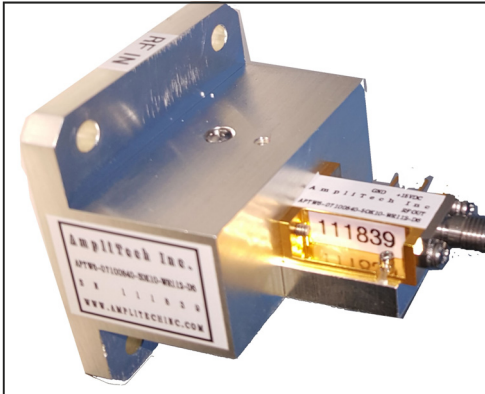


X-Band Waveguide Low Noise SATCOM Amplifier APTW6-07100840-50K10-WR112-D6



Applications

- Military
- Radar
- Weather Monitoring
- Air and Sea Traffic Control
- Satellite downlinks

Product Description

The APTW6-07100840-50K10-WR112-D6 is a high gain ultra low noise amplifier with good Flatness and excellent Insertion Loss and Return Loss. It is primarily used by the military for SATCOM applications, such as Radar, Weather and Speed Monitoring. It's versatility also lends itself to use by civil applications such as traffic control and law enforcement when installed in speed and position detection systems.

Key Specifications at 23°C

Parameter	Unit	Minimum	Typical	Maximum	Notes
Frequency	GHz	7.1	-	8.4	Customizable
Gain	dB	60	63	-	Customizable
Gain Flatness	dB	-	±1.0	±1.0	Customizable
In/Out VSWR	:1	-	1.35	1.5	Customizable
P@1dB	dBm	+10	+13.5	-	Customizable
DC Power	V@mA	+12	+15	+16	@190mA
Noise Temp.	K	-	40	50	@23°C
Outline/Package	-	-	-	-	WR112+D6

Features

- 7.1 to 8.4 GHz Frequency Range
- WR112 waveguide input
- **40K Noise Temperature (0.56 dB)**
- 63 dB typical Gain
- Gain Flatness ±1.0 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

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

