

X-Band Solid State Power Amplifier Module 9.0-10 GHz, 1500 Watts

Model BMCAP99109-1500

Overview

Stellant PST proudly introduces a new Gallium Nitride (GaN) amplifier for applications in the X-Band radar market. The AB linear design operates over the 9.0-10.0 GHz frequency range intended for use in radar applications. The amplifier design features include pulse width and duty factor protection as well as thermal and load VSWR fault monitoring. Consistent with its planned technology development roadmap, Comtech is leading the field with the latest in GaN-based RF device performance and advanced amplifier development.



Features

- AB Linear Gallium Nitride (GaN) Technology
- High Output Power Dynamic Range
- Excellent Efficiency
- RF Output (Forward/Reverse)
- Thermal and Load VSWR Protection
- Optional Digital Interface for Control & Status Monitoring
- Fast Blanking
- Low Phase Noise

Specifications

• Frequency Range:	9.0 to 10.0 GHz	• DC Voltage Input:	+28VDC ±1VDC
• Peak Output Power:	1500W Typical	• DC Supply Current:	12.5 Amps nominal for 5% DF
• Power Gain:	62dB nominal	• RF to DC Efficiency:	25% nominal
• Power Gain Variation:	±2 dB	• Operating Temperature:	-40°C to +65°C baseplate
• Pulse Width:	0.25 to 100 μs max	• Operating Humidity:	0 to 95% non-condensing
• Duty Cycle:	<6% max	• Operating Shock & Vibration:	Per Mil-Std-810F
• Pulse Droop:	≤ 0.015dB/μs	• Operating Altitude:	Up to 30,000 Ft.
• Pulse Rise & Fall Time:	<50ns	• PA Enable/Disable:	Low Voltage TTL
• Input VSWR:	<2:1	• RF Connectors:	
• Output Load VSWR:	<2:1	RF Input and Sample Ports:	SMA
• Load VSWR Protection:	∞VSWR	RF Output:	Type TNC (WG -90 optional)
• RF Input Sample:	- 15dBc	• DC & Interface Connector:	Combo-D-Subminiature
• Harmonics:		• Size:	9.6" x 6.8" x 2.00"
2Fo:	<-40dBc	• Weight:	5.5 lbs.
3Fo:	<-50dBc		
• RF Pulse: On-Off Isolation	≥ 110 dBc		

Power Systems Technology (PST)

105 Baylis Road
Melville, NY 11747
T: 631-777-8900

417 Boston St.
Topsfield, MA 01983
T: 978-887-5754



www.Stellantsystems.com



For more information, contact

Sales-PST@Stellantsystems.com