

X-Band Solid State Power Amplifier Module

9.0-10 GHz, 40 Watts

MODEL BME99109-40

Features:

- CW or Pulse Applications
- TWT Replacement
- Instantaneous 1000 MHz bandwidth
- AB Linear Gallium Nitride (GaN) Technology
- High Output Power Dynamic Range
- Forward and Reverse Power Monitoring
- Thermal and Load VSWR Protection
- Digital Interface for Control & Status Monitoring
- Phase and Amplitude Matching
- Ideal Building Block for Phased Array Radar or Range Instrumentation Systems
- ESD Protection IAW EN61000-4-2, MIL-STD-461F, CS101 and CE102



Performance Specifications

• Frequency Range:	9.0 to 10 GHz	• DC Voltage Input:	+36 VDC to +45 VDC
• Output Power:	40W CW (+46 dBm)	• DC Power Consumption:	225W max
• Power Gain:	46 dB nominal	• RF to DC Efficiency:	>18 % typical
• Dynamic Range:	30 dB	• Operating Temperature:	0°C to +55°C baseplate
• Phase Stability:	± 2.0° Peak to Peak	• Operating Humidity:	0 to 95% non-condensing
• Duty Cycle:	up to 100% DF	• Operating Shock & Vibration:	Per Mil-Std-810F
• Input VSWR:	<1.8:1	• Operating Altitude:	10,000 Ft.
• Output Load VSWR:	1.5:1	• Control Interface:	RS-485
• Load VSWR Protection:	Internal Circulator	• RF Connectors:	
• Input RF Overdrive:	+10 dB Max	RF Input Port:	SMA Female
• Output Fwd. & Rev. Monitoring:	± 0.5 dB typical	RF Output:	WG-90 (Bottom Surface)
• Harmonics:		• DC & Interface Connectors:	<i>Mighty Mouse</i> Series 80
2Fo:	<-60dBc	• Size:	4.00" x 4.00" x 3.33"
3Fo:	<-80dBc	• Weight:	2.5 lbs.

COMTECH PST proudly introduces another new Gallium Nitride (GaN) amplifier for X-Band applications. This class AB linear design operates over the full 9.0-10 GHz frequency range and is ideal for use in Phase Array Radar applications, as a TWT replacement or for a microwave communication link. The amplifier features phase and amplitude control, internal DC to DC converters and DC filtering, PA self-test and LED fault indications, unique waveguide coupling circuits, an internal isolator and digital control via a magic tee. The small light weight construction makes it amenable to a variety of platforms and environments. Contact our Marketing or local Representatives to discuss how Comtech's experts can support your next solid state amplifier requirement with its standard or custom designs for Radio Communications, HF, VHF UHF, L, S, C, and X Band Pulse Radar, TWT replacement, IFF, EW Jamming, Satellite, or Medical Instrumentation. Comtech PST is an innovative leader of SSPA systems.