

# X-Band Solid State Power Amplifier Module

## 9.2-10 GHz, 1000 Watts

### MODEL BPMC928109-1000

#### **Features:**

- AB Linear Gallium Nitride (GaN) Technology
- High Output Power Dynamic Range
- Excellent Efficiency
- RF Output Detectors
- Pulse Width and Duty Factor Protection
- Thermal and Load VSWR Protection



## Performance Specifications

<ul style="list-style-type: none"> <li>• Frequency Range: 9.2 to 10.0 GHz</li> <li>• Peak Output Power: 1000W typical (60 dBm <math>\pm</math> 1.5 dB over full temperature)</li> <li>• Power Gain: 60dB nominal</li> <li>• Pulse Width: 0.25 to 100 <math>\mu</math>s max</li> <li>• Duty Cycle: 5% max</li> <li>• Pulse Droop: &lt;1.0 dB @ 50<math>\mu</math>s PW</li> <li>• Pulse Rise &amp; Fall Time: &lt;50ns</li> <li>• Input VSWR: <math>\leq</math>1.5:1</li> <li>• Output Load VSWR: <math>\leq</math>1.5:1</li> <li>• Load VSWR Protection: <math>\approx</math>VSWR</li> <li>• Harmonics:                             <ul style="list-style-type: none"> <li>2Fo: &lt;-40dBc</li> <li>3Fo: &lt;-50dBc</li> </ul> </li> <li>• RF Pulse: On-Off Isolation <math>\geq</math>110 dBc</li> </ul>	<ul style="list-style-type: none"> <li>• DC Voltage Input: +28VDC <math>\pm</math>1VDC</li> <li>• DC Supply Power: 300W typical, 5% duty cycle</li> <li>• RF to DC Efficiency: 16% typical</li> <li>• Operating Temperature: -40°C to +65°C baseplate</li> <li>• Operating Humidity: 0 to 95% non-condensing</li> <li>• Operating Shock &amp; Vibration: Per Mil-Std-810F</li> <li>• Operating Altitude: 10,000 Ft.</li> <li>• PA Enable/Disable: TTL</li> <li>• Forward and Reverse Detectors: Analog voltage</li> <li>• RF Connectors:                             <ul style="list-style-type: none"> <li>RF Input and Detector Ports: SMA Female</li> <li>RF Output: TNC Female</li> </ul> </li> <li>• DC &amp; Interface Connectors: Combo-D-Subminiature</li> <li>• Size: 9.6" x 6.8" x 2.0"</li> <li>• Weight: 5.5 lbs.</li> <li>• Modulation Input Connector: SMC Male Jack</li> </ul>
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COMTECH PST proudly introduces a new Gallium Nitride (GaN) amplifier for applications in the X-Band radar market. The AB linear design operates over the 9.2-10.0 GHz frequency range intended for use in radar applications. 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.