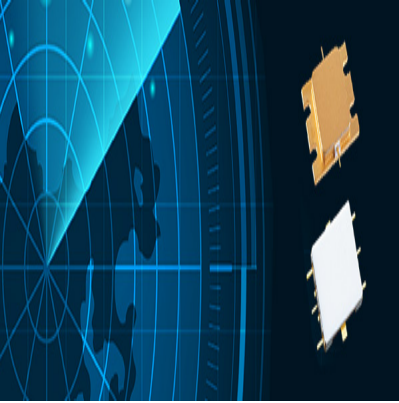




Powering the Future of Radar Technology with Sumitomo's 1000W GaN HEMT Amplifier

Description





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As the radar industry evolves, solid-state power amplifier (SSPA) based systems are rapidly replacing conventional magnetron-based systems. Component Distributors, Inc. (CDI) is proud to partner with Sumitomo Electric Device Innovations (SEDI) to bring you the latest in cutting-edge radar technology: the 1000W High Power, High-Efficiency GaN HEMT Amplifier for S-band radar applications. This breakthrough technology offers substantial advantages for Air Traffic Control (ATC) and meteorological radar systems, where power, reliability, and efficiency are critical.

Why Solid-State Radars Are the Future

Solid-state radar systems are gaining favor for several reasons:

- **Extended Lifespan:** Unlike magnetrons, which require periodic replacement, semiconductor-based systems, like those powered by GaN HEMTs, have a longer service life. This longevity translates to lower maintenance costs over time.
- **Superior Detection Capabilities:** Solid-state radars provide enhanced frequency stability, enabling them to detect smaller objects that magnetron radars often miss due to frequency fluctuations. This improvement significantly enhances the radar's performance, especially in applications where precision is critical.

Sumitomo's 1000W S-band GaN HEMT Amplifier: A Game Changer

SEDI's SGN2731-800L-R GaN HEMT amplifier represents a leap forward in radar amplifier technology. Its high power and efficiency make it ideal for modern radar systems that need to maintain or exceed the performance of older magnetron-based systems.

Key Features:

- **Industry-Leading Output Power:** With a typical output power of 1000W, this S-band GaN HEMT amplifier delivers the highest output power in its class.
- **High Efficiency:** Achieving 60% efficiency, this device reduces overall energy consumption, making it an economical choice for long-term operations.
- **Broadband Capabilities:** Covering a frequency range from 2.7 to 3.1 GHz, the amplifier is suitable for a wide range of radar applications.



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Category

1. Ewave
2. RF-Microwave
3. Sumitomo Electric Device Innovations U.S.A.

Date Created

September 6, 2024

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