CMPA851A025

8.5 - 10.5 GHz, 40 W GaN MMIC HPA

Wolfspeed's CMPA851A025 MMIC HPA family supports up to 40 W utilizing Wolfspeed's high performance, 0.15um GaN on SiC production process. The product family operates from 8.5 – 10.5 GHz and supports both defense and commercial-related radar applications. The CMPA851A025 family achieves 40 W of saturated output power with 30 dB of large signal gain under pulsed operation. CW operation is also an option. The CMPA851A025 family offers both bare die and SMT package solutions allowing the user to improve their SWaP-C benchmarks in meeting next-generation requirements.

Products

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Product SKU	Buy Online	Request Sample	Data Sheet	Recommended For New Design?	Technology	Frequency Min	Frequency Max	Pea Out Pow
CMPA851A025S-AMP1 NEW			Request Now	Yes	GaN on SiC	8.5 GHz	10.5 GHz	40
CMPA851A025S NEW			Request Now	Yes	GaN on SiC	8.5 GHz	10.5 GHz	40
CMPA851A025D NEW			Request Now	Yes	GaN on SiC	8.5 GHz	10.5 GHz	40

Features

- Superior Overall Performance
- Pulsed and CW Operation
- Small 6 x 6 mm Footprint
- Environmental Protection

Benefits

- High SWAP-C Analysis
- Automated Assembly

Applications

- Defense and Commercial Radar Systems

Technical & Sales Documents | Tools & Support

Document Type +

Document Type	Document Name
Application Notes	Eutectic Die Attach Procedure
Application Notes	GaN HEMT Bias Sequencing and Temperature Compensation Circuit
Product Catalog	RF Aerospace & Defense Line Card
Sales Terms	Wolfspeed, Inc. Sales Terms and Conditions

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Wolfspeed RF GaN meets 5G demands on PA design

Wolfspeed GaN on SiC products can replace inefficient silicon parts in 5G cellular transmitter amplifiers, achieving higher linearization, greater power density and improved thermal conductivity.

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Improving Pulse Fidelity in RF Power Amplifiers

A radar system designer's most coveted objectives are achieving a long range, adequate resolution to distinguish objects in close proximity to each other, and the ability to not only determine target velocities but target types in order to help differentiate friendlies from adversaries.A combination of both approaches is essential, and engineers can design for peak power points of the load-pull simulation while also paying attention to other parts of the circuit for baseband signal fidelity.

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