CMPA1E1F060

13.75 - 15.5 GHz, 60W GaN MMIC HPA

Wolfspeed's CMPA1E1F060 MMIC HPA family supports up to 60 W utilizing Wolfspeed's high performance, 0.15um GaN on SiC production process. The product family operates from 13.4 – 15.5 GHz and targets lower Ku-band radar applications, as well as, satellite uplinks and common datalink applications. Under saturation, the CMPA1E1F060 family achieves 60 W of typical output power with 26 dB of large signal gain and offered in multiple platforms. Targeting an IM3 level of -25 dBc or better, this HPA delivers 25 W of output power with 31 dB of gain while maintaining high efficiency. The CMPA1E1F060 family provides superior RF performance and thermal management and is offered in bare die and flange package solutions allowing the user to optimize their SWaP-C analysis 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	Peak Output Power
CMPA1E1F060F NEW			Request Now	Yes	GaN on SiC	13.4 GHz	15.5 GHz	60 W
CMPA1E1F060D NEW			Request Now	Yes	GaN on SiC	13.75 GHz	15.5 GHz	60 W

Features

- High Linear Power and Efficiency
- Supports High Video Bandwidth Requirements
- Optimized Platform Offerings

Benefits

- High SWaP-C Analysis
- Superior Thermal Management

Applications

- Satellite Uplink
- Common Data Links
- Military and Commercial Radar

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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Thermal Considerations for High-Power GaN RF Amplifiers

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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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