



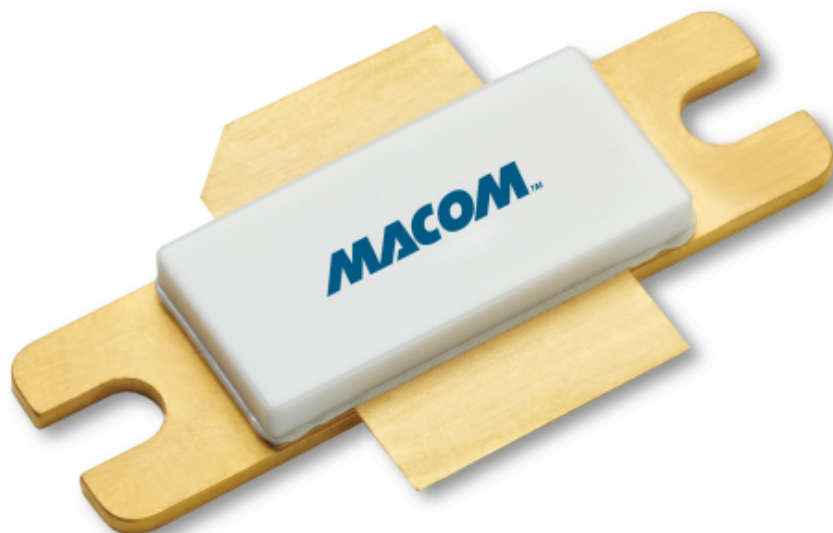
Partners in RF & Microwave

September 17, 2013

MACOM's New 600 W GaN on SiC Pulsed Power Transistor Delivers Industry's Highest Reliability Rating and Lowest Pulse Droop

Internally-matched, 600 W Power Transistor Provides High Gain, Efficiency and Ruggedness over the 1030 to 1090 MHz Bandwidth

LOWELL, Mass.--(BUSINESS WIRE)-- M/A-COM Technology Solutions Inc. ("MACOM"), a leading supplier of high-performance RF, microwave and millimeter wave products, today announced a new ceramic GaN on SiC HEMT Power Transistor for avionics applications.



The [MAGX-001090-600L00](#) is a gold-metalized, matched GaN on Silicon Carbide, RF power transistor optimized for pulsed avionics applications, such as secondary surveillance radar in air traffic control systems. The MAGX-001090-600L00 provides 600 W of output power with a typical 21.4 dB of gain and 63% efficiency. The device has very low thermal resistance of 0.05⁰C/W and best-in-class load mismatch tolerance of 5:1. In addition, the device has the lowest pulse droop of 0.2 dB and also can be used effectively under more demanding Mode-S ELM operating conditions.

MACOM's GaN transistor technology has been fully qualified with accelerated, high-temperature lifetime tests and this device has a predicted MTTF of over 600 years at a maximum junction temperature of 200 degrees C. (Photo: Business Wire)

MACOM's GaN transistor technology has been fully qualified with accelerated, high-temperature lifetime tests and this device has a predicted MTTF of over 600 years at a maximum junction temperature of 200⁰C. The device also boasts very high breakdown voltages, which provides customers with reliable and stable operation even in extreme load mismatch conditions.

"MACOM's GaN power technology offers a significant advantage in higher gain, higher efficiency and improved reliability compared to similar Si Bipolar and LDMOS power transistors," said Paul Beasley, Product Manager. "The device also provides the highest load mismatch tolerance in its class - a critical parameter to ensure the highest reliability and performance in demanding avionics applications."

The table below outlines typical performance:

Parameters	Units	MAGX-001090-600L00
Frequency	MHz	1030-1090
P _{out}	W	600
V _d	V	50
Power Gain	dB	21.4
Drain Efficiency	%	63
Pulse/Duty	µs/%	32/2
Pulse Droop	dB	0.2
Load Mismatch Tolerance	VSWR	5:1
R _{th}	°C / W	0.05

MTTF

Hours

5.2 · 10⁶

Evaluation boards of [MAGX-001090-600L00](#) are available from stock. Final datasheets and additional product information can be obtained from the MACOM website at: www.macomtech.com.

Visit MACOM at Booth #169 at European Microwave Week in Nuremberg Germany, 8-10, October, to find out more about the [MAGX-001090-600L00](#) and order samples today.

ABOUT MACOM:

M/A-COM Technology Solutions (www.macomtech.com) is a leading supplier of high performance RF, microwave, and millimeter wave products that enable next-generation Internet and modern battlefield applications. Recognized for its broad catalog portfolio of technologies and products, MACOM serves diverse markets, including CATV, wireless and optical communications infrastructure, satellite, radar, automotive, industrial, medical, and mobile devices. A pillar of the RF and microwave industry, we thrive on more than 60 years of solving our customers' most complex problems.

Headquartered in Lowell, Massachusetts, MACOM is certified to the ISO9001 international quality standard and ISO14001 environmental management standard. MACOM has design centers and sales offices throughout North America, Europe, Asia and Australia.

MACOM, M/A-COM, M/A-COM Technology Solutions, M/A-COM Tech, Partners in RF & Microwave, The First Name in Microwave and related logos are trademarks of MACOM. All other trademarks are the property of their respective owners.

NEW PRODUCT RELEASE DISCLAIMER:

Any express or implied statements in MACOM product announcements are not meant as warranties or warrantable specifications of any kind. The only warranty MACOM may offer with respect to any product sale is one contained in a written purchase agreement between MACOM and the purchaser concerning such sale and signed by a duly authorized MACOM employee, or, to the extent MACOM's purchase order acknowledgment so indicates, the limited warranty contained in MACOM's standard Terms and Conditions for Quotation or Sale, a copy of which may be found at www.macomtech.com/content/customersupport.

Photos/Multimedia Gallery Available: <http://www.businesswire.com/multimedia/home/20130917006012/en/>

FOR SALES INFORMATION:

North Americas, 800-366-2266

Europe, +353-21-244-6400

India, +91-80-43537383

China, +86-21-2407-1588

or

MEDIA:

M/A-COM Technology Solutions Inc.

Husrav Billimoria, 978-656-2896

Husrav.Billimoria@macomtech.com

or

Rainier Communications

Jessie Glockner, 508-475-0025 x140

jglockner@rainierco.com

or

embedded PR

Gerlinde Knoepfle, +49-(0)89-64913634-12

gk@embedded-pr.de

Source: M/A-COM Technology Solutions Inc.

News Provided by Acquire Media