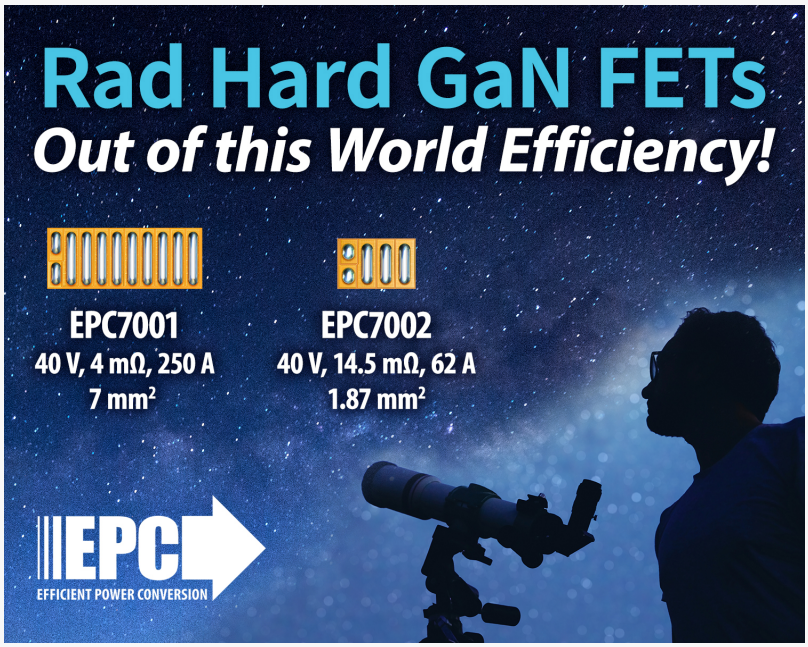
40 V Rad Hard GaN FETs Set New Performance Standards for Demanding Space Applications

EPC expands its family of rad-hard gallium nitride power products with two new 40 V devices to address critical spaceborne and high-reliability applications.



"40 V Rad Hard GaN FETs Set New Performance Standards for Demanding Space Applications "

EL SEGUNDO, CA, UNITED STATES, July 18, 2023 /EINPresswire.com/ -- EPC announces the introduction of two new 40 V rated radiation-hardened GaN FETs. EPC7001 is a 40 V, 4 mΩ, 250 APulsed, rad-hard GaN FET in a small 7 mm2 footprint. EPC7002 is a 40 V, 14.5 mΩ, 62 APulsed, rad-hard GaN FET in a tiny 1.87 mm2 footprint. Both devices have a total dose radiation rating greater than 1,000K Rad(Si) and SEE immunity for LET of 83.7 MeV/mg/cm2 with VDS up to 100% of rated breakdown. These new devices, along with the rest of the Rad Hard family, are offered in a chip-scale package. Packaged versions are available from EPC Space.

EPC's eGaN FETs and ICs offer a higher performing alternative to conventional rad hard silicon devices for high reliability and space applications. EPC's Rad hard devices are significantly smaller, have 40 times better electrical performance, and lower overall cost than rad hard silicon devices. Moreover, EPC's rad hard devices exhibit superior resistance to radiation, supporting higher total radiation levels and SEE LET levels compared to traditional silicon solutions.

Applications benefiting from the performance and fast deployment of these devices include DC-DC power converters, motor drives, lidar, deep probes, and ion thrusters for space applications. They are particularly well-suited for satellites operating in both Low Earth Orbit (LEO) and Geosynchronous Earth Orbit (GEO), as well as avionics systems.

"The Rad Hard product family provides unparalleled performance and reliability, coupled with significant space heritage for more efficient and robust systems covering a wide range of applications in harsh environments, such as space and other high reliability military

> “The Rad Hard product family provides unparalleled performance and reliability, coupled with significant space heritage for more efficient and robust systems in harsh environments." ”
>
> *Alex Lidow, CEO and co-founder of EPC*

applications”, said Alex Lidow, CEO, and co-founder of EPC.

Availability

The EPC7001 and EPC7002 are available for engineering sampling now.

About EPC

EPC is the leader in enhancement mode gallium nitride (eGaN®) based power management. eGaN FETs and integrated circuits provide performance many times greater than the best silicon power MOSFETs in applications such as DC-DC converters, remote sensing technology (lidar), motor drives for eMobility, robotics, and drones, and low-cost satellites.

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