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## **1200-V SiC MOSFETs Promise Greater Ruggedness And Reliability**

[NoMIS Power's](#) N3T080MP120D and N3T035MP120D are members of the company's first range of Advanced 1200-V SiC MOSFETs, which were unveiled at the recent ICSCRM 2024 held in Raleigh, N.C., from Sept. 29 to Oct. 4th. Featuring a more reliable gate-oxide process, 100% avalanche testing, and multiple packaging options, NoMIS' SiC MOSFETs are said to deliver greater ruggedness and reliability for applications including EVs, motor drives, solar PV inverters, energy storage systems, and solid-state power controllers.

The N3T080MP120D and N3T035MP120D feature  $R_{DS(ON)}$  specifications of 80 and 35 m $\Omega$ , respectively. The data sheet indicates these parts are currently available in three-lead TO-247 packages (see the figure). However, the company has indicated these products will also be made available in other packaging options.

Since its founding in 2020 as a spinout of the University at Albany, NoMIS Power has focused on bringing SiC's breakthrough advantages out of the laboratory and into the global power electronics industry. In the process, it has developed a full suite of next-generation power discrete and module technologies that will be released over the next 24 months.

According to the company, NoMIS Power's SiC technology delivers more rugged, reliable, and customizable performance thanks to novel designs and packaging architectures combined with an agile fabless model and bespoke services support.

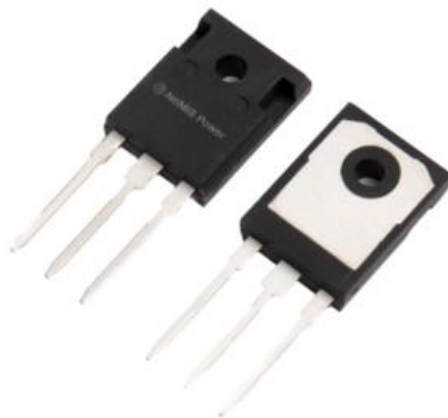
Parts are available now through Digikey and direct from NoMIS, including customization options.

NoMIS Power's advanced SiC MOSFET technology will be further leveraged in its upcoming range of 1200 V SiC power modules to be launched later this year at ECCE 2024 in Phoenix, Arizona, October 20-24.

NoMIS Power co-founder and CEO Adam Morgan stated, "We are excited to deliver our breakthrough SiC device technologies in a wide range of industry-standard package forms to meet the needs of R&D groups and business units inside power management product providers. We believe offering both discrete packages and power modules along with our customization services will allow NoMIS to offer something truly unique within the power electronics industry."

NoMIS Power VP and head of SiC Device Development Seung Yup Jang added, "We believe that our efficient design, robust oxidation process, and rigorous screening procedures will enable us to deliver more reliable and high-performance solutions to our customers."

For more information, see the Semiconductors And Modules [page](#) or the [N3T080MP120D](#) and [N3T035MP120D](#) data sheets. Or contact the [company](#).



*Figure. NoMIS Power's SiC technology delivers more rugged, reliable, and customizable performance thanks to novel designs and packaging architectures combined with an agile fabless model and bespoke services support, says the vendor. The company's first two products are the N3T080MP120D and N3T035MP120D 1200-V SiC MOSFETs.*