High Voltage Silicon Carbide MOS High Frequency Inverter

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With a rated voltage of 3.3 kV and a current of 750 A, the new Full SiC dual module is especially intended for high performance traction converters and flexible converter designs.

Both projects use 10 kV SiC devices and high frequency transformers 10 kV SiC modules: Cree/ Powerex HF transformers: Los Alamos, IAP, Dynapower

With the swift commercialization of SiC power devices, ranging from 600V to 3.3 kV and with future potential up to tens of kV, SiC MOSFET is rapidly supplanting silicon IGBT technology, ...

The SSPS is a 4 stage, AC - AC, soft-switched converter (Fig. 11) that steps the voltage at 20 kHz using a compact nano-crystalline transformer to facilitate a 75% reduction in weight and a 50% reduction in ...

Hence SiC MOSFET is the first device facing the challenge to switch in very high voltage, very high frequency and high power DC-AC converters, irrespectively of the final application ranging from ...

CoolSiC(TM) MOSFETs from Infineon provide high efficiency and optimal reliability. Our range of products is available in discrete housing as well as modules in 400 V, 650 V, 750 V, 1200 V, 1700 V, 2000 V, ...

This article provides a comprehensive review of Silicon Carbide (SiC) based inverters designed for High-Speed (HS) drive applications, which require higher output frequencies to enhance...

Recent research and development efforts in SiC inverters for electric drive applications highlight a strong focus on achieving high power density, high efficiency, and high-frequency operation.

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