

Impact of SiC and RC-IGBT on Drive and Power Supply

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Abstract: Growing population and economy of this planet require us to build up a sustainable society. In electric power conversion, more energy- and resource-saving, efficient systems must be developed. Power devices are the key for efficient power electronic systems. In this speech, state-of-the-art power devices and their applications are presented mainly on SiC and RC-IGBT. They increase the output power density, reduce the consumption of natural resources, and increase the efficiency of electric systems.



Dr. Tatsuhiko Fujihira is the CTO for Electronic Devices, Fuji Electric Co., Ltd., Japan. He has more than 30 years of experience in the research and development of power semiconductor devices, including IGBT, power MOSFET, and SiC. He has authored more than 30 papers, including the world-first technical paper of superjunction devices, in which he named the device as “Superjunction”, holds more than 100 patents, and is the receiver of three scientific awards.