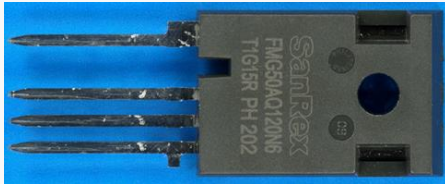


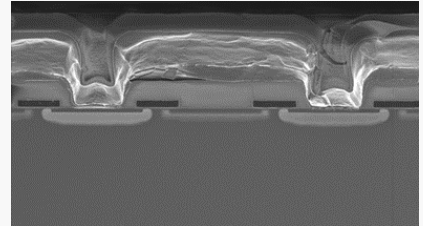
SiC MOSFET(1200V) manufactured by SANSHA ELECTRIC MANUFACTURING Corporation Structural analysis report



Package



Die



Cell area cross-sectional structure

November 2022. LTEC corporation released Structural analysis report of SiC MOSFET(1200V) manufactured by SANSHA ELECTRIC MANUFACTURING Corporation("SANSHA"). This new product is 50A type introduced in April 2022 in addition to their existing lineup (150A, 100A). This power devices are used in EV (electric vehicle) chargers, UPS (uninterruptible power supplies), and various switching power supplies.

Product specifications : FMG50AQ120N6 , 1200V SiC MOSFET , Id=50A , Ron=30mΩ

- Equipped with SiC MOSFET (DioMOS) developed by Panasonic.
- This transistor structure uses a mesh connection with planar gates.

Report contents

44 pages report includes

- Product appearance , X-ray observation
- Die overview
- SiC MOSFET cell array plane view analysis
- SiC MOSFET cell array and die periphery cross-section analysis
- SiC MOSFET transistor cell SCM analysis

(*) SCM(Scanning Capacitance Microscopy) is a measurement method that visualizes the P/N carrier distribution in two dimensions

Lead-time : One week after official order

Note: Please contact us for current report pricing

SiC MOSFET(1200V) manufactured by SANSHA ELECTRIC MFG

Structural analysis report

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Excerpt from structural analysis report



Fig. SiC MOSFET transistor die outer periphery cross-sectional structure analysis

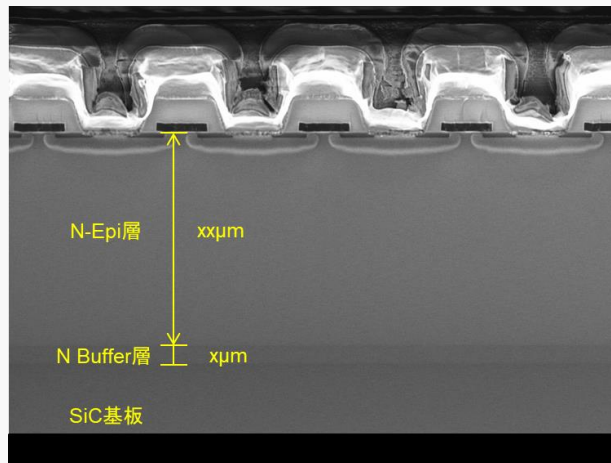


Fig. SiC MOSFET transistor cell array cross-sectional structure analysis

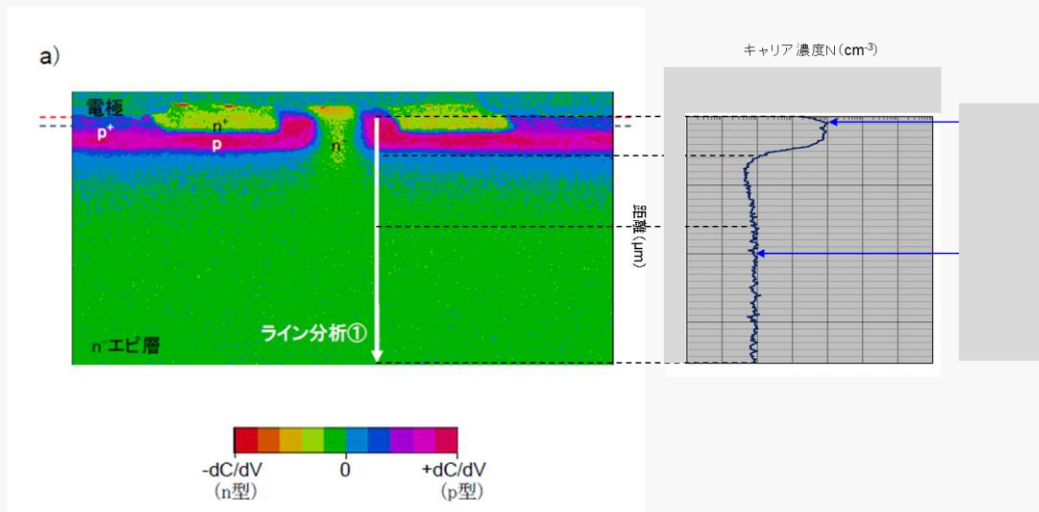


Fig. SiC MOSFET transistor cell SCM Analysis results