

## Power semiconductors for space applications

### Services

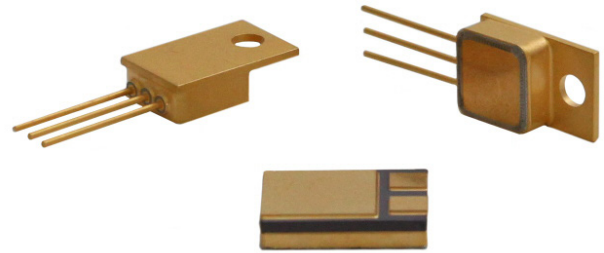
- Microelectronic packaging technologies
- Sealed power components such as power transistors or circuits integrated as power modules
- Modern cleanroom manufacturing facilities
- Quality management system according to EN 9100 and EN ISO 13485

### Certificates

First Sensor Lewicki GmbH is certified as Assembly- and Test-House for power MOSFETs since July 2014 by the German Aerospace Center (DLR) to build up, encapsulate and screen power semiconductors for space applications.

The following DLR component specifications are covered:

- DLR-RF-PS-STD-006, Iss. 1, Generic specification
- DLR-RF-PS-STD-013, Iss. 2, Detailed specification (SMD05)
- DLR-RF-PS-STD-014, Iss. 2, Detailed specification (TO-39)
- DLR-RF-PS-STD-016, Iss. 2, Detailed specification (TO-257/SMD05/SMD2)
- DLR-RF-PS-STD-019, Iss. 2, Detailed specification (TO-257)

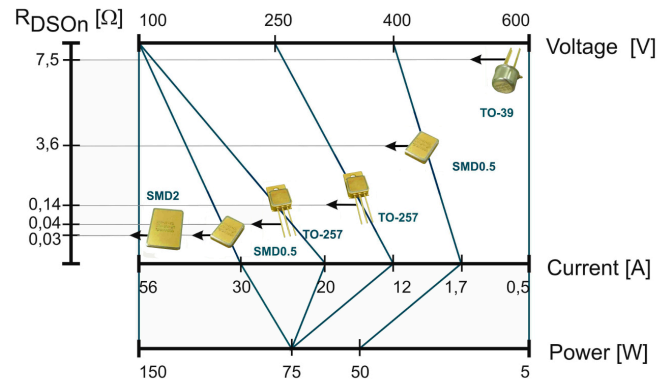


**Certification of power diode in progress!**

### Technical parameters, certified by DLR

Parameters	Specification
Drain-Source-Voltage ( $V_{DS}$ )	100 ... 600 V
Drain-Source-Current ( $I_{DS}$ )	0.5 ... 56 A
Power	5 ... 150 W
Resistance ( $R_{DS(on)}$ )	0.02 ... 7.5 Ohm
Chip size	1.6 ... 14.8 mm <sup>2</sup>
Bond wire diameter	125 ... 380 $\mu$ m
Housings	SMD0.5, SMD1, SMD2, TO-257AA, TO-39

*Packaging of semiconductors with other technical parameters and circuits on demand.*



### About First Sensor Lewicki GmbH

First Sensor Lewicki GmbH was founded in 1967. As a specialist for hybrid circuits and considerably influenced by space applications from the start, the company soon established itself as a pioneer of thick-film circuits in space and aerospace technology, defense technology, safety technology, medical technology, and industrial electronics. First Sensor Lewicki hybrid circuits are synonymous with highly reliable electronics and are used throughout the world. The technological spectrum includes all electronic packaging technologies for components and circuits as well as various in-house screening capabilities.

May 2017, subject to change without notice