

## **Output current of lead-free DC/DC converters is increased by up to 20A**

**Ericsson Power Modules is upgrading its PKD series of lead-free DC/DC converters for lead-free assembly processes. The first of the new converters, the PKD 4510 ASI, is available now, and has an input voltage range of 36-75V and delivers up to 15A at 3.3V. It offers a power increase of 88% over its predecessor in the same package and at a competitive price. The new family of on-board DC/DC converters will eventually include 1V/20A, 1.2V/20A, 1.5V/20A, 1.8V/20A, 2.5V/15A and 5V/10A versions. These will be introduced throughout 2003.**

The single output PKD DC/DC converters were the world's first surface mount DC/DC converters designed for lead-free manufacturing processes and they can withstand re-flow soldering at temperatures up to 260°C. The performance increase in the new versions have been achieved through better utilization of the ceramic substrate and thermal design improvements, including better thermal and electrical conductivity in the lead-frame material. New MOSFET technology has decreased power losses and resulted in increased efficiency, now typically 90 – 91% at full load. Price competitiveness has been ensured through greater integration of synchronous rectification control functions in a new ASIC and improved automated production processes. Another new feature of the enhanced product family is both negative and positive remote control functions in each module, providing more design flexibility for users.

PKD DC/DC converters are 7.5mm (0.3 inches) high, allowing close spacing, down to 15 mm, of printed circuits boards to minimize system size. They have a footprint of 46 x 50mm (1.81 x 1.97 inches) and weigh less than 22g. No heatsink is required and the lead-frame design ensures reliable connection to the printed circuit board and operation over a wide temperature range.

Designed to meet current and future legislation with respect to lead-free manufacturing, PKD DC/DC converters have 1500Vdc input/output isolation and the typical mean time between failures (MTBF) is expected to reach similarly high levels to those of their predecessor i.e. 5,100,000 hours at +75 °C. They are ideal for distributed power architectures in a wide range of telecom and datacom applications.

The PKD 4510 ASI is available now and priced at \$39/piece for 1,000+ quantities.

*Ericsson is shaping the future of Mobile and Broadband Internet communications through its continuous technology leadership. Providing innovative solutions in more than 140 countries, Ericsson is helping to create the most powerful communication companies in the world.*

**FOR FURTHER INFORMATION, PLEASE CONTACT**

Patrick Le Fèvre, Marketing Director  
Ericsson Power Modules AB  
Phone: +46-8-568 695 07  
Fax: +46-8-568 695 99

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If printing an Internet address please use Power Modules homepage and/or phone number to our International sales office:

URL: [www.ericsson.com/powermodules](http://www.ericsson.com/powermodules)

Europe: +46-8-568 696 20

U.S.A.: +1-972-583 6910/5254

China: + 86-21-5990 3258

**About Ericsson Power Modules**

Ericsson Power Modules is a supplier of world-class DC/DC power modules for distributed power architectures. With its global design, development, manufacturing and sales network Ericsson Power Modules is a leading supplier of power solutions to meet the customer demand for high performance.