

Press Release

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IXYS Introduces New 2.2kV, 5370A Fast Thyristor with Record Current Rating and 35% Better than Present Devices in Standard Package

Leiden, Netherlands and Chippenham, UK, May 25, 2017 — IXYS Corporation (NASDAQ:IXYS) an international power and IC semiconductor company, today announced that its wholly owned UK subsidiary, IXYS UK Westcode Ltd., launched a new 5370A distributed gate thyristor. The new symmetrical blocking device has a peak blocking voltage of 2.2kV and a continuous DC rating of 1.3kV. This new device is IXYS' highest current rated fast thyristor and is believed to be the highest current rating available today on the open market, breaking new ground in power handling capacity and density.

The new device has an RMS current rating of over 10kA at 25 degrees Celsius and surge rating of more than 75kA and is suitable for application with power ratings up to 10MW and more. With a turn-off time of as little as 50 microseconds the device is suitable for applications with frequencies up to 1 kilohertz.

The new 2.2kV device is encapsulated in a fully hermetic 26mm thick package with an 85mm electrode diameter and overall diameter of 124mm, smaller than the older designs with 100mm electrode and a total diameter of 144mm. With the silicon die directly bonded to a metallic disc, the new 96mm die device is constructed using a new improved process when compared to prior fast thyristor designs. This structure offers both improved transient thermal conditions and overall greater robustness when compared to designs with free-floating silicon. The thermal capacity of the metal disc and its direct fusion to the silicon enhances performance and presents excellent transient thermal and surge current ratings. The new package design, while retaining an industry standard footprint, allows for the maximum silicon to package ratio and represents up to a 35% increase in current rating over older designs in the larger package outline.

“The high current handling capability offers the opportunity to replace two smaller converters operated in parallel in order to achieve power ratings not previously attainable with lower power ratings of available devices, thereby significantly reducing component count system weight and size, as well as cost,” commented Frank Wakeman, IXYS UK's Marketing and Technical Support Manager.

The full symmetrical blocking device is available in two different switching classes at two standard voltage grades. Part number designations are 1800 volt parts are R5370EA18J with tq 50 microseconds and R5370EA18K with tq 60 microseconds; 2200 volt parts are R5370EA22J with tq 50 microseconds and R5370EA22K with tq 60 microseconds.

Typical applications for these devices include induction power supplies for melting and billet

heating up to multiple megawatts and resonant power supplies and pulse switches for applications including high power magnets and lasers.

For data sheet please go to the IXYS UK website at www.ixysuk.com or please contact us at (email: sales@ixysuk.com) or telephone: +44 (0)1249 444524 for quotation.

About IXYS UK

Located in Chippenham, England, IXYS UK Westcode Ltd is the IXYS leading manufacturing site for very high power thyristors, SCRs and rectifiers ranging up to 7200 Volts and 15,000 Amps. IXYS UK continues to supply high technology components for a wide range of applications such as wind and solar energy, welding, AC and DC motor drives for oil, marine and water treatment facilities, uninterruptible power supplies, motor soft starters, transportation, induction heating, mining equipment and many other industrial applications.

About IXYS Corporation

Since its founding, IXYS Corporation has been developing power semiconductors and mixed signal ICs to improve power conversion efficiency, generate solar and wind power and provide efficient motor control for industrial applications. IXYS, and its subsidiary companies, offer a diversified product base that addresses worldwide needs for power control in the growing cleantech industries, renewable energy markets, telecommunications, medical devices, transportation applications, flexible displays and RF power.

Safe Harbor Statement

Any statements contained in this press release that are not statements of historical fact, including the performance, features and suitability of products for various applications, may be deemed to be forward-looking statements. There are a number of important factors that could cause the results of IXYS to differ materially from those indicated by these forward-looking statements, including, among others, risks detailed from time to time in the Company's SEC reports, including its Form 10-Q for the fiscal quarter ended December 31, 2016. The Company undertakes no obligation to publicly release the results of any revisions to these forward-looking statements.