

## Press Release

### **Contacts:**

Frank Wakeman, IXYS UK Westcode Limited, Chippenham, SN15 1GE, United Kingdom. +44 (0)1249 444524

Ray Segall, IXYS Long Beach 562-296-6584 (US sales enquiries only)

### **IXYS Introduces New 2.8kV, 3115A Fast Thyristor with Improved Power Rating**

Leiden, Netherlands and Chippenham, UK. September 12, 2017 — IXYS Corporation (NASDAQ:IXYS) an international power and IC semiconductor company, today announced the launch of a new distributed gate thyristor with increased power density. This new fast thyristor with turn-off time of as little as 50 microseconds has an average current rating of 3115 amperes. The device is symmetrical blocking with up to 2800 volts and is therefore suitable for both voltage and current-fed applications.

The 83mm diameter silicon dice are bonded using a new improved process to ensure the best steady state and thermal transient performance which replaces older design devices based on floating silicon. The improved mechanical design of the package offers maximum power performance and minimises material to give exceptional reliability in the harsh operating conditions experienced in resonant power supplies for induction heating applications. With an average current rating of 3115 amperes at a heatsink temperature of 55 degrees Celsius, the new device has higher rating than present floating silicon design device it replaces, while retaining the same mechanical footprint. The new fast thyristors have an improved pilot thyristor design. The redesigned distributed gate geometry for the main thyristor gives improved gate trigger characteristics and transfer of current from the pilot device while retaining the requirement for a high rate of change in current capability.

“Provided the correct thermal conditions are observed, with a repetitive rate of change of current of 1000 amperes per microsecond, the device can be used in applications with repetitive frequency up to 5 kilohertz, a condition previously not achievable with a device of this voltage and current rating,” commented Frank Wakeman, IXYS UK’s Marketing & Technical Support Manager.

The dice are encapsulated in a 26mm thick, fully hermetic 75mm electrode contact diameter ceramic packages, with an industry standard overall diameter of 112mm.

The fully symmetrical blocking device is available in two different switching classes at two standard voltage grades, part number designations are: 2.4KV parts are R3115TJ24J with turn-off time 50 microseconds, and R3115TJ24K with turn-off time 60 microseconds; 2.8KV parts are R3115TJ28J with turn-off time 50 microseconds, and R3115TJ28K with turn-off time 60 microseconds.

Typical applications for this device include: induction power supplies for melting, billet heating and surface treatments, as well as 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](http://www.ixysuk.com) or please contact us at (email: [sales@ixysuk.com](mailto: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 June 30, 2017. The Company undertakes no obligation to publicly release the results of any revisions to these forward-looking statements.