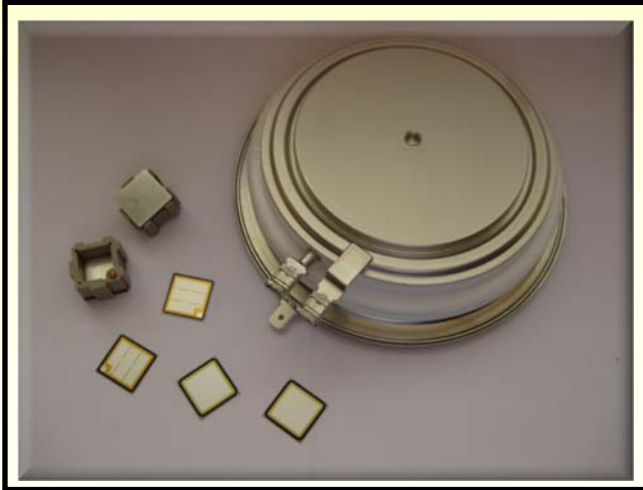


## ***IXYS UK Westcode introduces a new 1.7kV press-pack IGBT***



IXYS UK Westcode Ltd. announces the launch of its first 1.7kV press-pack IGBT. The new device is reverse conducting, with a fully rated diode integrated in the package and represents the first in a planned range of 1.7kV devices. The new device has a DC current rating of 960A and repetitive peak collector current of 1920A, with a continuous DC rating of 900V .

The 1.7kV device is based on IXYS latest die technology and is constructed using 8 parallel connected IGBT die and 4 parallel connected Diode die. Each die is 12.6mm square with an active area of approximately 1cm<sup>2</sup>. The new device is encapsulated in fully hermetic 26mm thick, 63mm electrode contact diameter ceramic packages, with an industry standard overall diameter of 100mm. The robust internal construction is bond free with the individual die directly pressure contacted through metallic pressure plates to the external copper electrodes. The direct bond free contact ensures highest reliability and unrivalled thermal cycling properties, far exceeding those of a conventionally packaged plastic package module. Package design is based on IXYS UK's well established and proven technology, with the same advantages of enhanced rupture capability, resisting more than ten times the short circuit energy of a conventional plastic packaged module device and the additional advantage that the device is virtually guaranteed to fail to a stable short circuit. These unique properties make the new device an ideal solution where high reliability, maximum power density and predictable failure are important. Devices are suited to harsh environments and where maintenance access is difficult such as off-shore marine and wind. The hermetic structure and high rupture resistance are properties which are particularly relevant in harsh environments where explosive failure and plasma leak are unacceptable, such as mining, gas and oil installations.

This device is the first of a planned range of 1.7kV products with prospective current ratings from 600A to 2500A. Parts will be available both reverse conducting, as in this first introduction and symmetrical blocking without an integral diode. As the products will use the same mechanical packaging as IXYS UK's established 2.5kV parts, introduction time cycles can be very short; for other rating options please consult factory.

Part number designations for this reverse conduction press-pack IGBT is T0960VC17G.

Typical applications for this device include: Traction including light rail, trams, trolley-bus and other electric vehicles; AC drives for harsh environments such as mining, marine and off shore, gas and oil installations; Renewable energy for wind turbines, hydro generation, wave-generation and solar; Plus any application where high power density and reliability are key considerations.

**For more information, please contact IXYS**

**UK Westcode Ltd**

Author—Mr. Frank Wakeman

E-mail—[f.wakeman@ixysuk.com](mailto:f.wakeman@ixysuk.com)



Langley Park Way

Chippenham, SN15 1GE, United Kingdom

Tel: +44 (0)1249 444524 Fax: +44 (0)1249 659448

E-mail: [sales@ixysuk.net](mailto:sales@ixysuk.net)

**[www.ixysuk.com](http://www.ixysuk.com)**