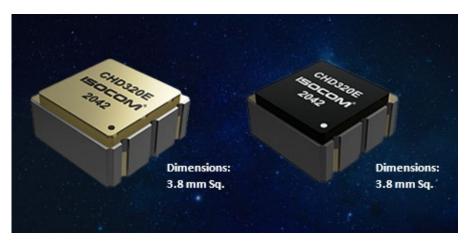
Product Spotlight July 2022



The CHD320 Photovoltaic Optocoupler for Isolated Solid-State Relays has Higher Gate Voltage for Space Satellite Applications



The CHD320's minimum open voltage (V_{OC}) of 10V, double that of standard 5-volt device, means only one CHD320 is required to drive the gate of a high voltage power MOSFET. This reduces the part count, improves reliability, saves PCB space, and reduces material costs.

The photocoupler is housed in a ceramic package with either Metal or Ceramic lid sealing, measuring just $3.85 \times 3.85 \times 1.6$ mm, making it suitable for driving the gates of high voltage power MOSFETs. This can be used to develop a galvanically-isolated solid-state relay function, says Isocom Managing Director and CEO Thomas Bayat.

The CHD320 is ISOCOM's first photovoltaic coupler to feature a minimum isolation voltage (BV_s) of 500V rms.

The method of achieving and configuring an isolated SSR to handle high voltage, large current switching, designers generally combine a photovoltaic coupler with a MOSFET. The CHD320 has the optical elements, but not the MOSFET.

A typical SSR incorporates these components as the output device and are generally suitable for applications that require on/off control of electrical currents in aerospace/space equipment.

Typical applications include the I/O relay output for inrush current protection in PSUs, battery voltage system monitoring, ground fault detection and switching power and signal lines in instrumentation applications.

Manufactured in AS9100D approved facilities, the CHD320 is suitable for use in defence, aerospace and space equipment driven by high voltage DC or AC systems.

For further information please visit the Isocom website <u>www.isocom.uk.com</u> Or email our team for any enquiries at <u>sales@isocom.uk.com</u>