INNOVATION NEWSLETTER

Hybrid Electronics Australia Pty. Ltd.
924 Mountain Highway, Bayswater, Victoria, 3153, Australia.
Ph: 61 3 9729 2177 Fax: 61 3 9729 8014 Mob: 0417 599 982
E-mail: hybrid@hybrid-electronics.com www.hybrid-electronics.com

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Introducing Stainless Steel Hybrids!

Hybrid Electronics now manufacture innovative microelectronic circuits using stainless steel thick film hybrids.

This process involves printing insulators, conductors, resistors and other sensor materials onto stainless steel. Electronic and non-electronic components are then added to the printed stainless steel to produce a complete hybrid circuit which can simply be "bolted on". In addition, stainless steel hybrids can be welded, bent and formed, and have holes added for mounting if required.

Stainless Steel hybrid applications:

The applications for stainless steel thick film hybrids are almost endless, here are just a few:

- Thermostat controls pressure sensors
- Strain sensors
- Fluid pressure measurement
- Temperature sensors
- Power components
- Microprocessors
- Mains voltage
- Hermetic sealing
- Fluid heaters - up to 100 Watts/cm^2

Benefits of Stainless Steel Hybrids

Benefits of Stainless Steel as a substrate:

- High corrosion resistance
- High & low temperature resistance
- Strength-to-weight advantage
- Ease of fabrication
- Durable/Strong/Tough

Stainless steel thick film hybrids offer the following significant advantages:

- Higher reliability compared with a standard Printed Circuit Board (PCB). This is due to the inherent characteristics of the materials technology and the use of fewer solder joints;
- The ability to print resistors under other components results in a smaller size unit compared with a PCB. On a PCB all of the components are placed next to each other;
- The Overall electronics packaging cost is considerably lower. This is because the hybrid can be encapsulated and then clipped or screwed into place rather than requiring a separate mounting box;
- Protection against reverse engineering.

If you would like more information on thick film hybrids please call +61 3 9729 2177 or visit www.hybrid-electronics.com.

Think outside the box & use a Stainless Steel Hybrid!