OXLEY

emc solutions

Electro-magnetic interference filters

Oxley Developments Company Ltd
Priory Park Ulverston Cumbria LA12 9QG United Kingdom
t: +44 (0) 1229 483226 f: +44 (0) 1229 581851 e: sales@oxleygroup.com

Oxley Inc
31 Business Park Drive Branford CT 06405 USA
t: +1 (203) 488 1033 f: +1 (203) 481 6971 e: info@oxleygroup.com

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www.oxleygroup.com

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advanced emi protection

Improving equipment reliability, enhancing platform capability

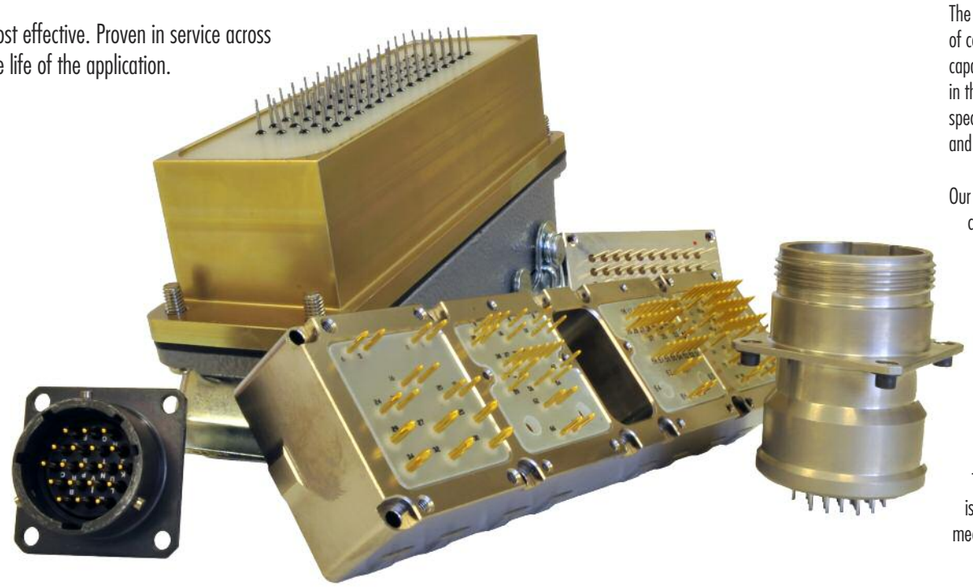
Oxley is a world leader in the design and development of high quality EMC filters for Defence and Aerospace markets. Established since 1942, we are renowned for our industry expertise, in-house capabilities and an ability to produce a superior range of customised and off the shelf solutions which solve our customers problems and satisfies the needs of the end-user.

With a total capability in EMC filters our facilities include design, ceramic production, machine, assembly and test facilities. This enables to manage every customer project in-house from start to finish.

Our high specification products are lightweight, reliable and cost effective. Proven in service across the world Oxley EMC filters and are designed to withstand the life of the application.

single line filters

Oxley single line EMI filters are available in a comprehensive range of styles and circuit configurations. The standard range covers threaded chassis, solder mount as well as pcb and push-fit filters with C, CL, Pi, T, 2Pi and 2T circuit options. Most filtering requirements can be covered from standard products. Where a specific filter requirement is not covered by our standard product range, custom filter solutions are available.



multi-line filters

Oxley offer a variety of custom multi-line filter solutions such as tubular, multi-layer discoidal and capacitive planar arrays. We offer cost effective solutions to meet demanding performance requirements. Each line can be specified individually for a range of performances across the array

filter array assemblies

The use of filter arrays in many applications offers reduced assembly costs; reduced risk of filter damage and removes the possibility of wiring errors during any subsequent assembly operations. Discrete panel assemblies can be made up from any combination of the full range of Oxley filters, into a rectangular, circular or customer specified panel shape.

filtered connector modules

Replacing a standard connector with an EMI filtered version is often the most cost effective and efficient way of integrating filters into high line density requirements. These can often be supplied as direct replacements for the existing circular, rectangular or hermetic connector.

In many cased EMI filters are required to withstand harsh environmental conditions with severe vibration and thermal stresses. Our experience gained through thousands of custom filter solutions and our extensive test facilities allow us to generate and verify the very demanding solutions required

planar capacitors

The multiway planar capacitor array or 'planar' is a single block of ceramic with multiple feedthrough lines. These can be capacitive, unfiltered or grounded and offer increased flexibility in the design of EMI filter solutions. Each line can be individually specified for its capacitance value voltage withstand performance and contact size.

Our planar component range varies from a simple 2 line capacitive array to those in excess of 150 lines. Common platforms include the military circular and D-type formats through to unique customer defined layouts. Capacitance values vary from pico Farads to micro-Farads and dielectric withstand voltages up to 2.5kV(d.c.) and 1.5kV (50Hz)

Our custom, compliant spring contact improves both filter assembly and reliability. Fitted to each line, the spring contact removes the need for multiple solder operations. This advanced assembly technique, by increasing the isolation of the ceramic elements from thermal and mechanical stress, provides a more robust solution.

transient voltage suppression (TVS)

Where there is a need for TVS, for example to meet the requirements of RTCA DO 160 and other specifications, we are able to provide solutions to cover a range of transient and power handling requirements. These elements can be integrated into both single and multi-line filters providing a high density integrated package.

Statistical process control (SPC) techniques are applied throughout the manufacturing process in order to control parameters during production. All multi-line filters undergo 100% electrical testing for capacitance, dissipation, dielectric withstand voltage and insulation resistance before release.

Choosing Oxley EMI suppression components ensures a high quality and cost effective solution.

Innovation • Protection • Customisation • Suppression • Efficiency • Reliability • Performance • Filtered