



MPE
Quality, Reliability, Performance

Company Bulletin

for EMC, EMP & TEMPEST Protection

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Custom mounting solutions make installation that much easier

Having pioneered the design, manufacture and assembly of feedthrough capacitor technology half-a-century ago, MPE continues to offer arguably the World's most comprehensive standard range of DC and AC, high-performance, multi-line, feedthrough capacitor units.

Compact and robust designs have always enabled their quick, simple mounting to equipment systems or installation within military vehicles, to provide a completely reliable and effective solution for EMC.

However, nowadays more and more important considerations are the practicalities of installation and the economics of that process. To accommodate those requirements, standard multi-line feedthroughs from MPE are frequently mounted onto a customised plate or bulkhead to significantly reduce installation time and cost. Cable terminations and enclosures are also readily tailored to meet customers' on-site requirements.

An extensive range of DC variants are available giving typical insertion loss performances of 50dB to 70dB at 1MHz rising to 90dB through to more than 1GHz, with typical capacitance values from 2 μ F to 40 μ F and rated voltage from 400V down to 30V DC. Typical applications for MPE's DC feedthrough capacitors are found in military vehicles, equipment and subsystems, including power management, motors, fans, hvac and NBC / CBRN threat detection and protection technologies.

The many AC ranges available from MPE provide typical insertion loss performances of 25dB to 45dB at 1MHz rising to 90dB through to over 1GHz, with typical capacitance values from 0.1 to 1 μ F and a rated voltage of 250V 50/60Hz or 600V DC. A wide spread of commercial and industrial uses for the AC versions include base stations for telecommunications as well as power supplies and IT servers.

All MPE feedthrough capacitor designs incorporate self-healing, metallised plastic film capacitor material and utilise a solderless capacitor assembly technique to ensure maximum lifespan and maximum reliability. Cases are made of stainless steel, terminals are of nickel-plated brass for excellent conductivity, whilst the potting is flame-retardant epoxy resin rated to specification UL 94V-0 and compliant with RoHS (Restriction of Hazardous Substances) regulations.

For fuller details, you can download from [here](#) the four-page product overview brochure on the MPE range of feedthrough capacitors, or visit the Feedthroughs section of the MPE website www.mpe.co.uk/category/feedthroughs/