CUSTOM-DESIGNED FILM CAPACITORS

Tailoring of capacitors to meet special requirements for geometry and electrical characteristics is often necessary.

Dearborn Electronic Inc. supplies “special” capacitors utilizing a wide variety of dielectrics in many different mechanical configurations.

CUSTOM DESIGN

Various dielectrics used have been paper, paper-polyester, polyester, polysulfone, polystyrene, polypropylene, TFE fluorocarbon, polyvinylidene, fluoride, and others. Capacitors have been produced using discrete foil and metalized electrode systems. Impregnants employed include mineral oil, wax, Vitamin Q® silicone oil and various so-called solid impregnants.

Capacitor housings include drawn and fabricated metal shells in standard, rectangular, and special shapes, glass and ceramic tubes, cast epoxy housings, molded housings, plastic-film tubes, plastic-film wraps, and epoxy and resin coatings. Where required, special mounting studs and brackets have been furnished.

Capacitance tolerances to meet specific applications needs are available within the limits of the capacitor construction. Units with matched capacitor sections, multiple sections of different dielectrics, pulse forming networks, capacitor networks, capacitor standards, or other application specific capacitors, are available to meet your circuit needs.

Special paper and film-type capacitors have been provided with capacitance ratings from 0.0001 µF to 2000 µF and with voltage ratings from 30 VDC to 30,000 VDC. Capacitors have been supplied to operate over the temperature range of -65°C to +250°C.

The rigid quality control exercised by Dearborn Electronics Inc. on all its standard production is also applied to custom-fabricated capacitors. Where necessary, special testing is done to verify requirements, such as low dielectric absorption, ultra-high insulation resistance, low dissipation factor, stability under temperature cycling or under specified environmental conditions, etc.

If you have the need for special capacitor designs utilizing paper or film dielectrics, Dearborn will be glad to make recommendations on how best to meet your application needs.