API Technologies’ Spectrum Control brand designs and manufactures a wide range of planar capacitor arrays. Using over 25 years of expertise in multilayer ceramic capacitor manufacturing, planar capacitors offer many advantages over stand-alone chip, discoidal or tubular capacitors: low profile, compact, quick assembly time. Various custom and industry standard geometries are available and our designs can incorporate multiple capacitance values, feed-through holes and ground holes. With a combination of versatility and functionality, API’s planar capacitors are quickly becoming the new standard in filtered connectors used in EMI suppression applications.

Features
- Unparalleled electrical performance and reliability
- Fast prototyping and short lead times
- 100% electrical and dimensional testing of critical parameters
- Custom packaging to suit end user needs
- Custom and standard designs available

Electrical Specifications
- Operating Temperature: -55°C - 125°C
- Capacitance: Up to 1 µF
- Capacitance Tolerance: ±10%, ±20%, +100%
- Capacitance Rating: Up to 1500 VDC
- Dielectric Withstanding Voltage: Up to 3000 VDC
- Dissipation Factor: < 3.5%
- Insulation Resistance: 1000 MΩ, µF or 10 KΩ

The electrical properties listed above are typical, and can be exceeded based on customer requirements and mechanical configuration. Since many variables affect the design, it is best to contact us directly for a detailed assessment of your planar capacitor needs.

Mechanical Specifications
- Dielectrics: EIA Codes: NP0 (COG), X7R, Z5U
- Termination: Fired-on: silver, solderable silver plating: gold, silver or copper over nickel barrier
- Surface: Lapped, termination bandwidth and insulative coating options
- Geometry: Military circulars, D-Sub, ARINC, Micro-D, custom configurations
- Thickness: Up to .150”

Typical Design Layouts