Advanced Technology Filters
Hermetic High Temperature Solder-Ins

**GENERAL DESCRIPTION**
These are high frequency filters in space saving solder-in designs which will operate under harsh environments and meet the high reliability requirements of MIL-F-28861 without outgassing. AVX Filters Corporation has designed a filter which sets a new standard for the industry. These feed-thru filters are constructed with hi-rel semiconductor materials and rugged MLC discoidal capacitors. They are also manufactured at high temperatures (>500°C) without fluxes, epoxies or other polymers, thus eliminating failure mechanisms associated with conventional solder-ins. These solder-ins withstand short temperature excursions as high as 400°C, and can actually be operated at temperatures to 200°C. Available either as discrete packages in standard case sizes or as multiple filter brackets, all have hermetic glass-to-metal seals on both ends.

**FEATURES**
- Standard sizes
- Epoxy free construction
- Hermetic on both ends
- MIL-C-123 Discoidal Capacitor
- 400°C installation

**STYLE**
- Discrete, hermetically sealed solder-in filters
  AVX Filters Series *
  WQ: .400" Case Diameter
  XQ: .250" Case Diameter
  YQ: .165" Case Diameter
  ZQ: .128" Case Diameter
*Equivalent to MIL-F-28861
Series FS70, FS71, FS72, FS73 and FS74
- Custom design available
- Multiple filter arrays
  - Custom bracket housing employing discrete hermetic filters
  - Custom rugged bracket housings with inter-rated hermetic filtered feed-thrus

**SPECIFICATIONS**
- Operating temperature range: -55°C to 200°C
- 400°C rated installation temperature
- Voltage range: 50 to 300 VDC/up to 200 VAC
- Capacitance Range: 10 pF to 1.4 mF
- Hermeticity: 1 x 10^-7 ATM cm^2/sec minimum
- Rated current: up to 25 amps
- Circuits: C
- Designed to meet or exceed requirements of MIL-F-28861

**CHARACTERISTICS**
- Rugged monolithic ceramic capacitor construction
- Capacitor attached with solderless, fluxless, high temperature metallurgical bond
- Hermetic glass-to-metal seals on both ends
- No epoxies, resins or polymers to outgas or degrade in harsh environments