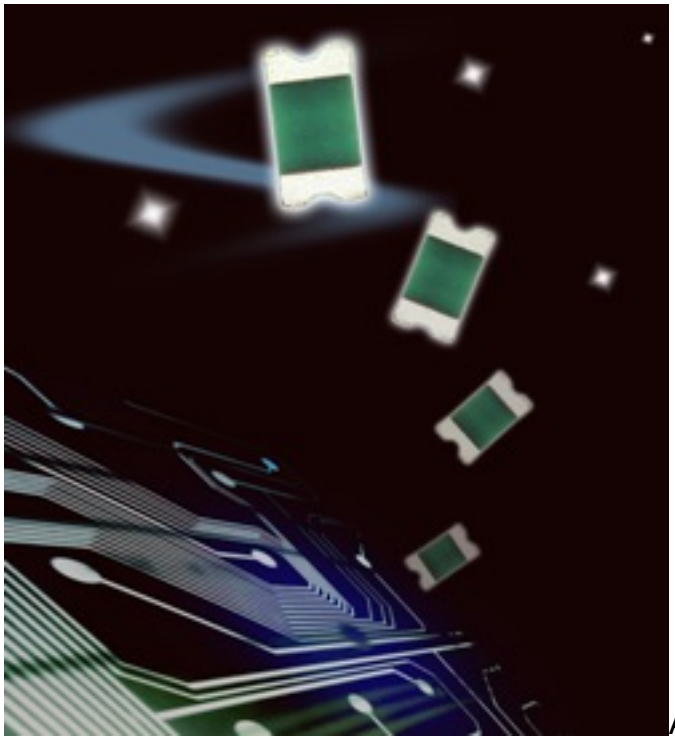
High Quality, Low ESR Multilayer Organic RF Capacitor



AVX Corporation has developed an 0603 case size surface mount capacitor capable of supporting frequencies from 700 MHz to well above 5 GHz. Designated the MLOC Series, the advanced organic RF capacitors maintain high Q and high self resonance while providing low ESR values at high frequencies. The capacitors, based on AVX's patented multilayer low loss organic (MLO) technology, are polymer-based organic capacitors that use high-conductivity copper interconnects in a multilayer fashion.

The ability to fabricate these components on large area substrates with sophisticated laser direct imaging allows for improved cost benefits and tolerance control. The end result is a low profile, low ESR and high-performance RF capacitor. In addition, the MLOC Series is expansion matched to printed circuit boards to allow for improved reliability.

"AVX's new line of organic capacitors represent a paradigm departure from traditional passive SMD components," said Larry Eisenberger, product manager at AVX. "The multilayer low loss organic RF capacitor's state-of-the-art design ultimately increases performance characteristics while decreasing costs."

The RoHS-compliant RF capacitors are 50 VDC to 250 VDC rated with capacitance values ranging from 0.1 pF to 2.5 pF with capacitance tolerance to +/- 0.02 pF. Available in 0603 case size with a 100% tin finish, the MLOC Series features stable NPO characteristics with an operating temperature range of -55°C to +125°C.

The MLOC Series surface mount capacitors are ideal for usage in RF power and low

noise amplifiers, filter networks, and MRI systems.

Typical pricing for the multilayer low loss organic RF capacitor is in the $0.04 to $0.30 range with a lead time of 8 weeks.

For more information, contact AVX on the Web at www.avx.com [1].

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Links:
[1] http://www.avx.com