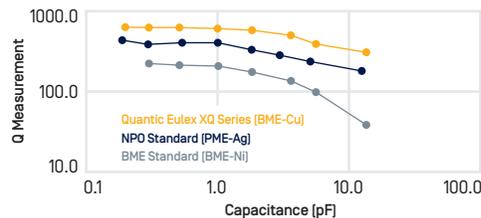


Ultra-High Q MLCC

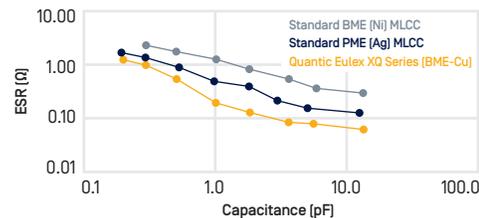
Ultra-Low ESR, RF and Microwave Capacitor



XQ Series 0402, Q Level Comparison @ 1 GHz



XQ Series 0402, ESR Level Comparison @ 1 GHz



Dielectric Properties & Electrical Summary

	NP0 (Class I)	X8G (Class I)
Size	01005, 0201, 0402, 0505, 0603, 0805, 1111	0603, 0805
Capacitance ₁	0.1pF to 1000pF	0.2pF to 82pF
Capacitance Tolerance	Cap ≤ 5pF: A(±0.05pF), B(±0.1pF), C(±0.25pF) 5pF < Cap < 10pF: B(±0.1pF), C(±0.25pF), D(±0.5pF) Cap ≥ 10pF: F(±1%), G(±2%), J(±5%)	
Rated Voltages (WVDC)	6.3V, 10V, 25V, 50V, 100V, 200V, 250V, 500V, 1500V	250V, 500V
Q ₂	01005, 0201, 0402/25V to 50V: Cap < 30pF: Q ≥ 400 + 20 C; Cap ≥ 30pF: Q ≥ 1000 0402/100 V ~ 200V, 0603, 0805, 0505, 1111: Cap < 30pF: Q ≥ 800 + 20 C; Cap ≥ 30pF: Q ≥ 1400	
Insulation Resistance	≥ 10GΩ @ 25°C or ≥ 100GΩ @ 125°C	
Operating Temperature	-55°C to +125°C	-55°C to +150°C
Capacitance Charge (TC)	±30ppm/°C	
Dissipation Factor (DF)	0.10% Max	0.15% Max



Features

- Ultra-High Q
- Ultra-Low ESR/ESL
- Ultra-Stable dielectric characteristic (±30ppm/°C)
- Pb-free terminations and copper electrodes
- Capacitance (0.1 to 1000pF)
- Available in narrow tolerances
- Size 01005 to 1111
- Voltage up to 1500V
- Operating temperature to 150°C (X8G)

Applications

Power Station
Base Station
UHF/Microwave
Timing Circuits
Mixers
5G Networks



Download the Ultra-High Q MLCC Data Sheet and Selection Guide.

Quantic™ Eulex

Quantic Eulex develops innovative ceramic components for the most demanding high frequency microwave, millimeter-wave, and 5G applications. Quantic Eulex solutions deliver design advantages through small-footprint, low profiling packaging, and a wide voltage range— fully tested up to 67 GHz with a roadmap planned from 6.5 to 100 GHz. The reliability of Quantic Eulex capacitors is well established at temperatures ranging from -55°C to +125°C. Monterey Park, CA | 323.266.6603 | info@quanticulex.com | quanticulex.com