



RF/Microwave Capacitors



Product Offerings

- Thin Film Surface Mount
 - ◇ Accu-P Capacitors
- Thick Film Surface Mount
 - ◇ SQ Series
 - ◇ U Dielectric
 - ◇ HQ Series
- Single Layer
 - ◇ GH Series
 - ◇ GZ Series



Product Offerings

■ Thin Film Surface Mount Capacitors

◇ Accu-P

- 0201, 0402, 0603, 0805, 1210
- Up to 100 VDC
- Tightest Tolerance available in market
 - $\pm .01$ pF
- Extremely Repeatable from Lot to Lot
- RF/Microwave Applications
 - 10 MHz to 10 GHz





0402 Accu-P® Engineering Kits

Type 1300 Ref: Accu-P0402KIT01	600pcs 30 values 20each	0.1pF to 22pF Tolerances: $\pm 0.05\text{pF}$, $\pm 0.1\text{pF}$, $\pm 2\%$
Type 1400 Ref: Accu-P0402KIT02	600pcs 30 values 20each	1.0pF to 4.7pF Tolerances: $\pm 0.05\text{pF}$, $\pm 0.1\text{pF}$
Type 2100 Ref: Accu-P0402KIT03	300pcs 15 values 20each	0.05pF to 0.75pF Ultra Tight Tolerance: $\pm 0.02\text{pF}$

SPECIAL KITS AVAILABLE UPON REQUEST



Typical Applications

- Cellular telephones
- Base Stations
- RF PA Modules
- Filters, VCO's, PA's, Matching Networks, RF Modules
- Satellite communications
- Wireless LAN



Product Offerings

■ Thick Film Surface Mount Capacitors

◇ SQ Series

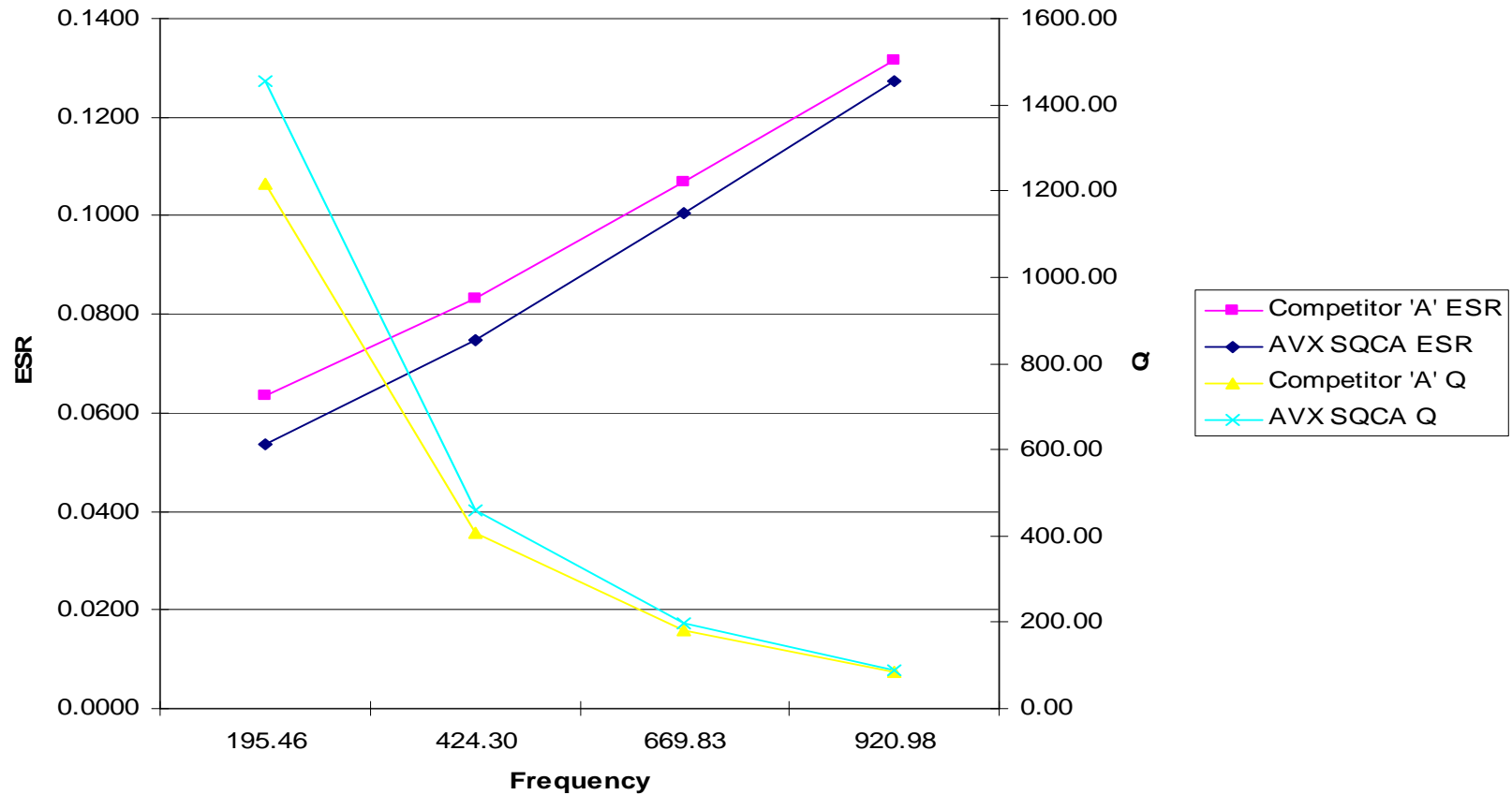
- (.110 x .110), (.055 x .055), & (.060 x .030) sizes
- Up to 500 WVDC
- Hi-Q, Low ESR
- Porcelain Dielectric
- RF/Microwave Applications
 - 10 MHz to 10 GHz





SQ RF Capacitors

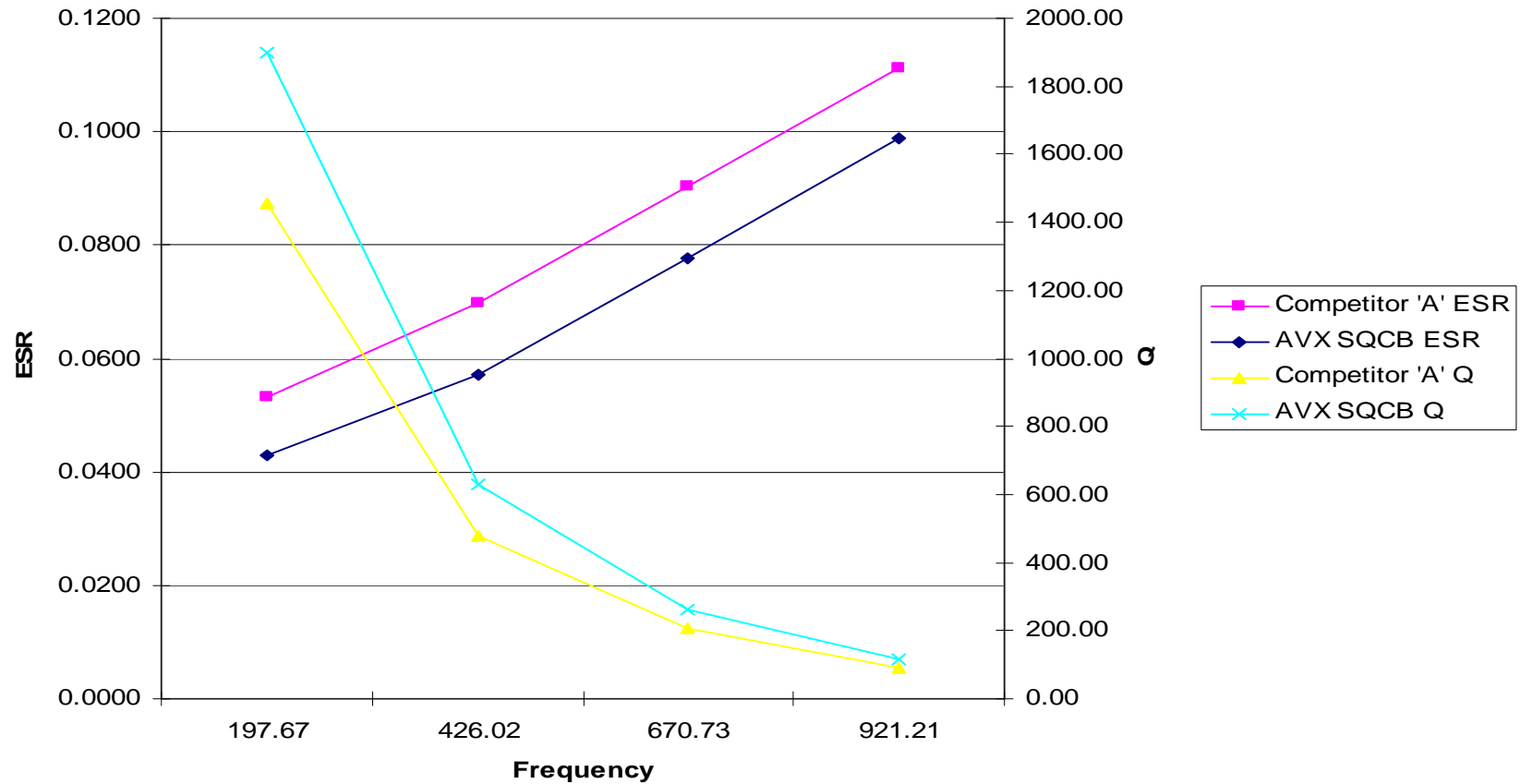
SQCA 10pf





SQ RF Capacitors

SQCB 10pf





SQ RF Capacitors

- Typical Applications
 - ◇ Mixers
 - ◇ Low Noise Amplifiers
 - ◇ Filter Networks
 - ◇ RF Power Amplifiers
 - ◇ Timing Circuits
 - ◇ Delay Lines
 - ◇ MRI Coils



Product Offerings

- Thick Film Surface Mount Capacitors
 - ◇ HQ Series
 - C (.220 x .250) and E (.370x .390) case size
 - Up to 4000 WVDC
 - Hi-Q, Low ESR and High RF Power handling
 - Surface mount and ribbon leaded version
 - RF/Microwave Applications
 - 1 MHz to 500 MHz

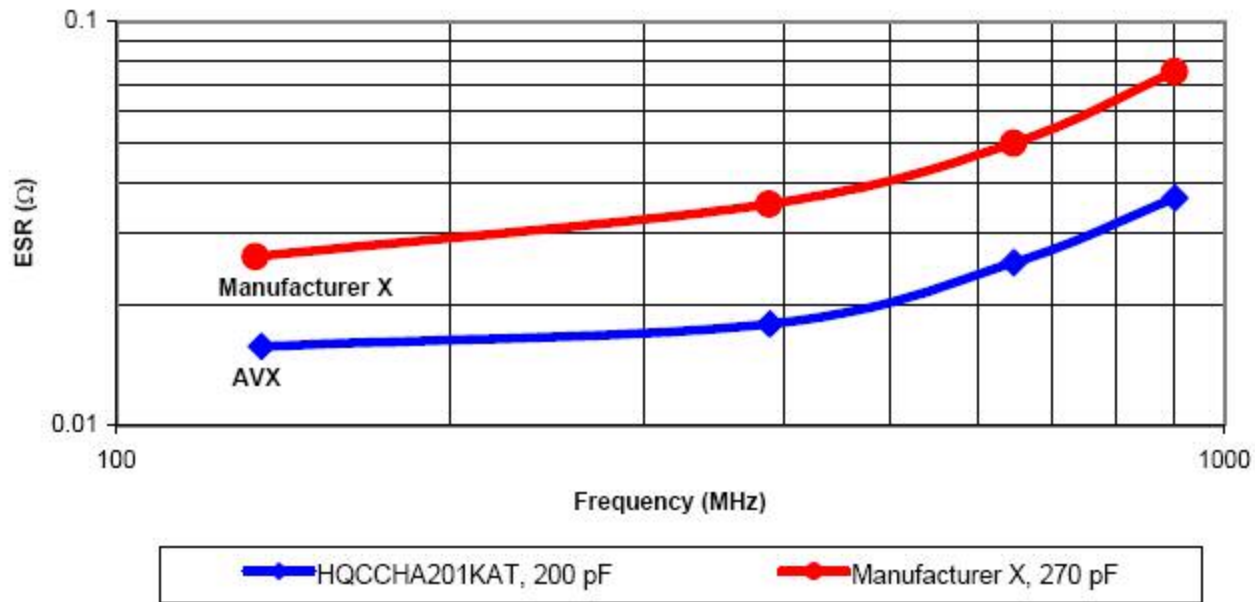




HQ RF Capacitors

■ ESR vs Competition

ESR Comparison for 200 pF, 3000VDC, HQCC-size parts
AVX P/N: HQCCHA201KAT
measured on Boonton 34A, Resonant, Coaxial Transmission Line

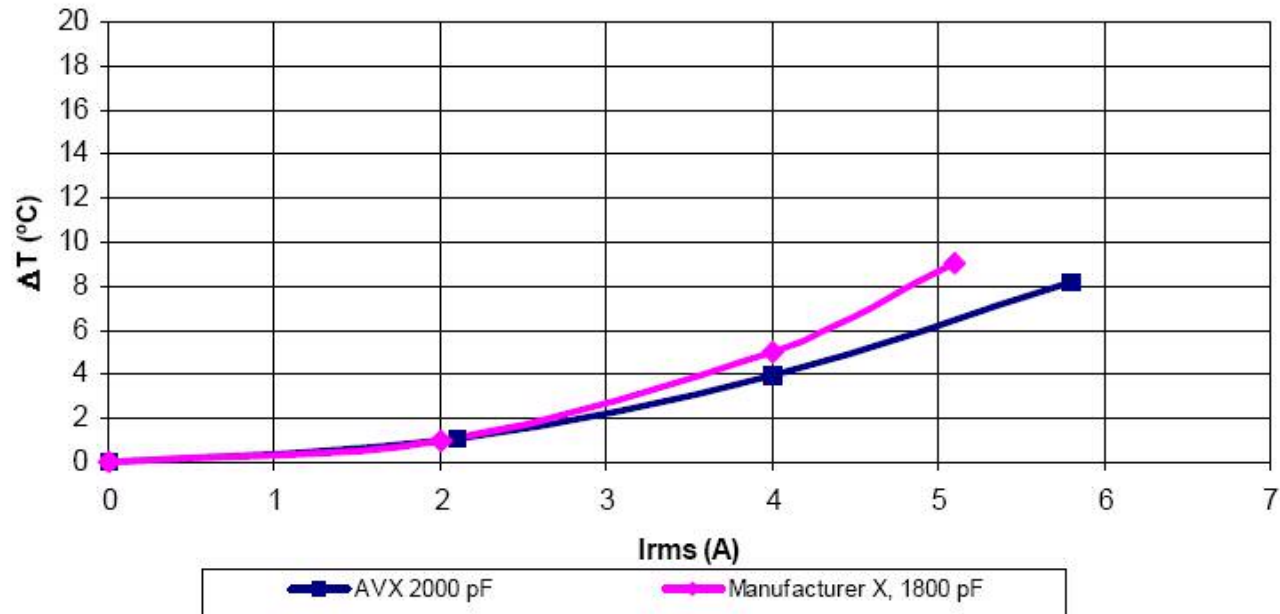




HQ RF Capacitors

■ Power Handling vs. Competition

RF POWER TESTING @ 13.56 MHz
Case size HQCC

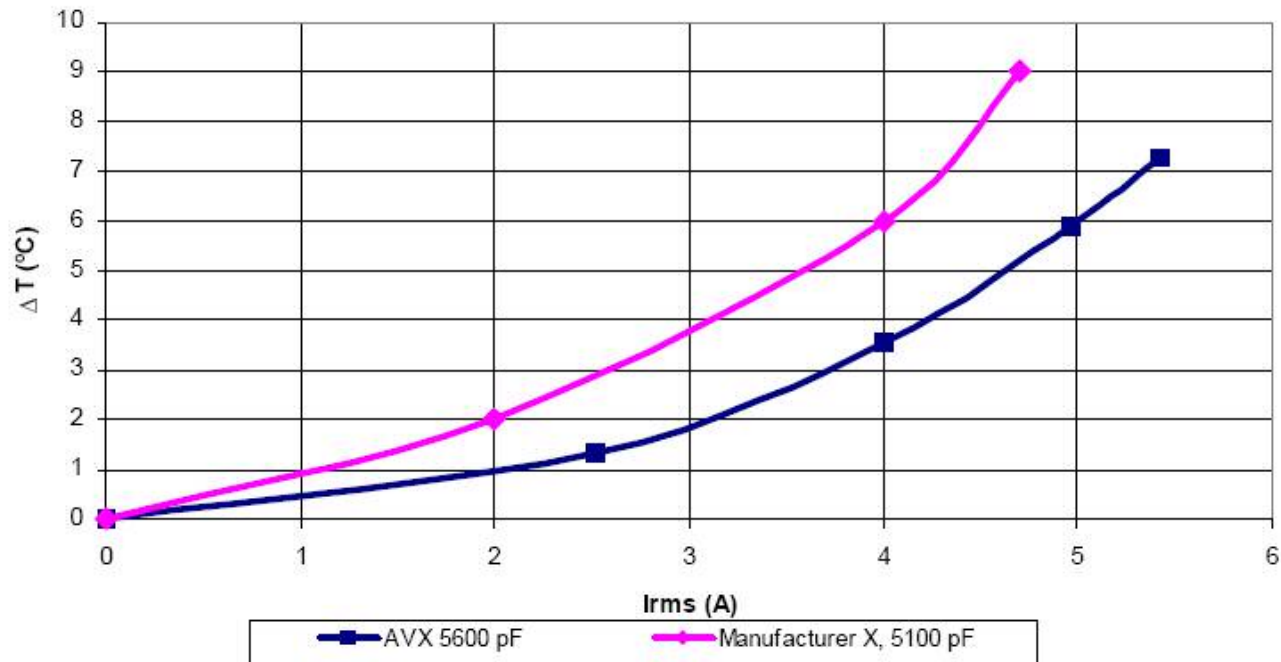




HQ RF Capacitors

■ Power Handling vs. Competition

RF POWER TESTING @ 13.56 MHz
Case size HQCE





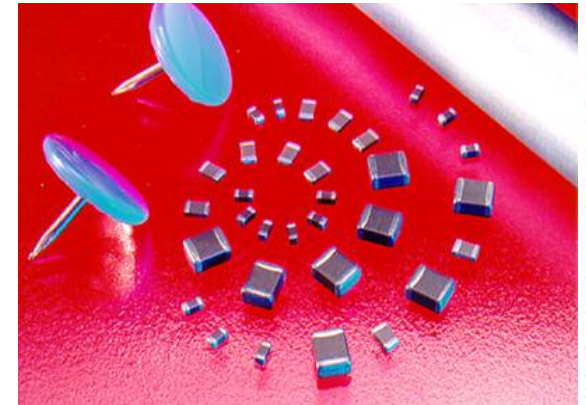
HQ RF Capacitors

- **Typical Applications**
 - ◇ Specialty High Power medical equipment such as MRI's
 - ◇ High power Industrial amplifiers
 - ◇ Military electronics
 - ◇ Industrial Test Equipment
 - ◇ Antenna Tuning and impedance matching
 - ◇ Inductive heating devices



Product Offerings

- Thick Film Surface Mount Capacitors
 - ◇ U Dielectric
 - 0402, 0603, 0805 and 1210
 - Up to 200 WVDC
 - Low ESR
 - NPO
 - RF/Microwave Applications
 - 1 MHz to 4 GHz



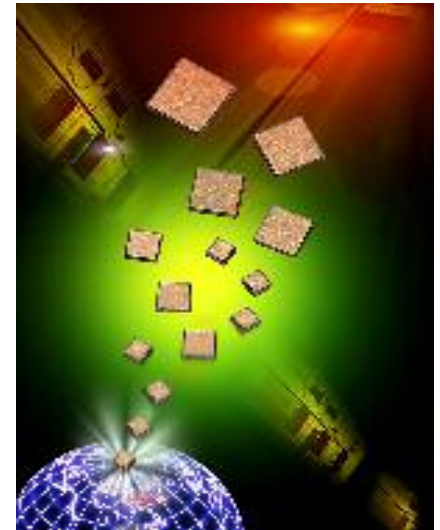


Product Offerings

■ Single Layer Capacitors

◇ GH Series

- Available in K's from 20 to 40,000
- Sizes from .010" square to .100" square
- Single and Double sided borders
- Titanium-Gold, standard termination
- Capacitor Arrays
- Custom etched patterns
- RF/Microwave Applications
 - 2 GHz to 100 GHz



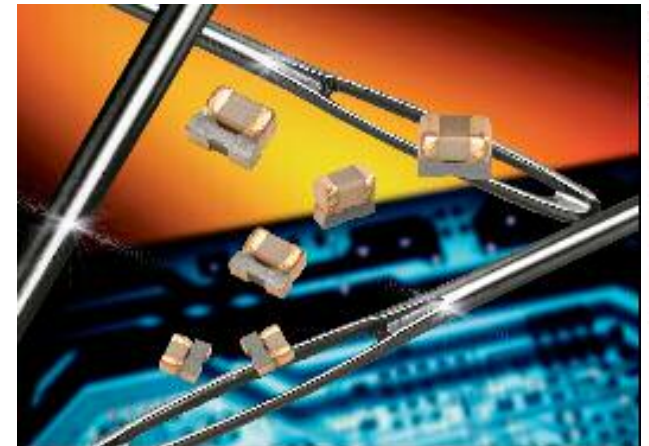


Product Offerings

■ Single Layer Capacitors

◇ GZ Series

- Available in (.040 x .015), 0402 and 0603 sizes
- Resonance free from 12 KHz to 40 GHz
- Surface mount configuration





AVX RF Capacitor Selection Matrix

	Cost	ESR	Advantage
HQ	\$\$\$\$	Ultra Low	Very high current and power handling
SQ	\$\$\$	Ultra Low	High CV with fantastic RF performance
Accu-P	\$\$	Ultra Low	Reliability and repeatability, extremely tight tolerance, and wide range of sizes
'U' Dielectric	\$	Low	Very cost effective for cost sensitive designs