



The DNA of tech.®

VJ HIFREQ Surface-Mount Multilayer Ceramic Chip Capacitors

# Ultra Low ESR MLCCs for High Frequency Applications

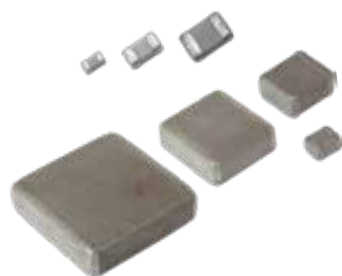


## ADVANTAGE

Vishay capacitors handle more power compared to competitor devices of the same design, in addition to having lower ESR

## KEY PRODUCT FEATURES

- ✓ Package sizes: 0402, 0505, 0603, 0805, 1111, 2525, and 3838
- ✓ Ideal for all types of high frequency applications, including RF and microwave instruments, base and small cell stations, medical instrumentation, and military devices



## MARKET AND APPLICATIONS



### CONNECTIVITY

- Base stations
- Small cell stations
- Broadband communication
- Wireless devices
- Filter circuits



### MEDICAL

- Coils and generators
- Capital equipment (MRI, CT)
- Instrumentation
- Handheld (RF ablation)



### AMS

- Communication systems (radio)
- Radar systems
- Matching networks
- DC blocking

## RESOURCES



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[Infographics](#)



[S-Parameters](#)



[Design Tools](#)

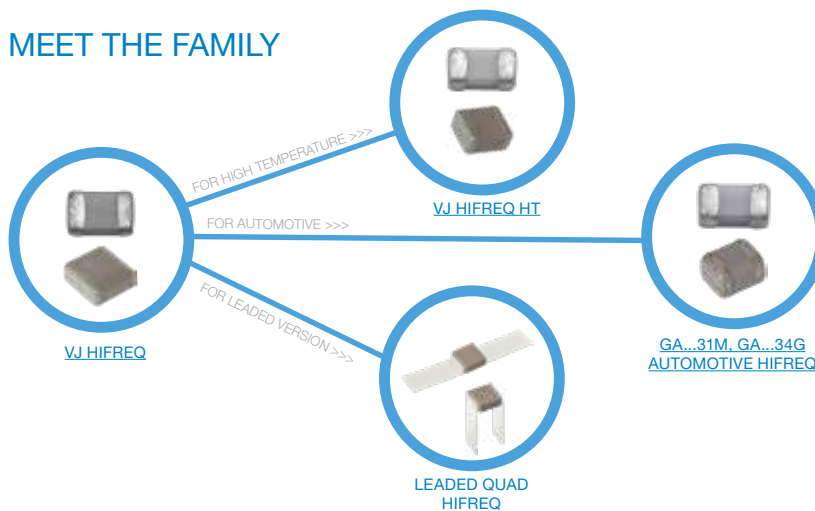


[Modelithics](#)



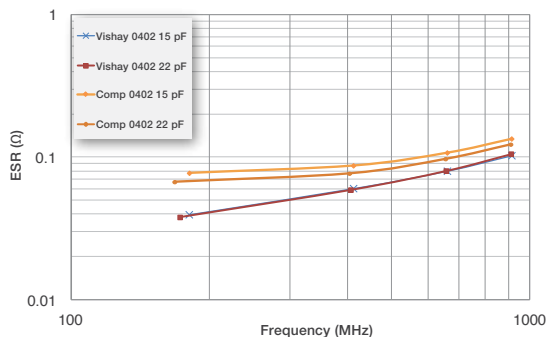
# VJ HIFREQ MULTILAYER CERAMIC CHIP CAPACITORS

## MEET THE FAMILY

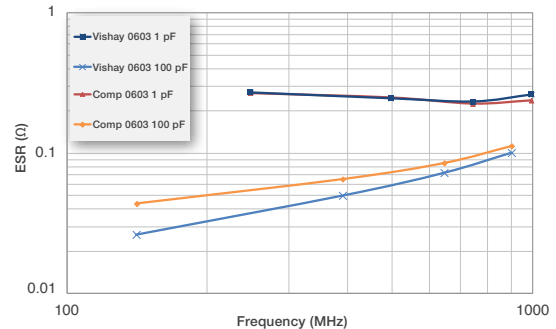


	0402	0603	0805	0505	1111	2525	3838
Standard	✓	✓	✓	✓	✓	✓	✓
Hi-Temp	✓	✓	✓	✓	✓		
Leaded					✓	✓	✓
Automotive Grade	✓	✓	✓	✓	✓		

ESR vs. Frequency of  
Vishay and Competing 0402 MLCC

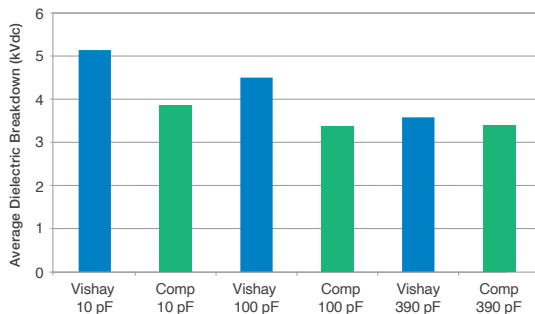


ESR vs. Frequency of  
Vishay and Competing 0603 MLCC

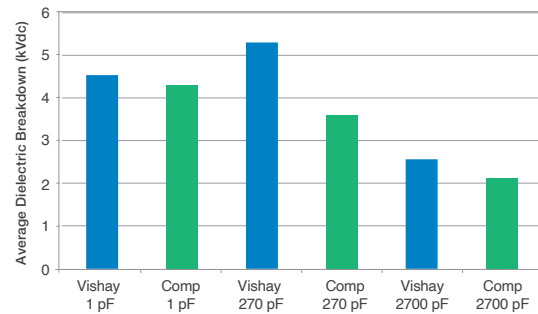


These charts show an ESR comparison of Vishay capacitors in both 0402 and 0603 body sizes against similar competitive parts over a set frequency range. The Vishay MLCC's have a significantly lower ESR value in this specific frequency range.

Vishay 1111 Quad MLCC DWV Level  
Is Higher Than the Competition

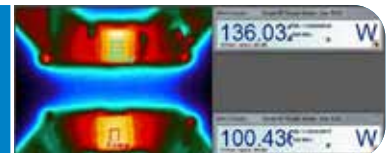


Vishay 2525 Quad MLCC DWV Level  
Is Higher Than the Competition



The charts above show the average dielectric breakdown voltage comparison of Vishay capacitors in comparison to competing parts in the 1111 and 2525 case sizes with different capacitance values. Vishay parts exceed the comparison parts performance on average.

Thermal imaging shows Vishay MLCC surface temperatures are equivalent or cooler than the competition while continuous power is applied. [Send us a sample request!](#)



[www.vishay.com](http://www.vishay.com)