

C-SERIES HIGH FREQUENCY CHIP CAPACITORS

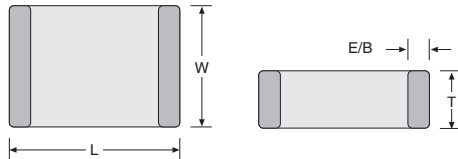


KEY FEATURES

- High-Q / Low ESR
- Self Resonant Frequencies to 23.0 GHz
- Lead-Free Terminations
- Free MLCSoft® for SPICE & S-Parameter Modeling Data

APPLICATIONS

- Cellular Products
- Cable Components
- RF Transceivers
- Wireless LAN
- RF Integrated Circuits
- Custom Applications



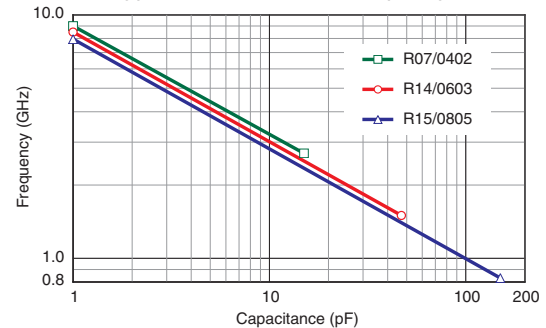
Dielectric RF Performance

S Series	BEST
C Series	BETTER
L Series	GOOD
NPO	?

DIELECTRIC CHARACTERISTICS

TEMPERATURE COEFFICIENT:	0 ± 30ppm /°C, -55 to 125°C	
QUALITY FACTOR:	2,500 min.,10,000 typical	
INSULATION RESISTANCE:	>1,000 G @ 25°C,WVDC; 125°C IR is 10% of 25°C rating.	
DIELECTRIC STRENGTH:	2.5 X WVDC Min., 25°C, 50 mA max	
TEST PARAMETERS:	1MHz ±50kHz, 1.0±0.2 VRMS, 25°C	
AVAILABLE CAPACITANCE:	Size 0402:	0.2 - 15 pF
	Size 0603:	0.2 - 47 pF
	Size 0805:	0.2 - 150 pF
	Size 1210:	0.5 - 1000 pF

Typical Series Resonant Frequency



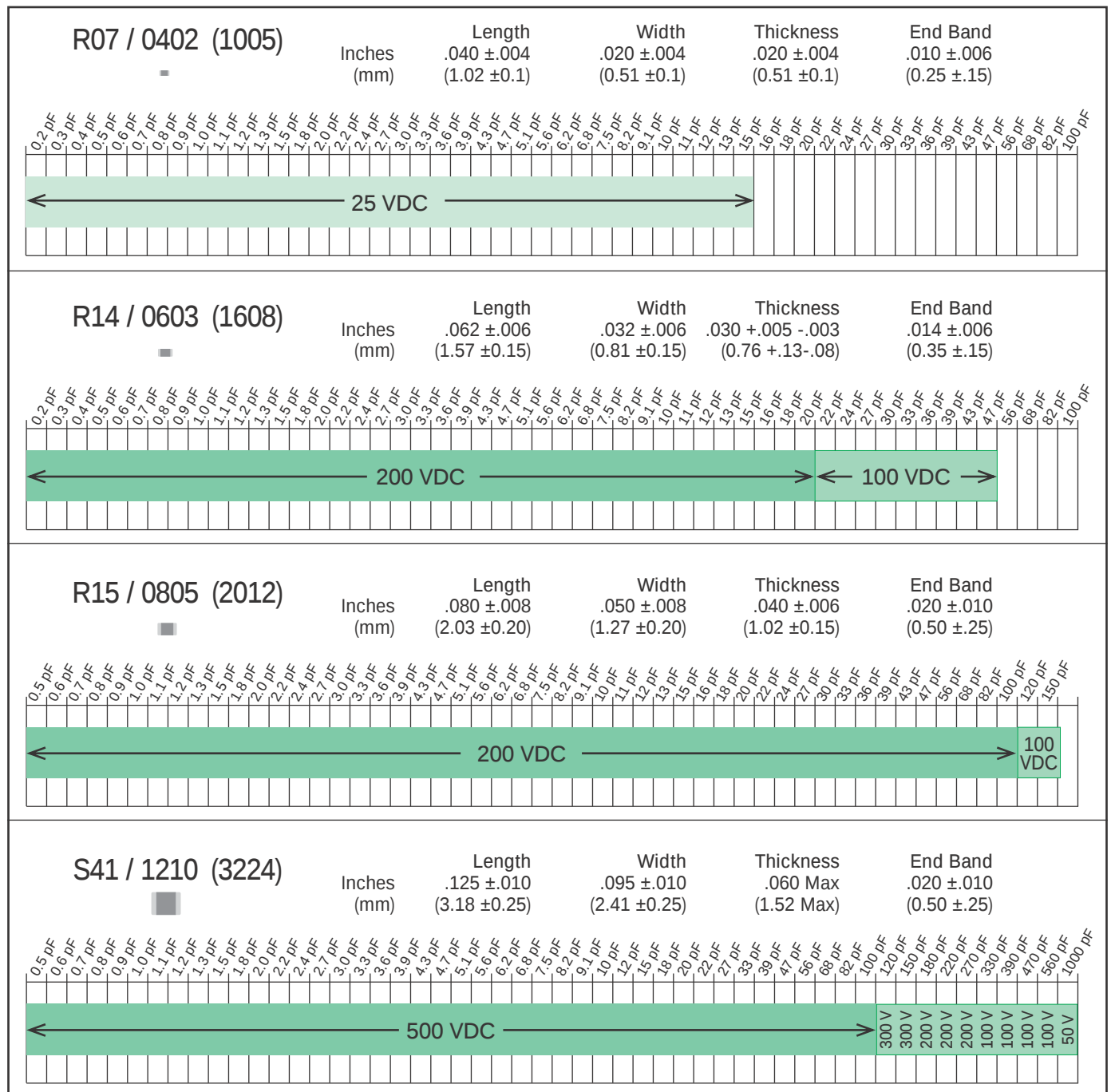
HOW TO ORDER

The diagram illustrates the meaning of each digit in the part number 201R15C101JV4E:

- 201**: VOLTAGE
250 = 25 V
500 = 50 V
101 = 100 V
201 = 200 V
301 = 300 V
501 = 500 V
- R15**: CASE SIZE
See Chart
- C**: DIELECTRIC
C = High-Q NPO
- 101**: CAPACITANCE
1st two digits are significant; third digit denotes number of zeros, R = decimal.
1R0 = 1.0 pF
101 = 100 pF
- J**: TOLERANCE
 ** A = ± 0.05 pF
 * B = ± 0.10 pF
 * C = ± 0.25 pF
 F = $\pm 1\%$
 G = $\pm 2\%$
 J = $\pm 5\%$
 K = $\pm 10\%$
 * Values < 10 pF
 ** Values ≤ 2.0 pF
- V**: TERMINATION
V = Ni/Sn
- 4**: MARKING
4 = Unmarked
6 = EIA "J" Code*
*For sizes 0805
- E**: TAPE MODIFIER
 Code Type Reel
 SIZES 0402 & 0603:
 T Paper 7"
 Y Paper 5"
 SIZE 0805 & 1210:
 E Embossed 7"
 Z Embossed 5"
 Tape specifications conform to EIA RS481

Part number written: 201R15C101JV4E

AVAILABLE CAPACITANCE SELECTION



This selection chart represents basic C/V capability in this series. Please contact the factory for capacitance, voltage, case size combinations not shown.

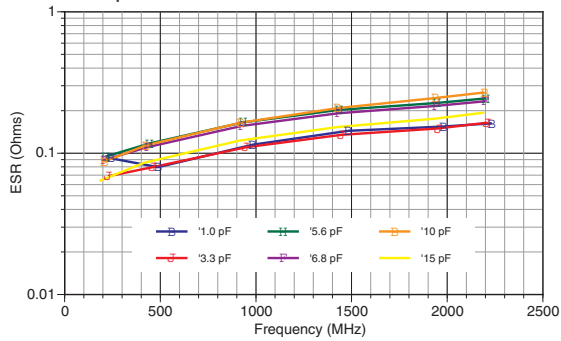
MECHANICAL & ENVIRONMENTAL CHARACTERISTICS

JTI C-Series Ceramic Capacitors conform to the environmental characteristics of the S-Series listed on page 7 of the JTI catalog.

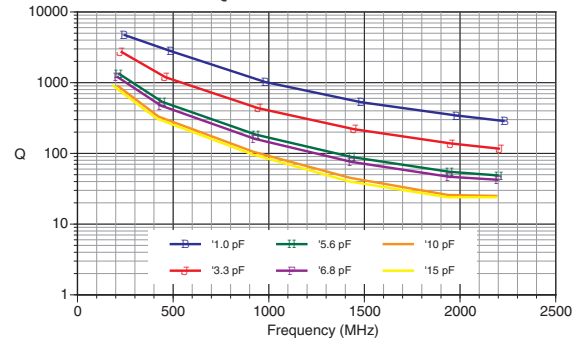


RF CHARACTERISTICS VERSUS FREQUENCY

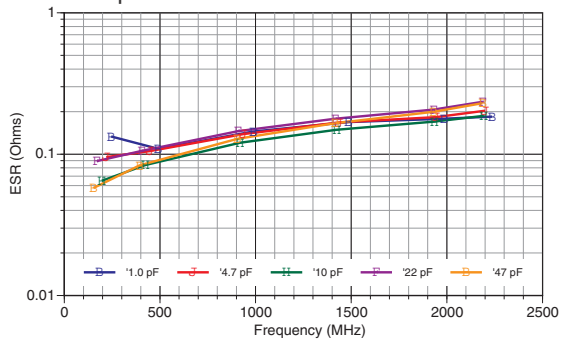
Equivalent Series Resistance: 0402/R07C



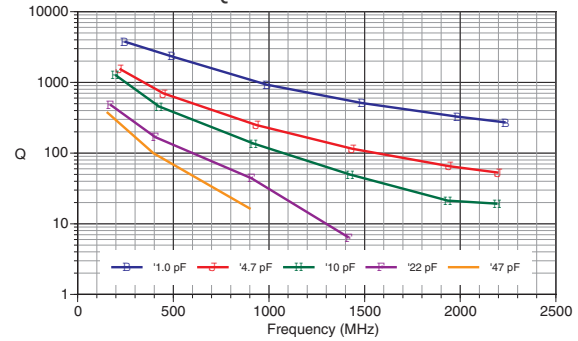
Q Factor: 0402/R07C



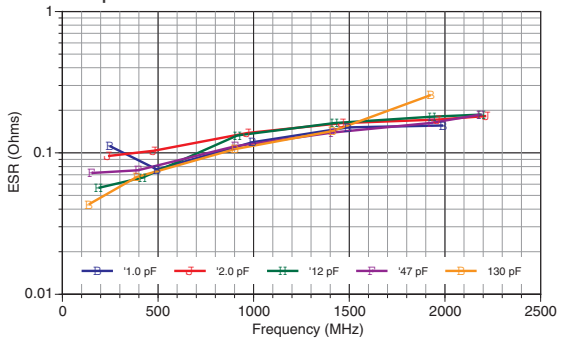
Equivalent Series Resistance: 0603/R14C



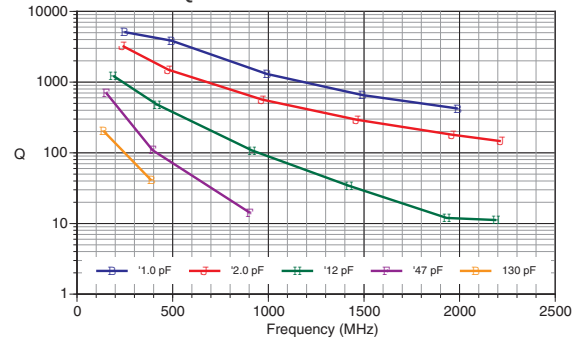
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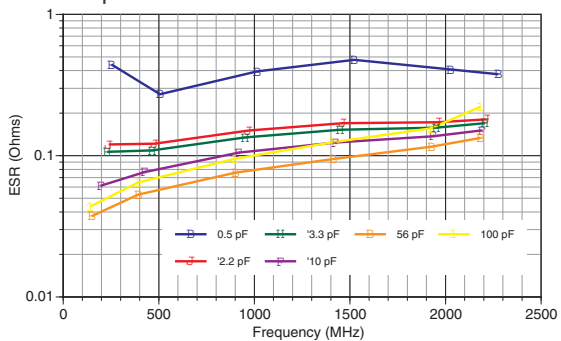
Equivalent Series Resistance: 0805/R15C



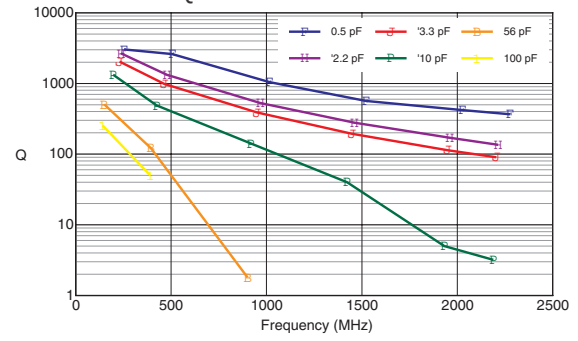
Q Factor: 0805/R15C



Equivalent Series Resistance: 1210/S41C

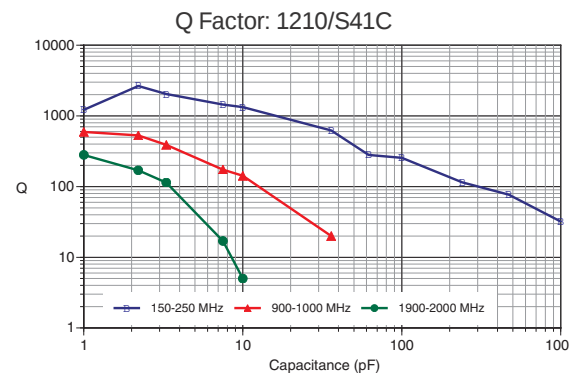
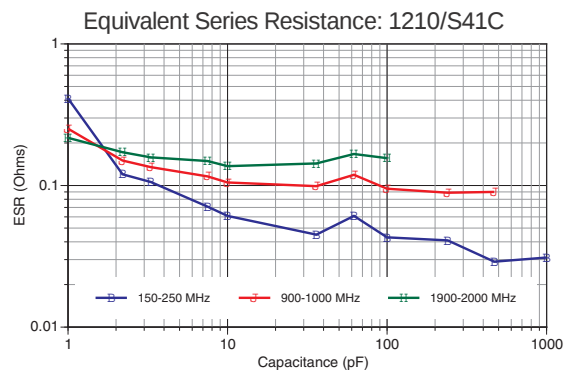
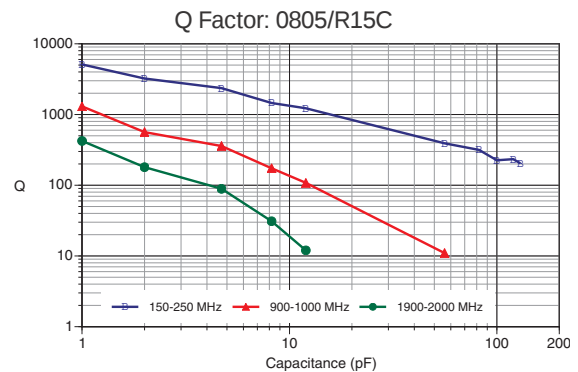
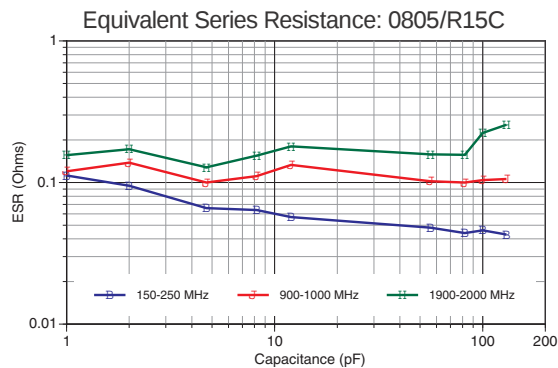
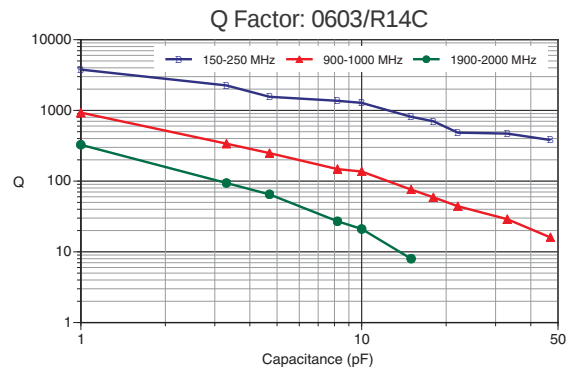
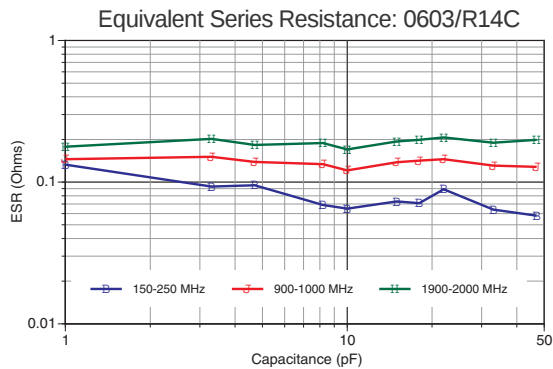
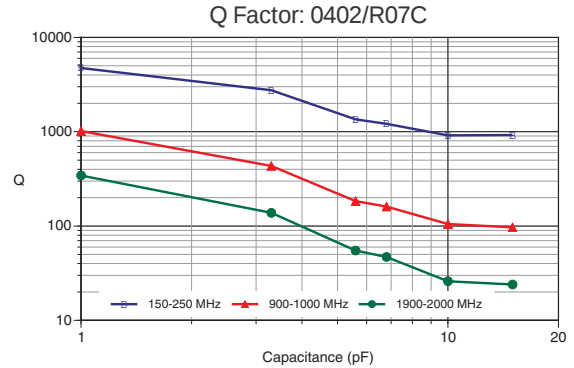
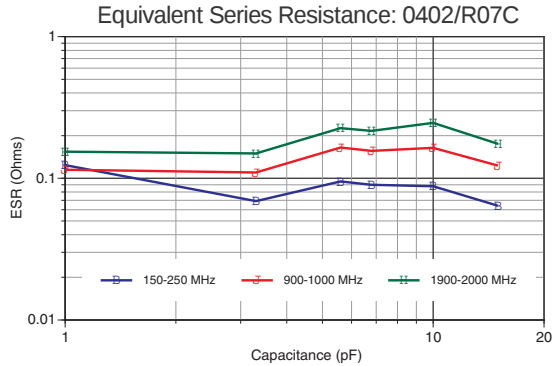


Q Factor: 1210/S41C



Measurements performed on a Boonton 34A Resonant Coaxial Line and represent typical capacitor performance.

RF CHARACTERISTICS VERSUS CAPACITANCE



Measurements performed on a Boonton 34A Resonant Coaxial Line and represent typical capacitor performance.

