

LOW INDUCTANCE CHIP CAPACITORS



These MLC capacitors are specially designed to lower inductance by altering the aspect ratio of the termination in conjunction with improved conductivity of the electrodes. This inherent low ESL and ESR design improves the capacitor circuit performance by lowering the current change noise pulse and voltage drop. The system will benefit by lower power consumption, increased efficiency, and higher operating speeds.

FEATURES

- Low ESL
- Low ESR
- High Resonant Frequency
- Small Size

APPLICATIONS

- High Speed Microprocessors
- AC Noise Reduction in multi-chip modules (MCM)
- High speed digital equipment

CAPACITANCE SELECTION

			150 pF	180 pF	220 pF	330 pF	470 pF	1000 pF	1200 pF	2200 pF	3300 pF	4700 pF	.010 μ F	.012 μ F	.022 μ F	.033 μ F	.047 μ F	.10 μ F	.12 μ F	.22 μ F	.33 μ F	.47 μ F	1.00 μ F
B15 / 0508 Inches (mm) L .050 $\pm$.010 (1.27 $\pm$.25) W .080 $\pm$.010 (2.03 $\pm$.25) T .050 Max. (1.27) E/B .010 $\pm$.005 (0.25 $\pm$.13)	50 V	DIELECTRIC NPO X7R Z5U																					
	25 V																						
	16 V																						
B18 / 0612 Inches (mm) L .062 $\pm$.010 (1.57 $\pm$.25) W .125 $\pm$.010 (3.17 $\pm$.25) T .060 Max. (1.52) E/B .010 $\pm$.005 (0.25 $\pm$.13)	50 V																						
	25 V																						
	16 V																						

Dielectric specifications are listed on page 28 & 29.

HOW TO ORDER LOW INDUCTANCE

500

VOLTAGE
160 = 16 V
250 = 25 V
500 = 50 V

B18

CASE SIZE
B15 = 0508
B18 = 0612

W

DIELECTRIC
N = NPO
W = X7R
Z = Z5U

473

CAPACITANCE
1st two digits are significant; third digit denotes number of zeros.
474 = 0.47 μ F
105 = 1.00 μ F

K

TOLERANCE
J = $\pm$ 5%
K = $\pm$ 10%
M = $\pm$ 20%
Z = +80% -20%

V

TERMINATION
V = Nickel Barrier

MARKING
4 = Unmarked

4

TAPE MODIFIER

Code	Type	Reel
E	Plastic	7"
U	Plastic	13"
T	Paper	7"
R	Paper	13"

Tape specs. per EIA RS481

E

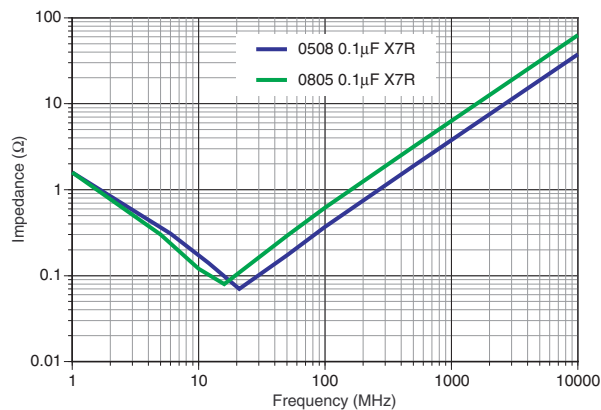
P/N written: 500B18W473KV4E

P/N written: 500B18W473KV4E

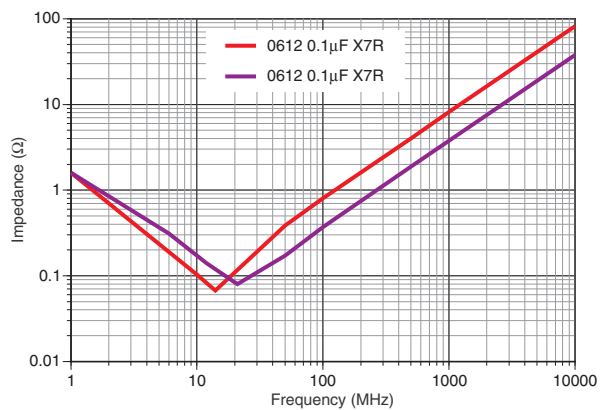
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TYPICAL PERFORMANCE

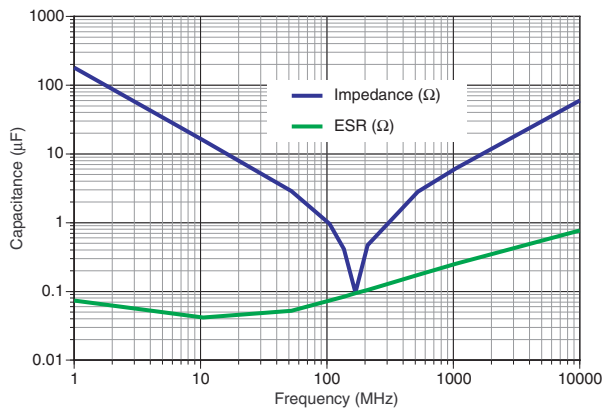
IMPEDANCE 0508 vs. 0805



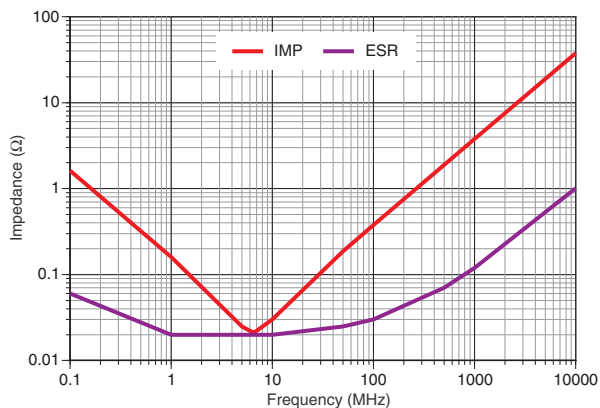
IMPEDANCE 0612 vs. 1206



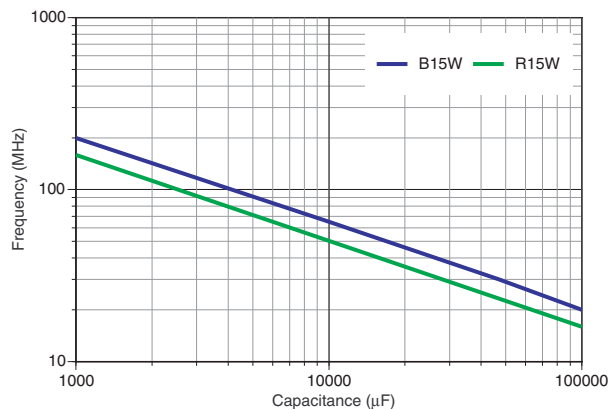
IMPEDANCE AND ESR 0612 0.1μF X7R



IMPEDANCE AND ESR 0612 0.1μF X7R



SERIES RESONANT FREQUENCY 0508 vs. 0805



0508 X7R SERIES RESONANT FREQUENCY

