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.

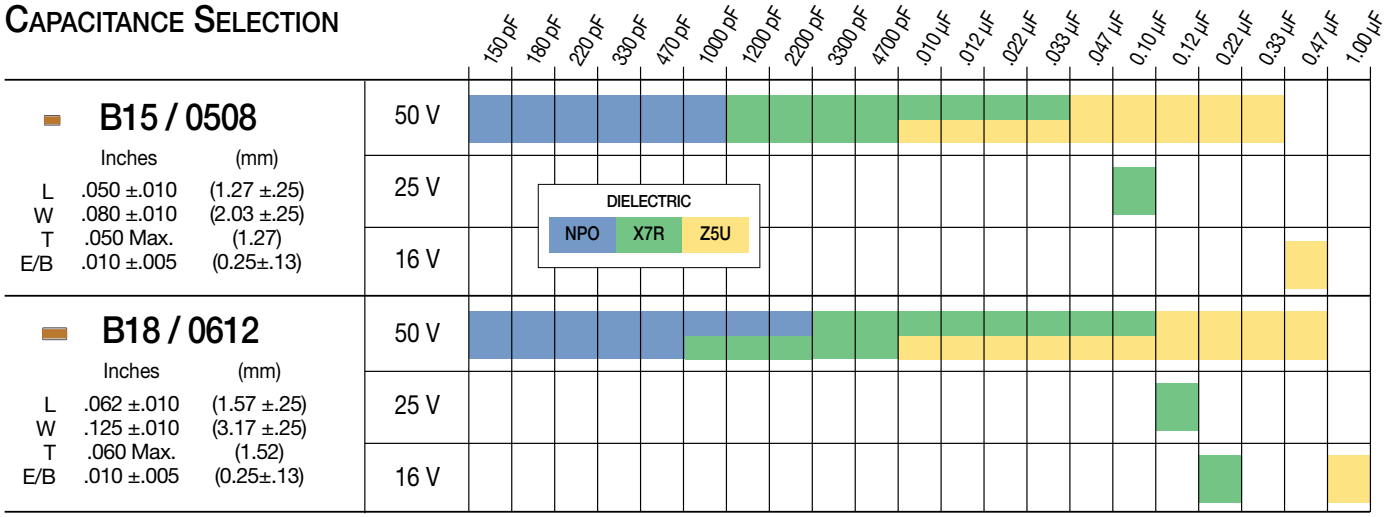
Features

- 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



Dielectric specifications are listed on page 28 & 29.

How to Order Low Inductance

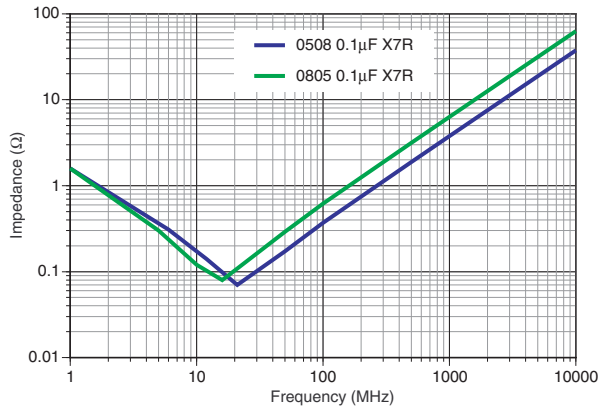
500	B18	W	473	K	V	4	E
VOLTAGE 160 = 16 V 250 = 25 V 500 = 50 V	**CASE SIZE** B15 = 0508 B18 = 0612	**DIELECTRIC** N = NPO W = X7R Z = Z5U	**CAPACITANCE** 1st two digits are significant; third digit denotes number of zeros. 474 = 0.47 µF 105 = 1.00 µF	**TOLERANCE** J = ± 5% K = ± 10% M = ± 20% Z = +80% -20%	**TERMINATION** V = Nickel Barrier	**MARKING** 4 = Unmarked	**TAPE MODIFIER** Code Type Reel E Plastic 7" U Plastic 13" T Paper 7" R Paper 13" Tape specs. per EIA RS481

P/N written: 500B18W473KV4E

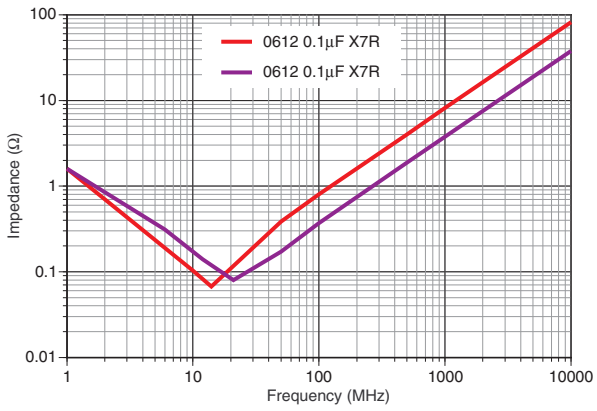
Low Inductance Chip Capacitors

Typical Performance

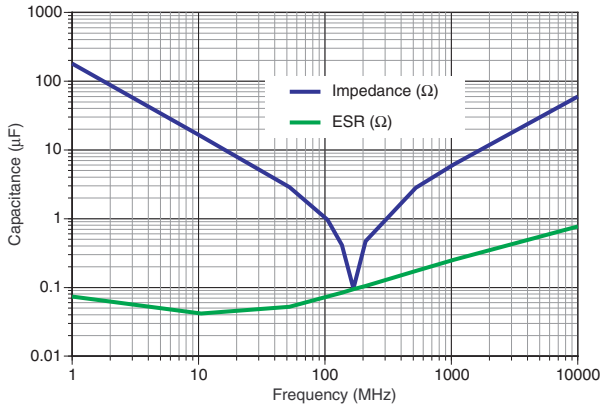
IMPEDANCE 0508 vs. 0805



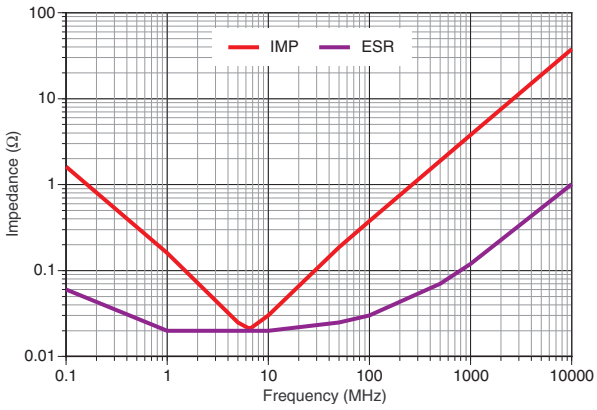
IMPEDANCE 0612 vs. 1206



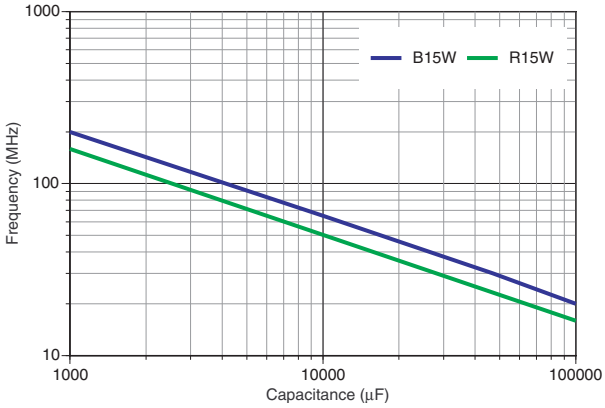
IMPEDANCE AND ESR 0612 0.1µF X7R



IMPEDANCE AND ESR 0612 0.1µF X7R



SERIES RESONANT FREQUENCY 0508 vs. 0805



0508 X7R SERIES RESONANT FREQUENCY