

# RF Ceramic Component Proto-Typing Kits

Johanson Technology's engineering prototype kits provide RF designers with a broad selection of high frequency ceramic components. Each kit contains a selection of components as well as the latest product data on Johanson's full line of "High Frequency Ceramic Solutions". List price is \$100.00 each, but price may be waived for qualified high volume applications. *The selections listed below represents typical kit contents. Johanson reserves the right to make limited value/tolerance substitutions when necessary. Please advise any critical values at time of order.*



## Capacitor and Inductor Design Kits

**0201 L-Series Capacitors & Ceramic Inductors** (Values {pF or nH} & tolerances) **P/N : L/C-201DL**  
 50 PCS. EA. MLCC (pF): 0.3 B, 0.5 B, 0.7 B, 0.9 B, 1.0 B, 1.2 B, 1.5 B, 1.8 B, 2.2 B, 2.7 B, 3.0 B, 3.3 B, 3.6 B, 3.9 B, 4.3 B, 4.7 B, 5.1 C, 5.6 C, 6.8 C, 8.2 C, 9.1 C, 10 J, 12 J, 15 J, 18 J, 22 J, 27 J, 33 J

50 PCS. EA. MLCI (nH): 0.6 C, 0.8 C, 1.0 S, 1.2 S, 1.5 S, 1.8 S, 2.2 S, 2.4 S, 2.7 S, 3.0 S, 3.3 S, 3.7 S, 3.9 S, 4.7 S, 5.1 S, 5.6 S, 6.8 J, 8.2 J, 10 J, 12 J, 13 J, 15 J, 18 J, 20 J, 22 J, 27 J, 33 J, 39 J

**0402 S-Series Capacitors & Ceramic Inductors** (Values {pF or nH} & tolerances) **P/N : L/C-402DS**  
 50 PCS. EA. MLCC (pF): 0.2 B, 0.3 B, 0.5 B, 0.7 B, 0.9 B, 1.0 B, 1.2 B, 1.5 B, 1.8 B, 2.0 B, 2.2 B, 2.4 B, 2.7 B, 3.0 B, 3.6 B, 4.3 B, 4.7 B, 5.6 C, 6.8 C, 7.5 C, 8.2 C, 9.1 C, 10 J, 12 J, 15 J, 22 J, 27 J, 30 J

50 PCS. EA. MLCI (nH): 1.0 S, 1.2 S, 1.5 S, 1.8 S, 2.2 S, 2.4 S, 2.7 S, 3.0 S, 3.3 S, 3.9 S, 4.3 S, 4.7 S, 5.1 S, 5.6 S, 6.8 J, 7.5 J, 8.2 J, 10 J, 12 J, 15 J, 18 J, 22 J, 27 J, 33 J, 39 J, 47 J, 68 J, 100 J

**0603 S-Series Capacitors & Ceramic Inductors** (Values {pF or nH} & tolerances) **P/N : L/C-603DS**  
 50 PCS. EA. MLCC (pF): 0.3 B, 0.5 B, 0.8 B, 1.0 B, 1.2 B, 1.5 B, 1.8 B, 2.2 B, 2.7 B, 3.3 B, 3.6 B, 3.9 B, 4.7 B, 5.6 C, 6.8 C, 8.2 C, 10 J, 12 J, 15 J, 18 J, 20 J, 24 J, 27 J, 33 J, 39 J, 47 J, 68 J, 82 J

50 PCS. EA. MLCI (nH): 1.0 S, 1.5 S, 1.8 S, 2.2 S, 2.7 S, 3.3 S, 3.9 S, 4.7 S, 5.6 S, 6.8 J, 8.2 J, 10 J, 12 J, 15 J, 18 J, 22 J, 27 J, 33 J, 39 J, 47 J, 56 J, 68 J, 82 J, 100 J, 120 J, 150 J, 180 J, 220 J

**0805 S-Series Capacitors & WireWound High Q Chip Inductors** (Values {pF or nH} & tolerances) **P/N : L/C-805DS**  
 50 PCS. EA. MLCC (pF): 4.7 B, 5.6 C, 6.8 C, 7.5 C, 8.2 C, 9.1 C, 10 J, 12 J, 15 J, 18 J, 20 J, 22 J, 24 J, 27 J, 30 J, 33 J, 36 J, 39 J, 43 J, 47 J, 56 J, 68 J, 82 J, 100 J, 120 J, 150 J, 180 J, 220 J

20 PCS. EA. (nH): 2.7 C, 3.9 C, 5.6 C, 6.8 J, 8.2 J, 12 J, 16 J, 20 J, 27 J, 33 J, 39 J, 47 J, 56 J, 68 J, 82 J, 100 J, 120 J, 150 J, 180 J, 220 J, 270 J, 330 J, 390 J, 560 J, 1000 J, 2200 J, 6800 J, 10000 J

## Non-Magnetic Capacitor Designer Kit

**EIA 1111 S42E-Series Capacitors** (Values {pF} & tolerances) Non-Magnetic **P/N: S111DUE**  
 10 PCS. EACH (pF): 1.0 B, 3.9 B, 4.7 B, 6.8 C, 7.5 C, 8.2 C, 9.1 C, 10 J, 12 J, 15 J, 18 J, 20 J, 27 J, 33 J, 47 J, 56 J, 68 J, 82 J, 100 J, 120 J, 150 J, 180 J, 220 J, 270 J, 390 J, 470 J, 560 K, 1000 K

## Tuning Capacitor Kits

**0201 L-Series Capacitors** (Values {pF} & tolerances) **P/N: S201TL**  
 50 PCS. EACH (pF): 0.2 A, 0.3 A, 0.4 A, 0.5 B, 0.6 B, 0.7 B, 0.8 B, 0.9 B, 1.0 B, 1.1 B, 1.2 B, 1.3 B, 1.5 B, 1.8 B, 2.0 B, 2.2 B, 2.4 B, 2.7 B, 3.0 B, 3.3 B, 3.6 B, 3.9 B, 4.3 B, 4.7 B, 5.1 C, 5.6 C, 6.2 C, 6.8 C

**0201 L-Series Ultra High-Q Capacitors** (Values {pF} & tolerances) **P/N: S201DG**  
 50 PCS. EACH (pF): 0.3 B, 0.5 B, 0.7 B, 0.9 B, 1.0 B, 1.2 B, 1.3 B, 1.5 B, 1.6 B, 1.8 B, 2.0 B, 2.2 B, 2.4 B, 2.7 B, 3.0 B, 3.3 B, 3.6 B, 3.9 B, 4.3 B, 4.7 B, 5.1 C, 5.6 C, 6.8 C, 8.2 C, 9.1 C, 10 J, 12 J, 15 J

**0402 S-Series Capacitors** (Values {pF} & tolerances) **P/N: S402TS**  
 50 PCS. EACH (pF): 0.2 A, 0.3 A, 0.4 A, 0.5 B, 0.6 B, 0.7 B, 0.8 B, 0.9 B, 1.0 B, 1.1 B, 1.2 B, 1.3 B, 1.5 B, 1.8 B, 2.0 B, 2.2 B, 2.4 B, 2.7 B, 3.0 B, 3.3 B, 3.6 B, 3.9 B, 4.3 B, 4.7 B, 5.1 C, 5.6 C, 6.2 C, 6.8 C

**0603 S-Series Capacitors** (Values {pF} & tolerances) **P/N: S603TS**  
 50 PCS. EACH (pF): 0.2 B, 0.3 B, 0.4 B, 0.5 B, 0.6 B, 0.7 B, 0.8 B, 0.9 B, 1.0 B, 1.1 B, 1.2 B, 1.3 B, 1.5 B, 1.8 B, 2.0 B, 2.2 B, 2.4 B, 2.7 B, 3.0 B, 3.3 B, 3.6 B, 3.9 B, 4.3 B, 4.7 B, 5.1 C, 5.6 C, 6.2 C, 6.8 C

**0805 S-Series Capacitors** (Values {pF} & tolerances) **P/N: S805TS**  
 50 PCS. EACH (pF): 0.3 B, 0.5 B, 0.7 B, 0.9 B, 1.0 B, 1.1 B, 1.2 B, 1.3 B, 1.5 B, 1.8 B, 2.0 B, 2.2 B, 2.4 B, 2.7 B, 3.0 B, 3.3 B, 3.6 B, 3.9 B, 4.3 B, 4.7 B, 5.1 C, 5.6 C, 6.2 C, 6.8 C, 7.5 C, 8.2 C, 9.1 C, 10 J

**1111 E-Series Capacitors** (Values {pF} & tolerances) **P/N: S111TVE**  
 10 PCS. EACH (pF): 0.5 B, 0.6 B, 0.7 B, 0.8 B, 0.9 B, 1.0 B, 1.1 B, 1.2 B, 1.3 B, 1.5 B, 2.0 B, 2.2 B, 2.4 B, 2.7 B, 3.0 B, 3.3 B, 3.6 B, 3.9 B, 4.3 B, 4.7 B, 5.1 C, 5.6 C, 6.2 C, 6.8 C, 7.5 C, 8.2 C, 9.1 C, 10 J

## Non-Magnetic Capacitor Tuning Kit

**EIA 1111 S42E-Series Capacitors** (Values {pF} & tolerances) Non-Magnetic **P/N: S111TUE**  
 10 PCS. EACH (pF): 0.5 B, 0.6 B, 0.7 B, 0.8 B, 0.9 B, 1.0 B, 1.1 B, 1.2 B, 1.3 B, 1.5 B, 2.0 B, 2.2 B, 2.4 B, 2.7 B, 3.0 B, 3.3 B, 3.6 B, 3.9 B, 4.3 B, 4.7 B, 5.1 C, 5.6 C, 6.2 C, 6.8 C, 7.5 C, 8.2 C, 9.1 C, 10 J

## Single Layer Capacitor Kits

**Broadband Single Layer Capacitors** **P/N: GBBL**  
 10 PCS. EACH: 160U01A271PN4W, 160U01A471MT4W, 160U02A102MT4W, 500U02A471MT4W, 500U03A102MT4W, 160U03A222MN4W, 500U04A152KN4W, 160V02A681MT4W, 160V01A471MT4W, 500V01A101MT4W



## WireWound Inductor Kits

<b>0402 WireWound High Q Chip Inductors (Values {nH} &amp; tolerances)</b>	<b>P/N: L402W</b>
20 PCS. EACH (nH): 1.0 C, 1.8 C, 2.0 C, 2.7 C, 3.3 C, 3.9 C, 4.7 C, 5.6 C, 6.8 J, 7.5 J, 8.2 J, 9.0 J, 10 J, 12 J, 15 J, 18 J, 20 J, 22 J, 24 J, 27 J, 30 J, 33 J, 39 J, 47 J, 56 J, 82 J, 100 J, 120 J	
<b>0603 WireWound High Q Chip Inductors (Values {nH} &amp; tolerances)</b>	<b>P/N: L603W</b>
20 PCS. EACH (nH): 1.6 C, 1.8 C, 2.0 C, 3.9 C, 4.7 C, 5.1 C, 5.6 C, 6.8 J, 7.5 J, 8.2 J, 10 J, 12 J, 15 J, 18 J, 22 J, 27 J, 33 J, 39 J, 47 J, 56 J, 68 J, 72 J, 82 J, 100 J, 150 J, 180 J, 270 J, 330 J	
<b>0805 WireWound High Q Chip Inductors (Values {nH} &amp; tolerances)</b>	<b>P/N: L805W</b>
20 PCS. EACH (nH): 2.7 C, 3.9 C, 5.6 C, 6.8 J, 8.2 J, 12 J, 16 J, 20 J, 27 J, 33 J, 39 J, 47 J, 56 J, 68 J, 82 J, 100 J, 120 J, 150 J, 180 J, 220 J, 270 J, 330 J, 390 J, 560 J, 1000 J, 2200 J, 6800 J, 10000 J	

## (Individual) Capacitor, Inductor Designer Kits

<b>0201 L-Series Capacitors (Values {pF} &amp; tolerances)</b>	<b>P/N: S201DL</b>
50 PCS. EACH (pF): 0.3 B, 0.5 B, 0.7 B, 0.9 B, 1.0 B, 1.2 B, 1.5 B, 1.8 B, 2.2 B, 2.7 B, 3.0 B, 3.3 B, 3.6 B, 3.9 B, 4.3 B, 4.7 B, 5.1 C, 5.6 C, 6.8 C, 8.2 C, 9.1 C, 10 J, 12 J, 15 J, 18 J, 22 J, 27 J, 33 J	
<b>0201 G-Series Ultra High-Q Capacitors with Oriented Electrodes (Values {pF} &amp; tolerances)</b>	<b>P/N: S201DG</b>
Contains 50 PCS. EACH of the following 0201 capacitor sizes (pF): 0.3 B, 0.5 B, 0.7 B, 0.9 B, 1.0 B, 1.2 B, 1.5 B, 1.8 B, 2.2 B, 2.7 B, 3.0 B, 3.3 B, 3.6 B, 3.9 B, 4.3 B, 4.7 B, 5.1 C, 5.6 C, 6.8 C, 8.2 C, 9.1 C, 10 J, 12 J, 15 J	
<b>0201 Inductors (Values {nH} &amp; tolerances)</b>	<b>P/N: L201DC</b>
50 PCS. EACH (nH): 0.6 C, 0.8 C, 1.0 S, 1.2 S, 1.5 S, 1.8 S, 2.2 S, 2.4 S, 2.7 S, 3.0 S, 3.3 S, 3.7 S, 3.9 S, 4.7 S, 5.1 S, 5.6 S, 6.8 J, 8.2 J, 10 J, 12 J, 13 J, 15 J, 18 J, 20 J, 22 J, 27 J, 33 J, 39 J	
<b>0402 S-Series Capacitors (Values {pF} &amp; tolerances)</b>	<b>P/N: S402DS</b>
50 PCS. EACH (pF): 0.2 B, 0.3 B, 0.5 B, 0.7 B, 0.9 B, 1.0 B, 1.2 B, 1.5 B, 1.8 B, 2.0 B, 2.2 B, 2.4 B, 2.7 B, 3.0 B, 3.6 B, 4.3 B, 4.7 B, 5.6 C, 6.8 C, 7.5 C, 8.2 C, 9.1 C, 10 J, 12 J, 15 J, 22 J, 27 J, 30 J	
<b>0402 Inductors (Values {nH} &amp; tolerances)</b>	<b>P/N: L402DC</b>
50 PCS. EACH (nH): 1.0 S, 1.2 S, 1.5 S, 1.8 S, 2.2 S, 2.4 S, 2.7 S, 3.0 S, 3.3 S, 3.9 S, 4.3 S, 4.7 S, 5.1 S, 5.6 S, 6.8 J, 7.5 J, 8.2 J, 10 J, 12 J, 15 J, 18 J, 22 J, 27 J, 33 J, 39 J, 47 J, 68 J, 100 J	
<b>0603 S-Series Capacitors (Values {pF} &amp; tolerances)</b>	<b>P/N: S603DS</b>
50 PCS. EACH (pF): 0.3 B, 0.5 B, 0.8 B, 1.0 B, 1.2 B, 1.5 B, 1.8 B, 2.2 B, 2.7 B, 3.3 B, 3.6 B, 3.9 B, 4.7 B, 5.6 C, 6.8 C, 8.2 C, 10 J, 12 J, 15 J, 18 J, 20 J, 24 J, 27 J, 33 J, 39 J, 47 J, 68 J, 82 J	
<b>0603 Inductors (Values {nH} &amp; tolerances)</b>	<b>P/N: L603DC</b>
50 PCS. EACH (nH): 1.0 S, 1.5 S, 1.8 S, 2.2 S, 2.7 S, 3.3 S, 3.9 S, 4.7 S, 5.6 S, 6.8 J, 8.2 J, 10 J, 12 J, 15 J, 18 J, 22 J, 27 J, 33 J, 39 J, 47 J, 56 J, 68 J, 82 J, 100 J, 120 J, 150 J, 180 J, 220 J	
<b>0805 S-Series Capacitors (Values {pF} &amp; tolerances)</b>	<b>P/N: S805DS</b>
50 PCS. EACH (pF): 4.7 B, 5.6 C, 6.8 C, 7.5 C, 8.2 C, 9.1 C, 10 J, 12 J, 15 J, 18 J, 20 J, 22 J, 24 J, 27 J, 30 J, 33 J, 36 J, 39 J, 43 J, 47 J, 56 J, 68 J, 82 J, 100 k, 120 k, 150 k, 180 k, 220 k	
<b>1111 E-Series Capacitors (Values {pF} &amp; tolerances)</b>	<b>P/N: S111DVE</b>
10 PCS. EACH (pF): 1.0 B, 3.9 B, 4.7 B, 6.8 C, 7.5 C, 8.2 C, 9.1 C, 10 J, 12 J, 15 J, 18 J, 20 J, 27 J, 33 J, 47 J, 56 J, 68 J, 82 J, 100 K, 120 K, 150 K, 180 K, 220 K, 270 K, 390 K, 470 K, 560 K, 1000 K	

## 2.45GHz Designer Kit for WLAN, Bluetooth, Zigbee, ISM and 802.11

<b>0402 S-Series Capacitors, 0402 Inductors &amp; 2.45 GHz RF Components</b>	<b>P/N: 2450L/C402D</b>
6 PCS. EA. BAND PASS FILTERS: 2450BP07A0100, 2450BP14D0100, 2450BP15B100, 2450BP15H0100, 2450BP18C100C, 2450BP39D100C, 2450BP14F0100 6 PCS. EA. CHIP ANTENNA: 2450AT14A100, 2450AT18B100, 2450AT18D0100, 2450AT42E0100, 2450AT42B100, 2450AT43B100, 2450AT45A100 6 PCS. EA. LOW PASS FILTER: 2450LP14B100, 2450LP07C0100      6 PCS. EA. HIGH PASS FILTER: 2450HP14A100 6 PCS. EA. BALUN: 2450BL14C050, 2450BL15B050, 2450BL15B100, 2450BL07A0050 6 PCS. EA. FILTER BALUN: 2450FB15A050, 2450FB15A0100, 2450FB39B100      6 PCS. EA. DIPLEXER: 2450DP14G5400, 2450DP15K5400, 2450DP15Q5400 50 PCS. EA. MLCC (pF): 0.3 B, 0.5 B, 1.0 B, 1.5 B, 1.8 B, 2.2 B, 2.7 B, 3.3 B, 3.9 B, 4.7 B, 5.6 C, 6.8 C, 8.2 C, 10 J 50 PCS. EA. MLCI (nH): 1.0 S, 1.5 S, 1.8 S, 2.2 S, 2.7 S, 3.3 S, 4.7 S, 5.6 S, 6.8 J, 8.2 J, 10 J, 15 J, 18 J, 27 J	
<b>0603 S-Series Capacitors, 0603 Inductors &amp; 2.45 GHz RF Components</b>	<b>P/N: 2450L/C603D</b>
6 PCS. EA. BAND PASS FILTERS: 2450BP07A0100, 2450BP14D0100, 2450BP15B100, 2450BP15H0100, 2450BP18C100C, 2450BP39D100C, 2450BP14F0100 6 PCS. EA. CHIP ANTENNA: 2450AT14A100, 2450AT18B100, 2450AT18D0100, 2450AT42E0100, 2450AT42B100, 2450AT43B100, 2450AT45A100 6 PCS. EA. LOW PASS FILTER: 2450LP14B100, 2450LP07C0100      6 PCS. EA. HIGH PASS FILTER: 2450HP14A100 6 PCS. EA. BALUN: 2450BL14C050, 2450BL15B050, 2450BL15B100, 2450BL07A0050 6 PCS. EA. FILTER BALUN: 2450FB15A050, 2450FB15A0100, 2450FB39B100      6 PCS. EA. DIPLEXER: 2450DP14G5400, 2450DP15K5400, 2450DP15Q5400 50 PCS. EA. MLCC (pF): 0.3 B, 0.5 B, 1.0 B, 1.5 B, 1.8 B, 2.2 B, 2.7 B, 3.3 B, 3.9 B, 4.7 C, 5.6 C, 6.8 C, 8.2 C, 10 J 50 P CS. EA. MLCI (nH): 1.0 S, 1.5 S, 1.8 S, 2.2 S, 2.7 S, 3.3 S, 4.7 S, 5.6 S, 6.8 J, 8.2 J, 10 J, 15 J, 18 J, 27 J	



## 5.5GHz Designer Kit for WLAN, Bluetooth, ISM and 802.11

### 0402 S-Series Capacitors, 0402 Inductors & RF Components

**P/N: 5500L/C402D**

6 PCS. EA. BAND PASS FILTERS: 5515BP15B975, 5550BP14A0800, 5515BP15C1020, 5515BP15B725, 5425BP15A1050, 5515BP15C975, 5400BP14A0950  
 6 PCS. EA. CHIP ANTENNA: 2450AD46A5400, 5400AT18A1000, 5500AT07A0900, 2450AD14A5500      6 PCS. EA. LOW PASS FILTER 5515LP15A730  
 6 PCS. EA. BALUN: 5400BL14B100, 5400BL15B050, 5400BL15B100, 5400BL15K050  
 6 PCS. EA. DIPLEXER: 2450DP15Q5400, 2450DP15K5400, 2450DP15D5400, 2450DP15E5400      6 PCS. EA. HIGH PASS FILTER 5400HP05A0950  
 50 PCS. EA. MLCC (pF): 0.3 B, 0.5 B, 0.8 B, 1.0 B, 1.2 B, 1.5 B, 1.8 B, 2.0 B, 2.2 B, 2.7 B, 3.3 B, 3.9 B, 4.7 B, 5.6 C  
 50 PCS. EA. MLCI (nH): 1.0 S, 1.5 S, 1.8 S, 2.2 S, 2.7 S, 3.3 S, 3.9 S, 4.7 S, 5.6 S, 6.8 J, 8.2 J, 10 J, 12 J, 15 J

### 0603 S-Series Capacitors, 0603 Inductors & RF Components

**P/N: 5500L/C603D**

6 PCS. EA. BAND PASS FILTERS: 5515BP15B975, 5550BP14A0800, 5515BP15C1020, 5515BP15B725, 5425BP15A1050, 5515BP15C975, 5400BP14A0950  
 6 PCS. EA. CHIP ANTENNA: 2450AD46A5400, 5400AT18A1000, 5500AT07A0900, 2450AD14A5500      6 PCS. EA. LOW PASS FILTER 5515LP15A730  
 6 PCS. EA. BALUN: 5400BL14B100, 5400BL15B050, 5400BL15B100, 5400BL15K050  
 6 PCS. EA. DIPLEXER: 2450DP15Q5400, 2450DP15K5400, 2450DP15D5400, 2450DP15E5400      6 PCS. EA. HIGH PASS FILTER 5400HP05A0950  
 50 PCS. EA. MLCC (pF): 0.3 B, 0.5 B, 0.8 B, 1.0 B, 1.2 B, 1.5 B, 1.8 B, 2.0 B, 2.2 B, 2.7 B, 3.3 B, 3.9 B, 4.7 B, 5.6 C  
 50 PCS. EA. MLCI (nH): 1.0 S, 1.5 S, 1.8 S, 2.2 S, 2.7 S, 3.3 S, 3.9 S, 4.7 S, 5.6 S, 6.8 J, 8.2 J, 10 J, 12 J, 15 J

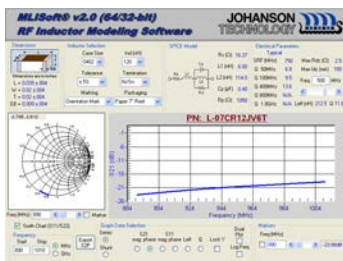
## Internet of Things, ISM Development Kit (IoT)

### 0402 RFCC - Internet of Things ISM Development Kit, S-Series Capacitors, RF Chip Inductors P/N: IOT-L/C402D-1

8 PCS. EA. 430MHz ISM Ant: 0433AT62A0020      8 PCS. EA. 2.4G ANT Hi-Gain: 2450AT45A100  
 8 PCS. EA. TI CC11XX 400MHz: 0433BM15A0001      8 PCS. EA. 2.4G BPF EIA0805: 2450BP15B100  
 8 PCS. EA. 500MHz LPF: 0500LP15A500      8 PCS. EA. 2.4G Balun 1:2: 2450BL15B100  
 8 PCS. EA. TI CC11XX 900MHz: 0896BM15A0001      8 PCS. EA. 2.4G Balun 1:1: 2450BL15B050  
 8 PCS. EA. AT86RF215 900MHz: 0896BM15E0025      8 PCS. EA. nRF51 BAL-BPF: 2450BM14E0003  
 8 PCS. EA. 868/915 Antenna: 0900AT43A0070      8 PCS. EA. CC26XX BAL-BPF: 2450BM14G0011  
 8 PCS. EA. 868/928 HiRejLPF: 0900LP15B0063      8 PCS. EA. CC25/24XX BAL-FL: 2450BM15A0002  
 8 PCS. EA. 868/915 LPF: 0915LP15B026      8 PCS. EA. AT86RF23X SAMR21: 2450BM15A0015  
 8 PCS. EA. CC12xx BAL FIL: 0900PC15J0013      8 PCS. EA. 2.4G BPF EIA0603: 2450BP14F0100  
 8 PCS. EA. 2.4GHz Micro ANT: 2450AT07A0100      8 PCS. EA. 2.4G BPF EIA0805: 2450BP15H0100  
 8 PCS. EA. 2.4GHz Mini Ant: 2450AT18A100      8 PCS. EA. 2.4G LPF EIA0603: 2450LP14B100  
 8 PCS. EA. 2.4GHz ANT Gain: 2450AT18D0100      8 PCS. EA. 2.4G LPF EIA0805: 2450LP15B050  
 8 PCS. EA. 2.4G ANT Corner: 2450AT42B100      8 PCS. EA. AT86RF23X Mega12: 2450FB15L0001  
 50 PCS. EA. MLCC (pF): 0.3 B, 0.5 B, 0.8 B, 1.0 B, 1.2 B, 1.5 B, 1.8 B, 2.2 B, 2.7 B, 3.3 B, 3.9 B, 4.7 B, 5.6 B, 6.8 C  
 50 PCS. EA. MLCI (nH): 1.0 S, 1.5 S, 1.8 S, 2.2 S, 2.7 S, 3.3 S, 3.9 S, 4.7 S, 5.6 S, 6.8 J, 8.2 J, 10 J, 12 J, 15 J

Standard Termination for all kits - 100% Sn. Consult Factory for other termination options

# JTIsoft® 2.0 CAPACITOR & INDUCTOR MODELING SOFTWARE



The screenshot shows the S2P File MLCSoft interface. It includes a 'Capacitance' field set to 10 pF and a 'Frequency Range' section with 'Start' at 500 MHz, 'Stop' at 5000 MHz, 'Steps' at 101, and 'Increment' at 45.0 MHz. Below this is a table of S-parameter data:

f	S11	S12	S21	S22
500	0.31	-71.8	0.95	18.1
545	0.29	-73.1	0.96	16.7
590	0.27	-74.3	0.96	15.6
635	0.25	-75.2	0.97	14.6
680	0.24	-76.1	0.97	13.7
725	0.22	-76.8	0.97	12.9
770	0.21	-77.5	0.98	12.3
815	0.20	-78.1	0.98	11.8
860	0.19	-78.7	0.98	11.1
905	0.18	-79.1	0.98	10.6
950	0.18	-79.6	0.98	10.1
995	0.17	-80.0	0.98	9.7
1040	0.16	-80.3	0.99	9.3
1085	0.16	-80.7	0.99	9.0

JTIsoft® consists of two advanced design simulation software programs which offer component modeling from 1 MHz to 20 GHz. MLCsoft® provides S-Parameter and SPICE modeling data for six different size high frequency multi-layer ceramic capacitors (MLCCs) chip sizes while MLIssoft® provides S-Parameter and SPICE modeling on four different size high frequency multi-layer ceramic inductors (MLCIs). The main interface screen displays electrical parameters such as SRF, PRF1, PRF2, ESR, Q, Ceff, Leff, Rdc, and Ldc which are updated dynamically as chip size, value, and frequency parameters are varied by the user. The complete part number is also dynamically displayed for ordering accuracy.

Both programs also provide highly detailed graphical plots of device performance over a user specified frequency range. The chart displays are instantly updated as the user makes component or frequency changes. Smith chart displays of both impedance and S11/S22 are available as point plots, line plots, and line-point plots. Traditional X-Y graphs are available for parameters of S21 and S11 both phase and magnitude, Impedance magnitude, as well as Q, ESR and effective capacitance. Display formats include standard, log Y, and log/log. Chart may be exported in BMP or Metafile format. Numerical S-Parameter data may be displayed and exported as an .S2P format file.

**JTIsoft® is available for download from our web site.**

