

# 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, 100 J, 120 J, 150 J, 180 J, 220 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: S201DS

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: 500V01A470MT4W, 500U01A800MT4W, 500U01A101MT4W, 160U01A331MT4W, 160U01A471MT4W, 250U02A471MT4W, 250U02A471MT4W-10, 160U02A102MT4W, 500U03A561MT4W-10, 160U03A222MN4W



## Standard Single Layer Capacitors

### Broadband Single Layer Capacitors

P/N: SLC

10 PCS. EACH: 500U10N0R4BT4W, 101V10L1R5MT4W, 500U10B5R1KT4W, 500V15W100KN4W, 101U15T500MT4W, 101U20X390MT4W, 500U20T101KT4W, 500U25N2R0CN4W, 101V25T101MN4W, 101V30Y471MT4W

### WireWound Inductor Kits

#### 0402 WireWound High Q Chip Inductors (Values {nH} & tolerances)

P/N: L402W

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

#### 0603 WireWound High Q Chip Inductors (Values {nH} & tolerances)

P/N: L603W

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

#### 0805 WireWound High Q Chip Inductors (Values {nH} & tolerances)

P/N: L805W

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

#### 0201 L-Series Capacitors (Values {pF} & tolerances)

P/N: S201DL

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

#### 0201 L-Series Ultra High-Q Capacitors Horizontal Electrode Orientation (Values {pF} & tolerances)

P/N: S201DS

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

#### 0201 Inductors (Values {nH} & tolerances)

P/N: L201DC

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

#### 0402 S-Series Capacitors (Values {pF} & tolerances)

P/N: S402DS

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

#### 0402 Inductors (Values {nH} & tolerances)

P/N: L402DC

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

#### 0603 S-Series Capacitors (Values {pF} & tolerances)

P/N: S603DS

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, 3.0 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, 100 J, 120 J, 150 J, 180 J, 220 J

#### 0603 Inductors (Values {nH} & tolerances)

P/N: L603DC

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

#### 0805 S-Series Capacitors (Values {pF} & tolerances)

P/N: S805DS

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 J, 120 J, 150 J, 180 J, 220 J

#### 1111 E-Series Capacitors (Values {pF} & tolerances)

P/N: S111DVE

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

#### 0402 S-Series Capacitors, 0402 Inductors & 2.45 GHz RF Components

P/N: 2450L/C402D

6 PCS. EA. BAND PASS FILTERS: 2450BP07A100, 2450BP15B100

6 PCS. EA. CHIP ANTENNA: 2450AT18A100, 2450AT18B100, 2450AT42A100, 2450AT42B100, 2450AT43A100, 2450AT43B100, 2450AT45A100

6 PCS. EA. LOW PASS FILTER: 2450LP14A100, 2450LP14B100, 2450LP15A050

6 PCS. EA. HIGH PASS FILTER: 2450HP14A100

6 PCS. EA. BALUN: 2450BL14C050, 2450BL14C100, 2450BL15B050, 2450BL15B100, 2450BL15B200

6 PCS. EA. FILTER BALUN: 2450FB15A050, 2450FB39A050      6 PCS. EA. DIPLEXER: 2450DP15A5512, 2450DP15D5400

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

#### 0603 S-Series Capacitors, 0603 Inductors & 2.45 GHz RF Components

P/N: 2450L/C603D

6 PCS. EA. BAND PASS FILTERS: 2450BP07A100, 2450BP15B100

6 PCS. EA. CHIP ANTENNA: 2450AT18A100, 2450AT18B100, 2450AT42A100, 2450AT42B100, 2450AT43A100, 2450AT43B100, 2450AT45A100

6 PCS. EA. LOW PASS FILTER: 2450LP14A100, 2450LP14B100, 2450LP15A050

6 PCS. EA. HIGH PASS FILTER: 2450HP14A100

6 PCS. EA. BALUN: 2450BL14C050, 2450BL14C100, 2450BL15B050, 2450BL15B100, 2450BL15B200

6 PCS. EA. FILTER BALUN: 2450FB15A050, 2450FB39A050      6 PCS. EA. DIPLEXER: 2450DP15A5512, 2450DP15D5400

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 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

