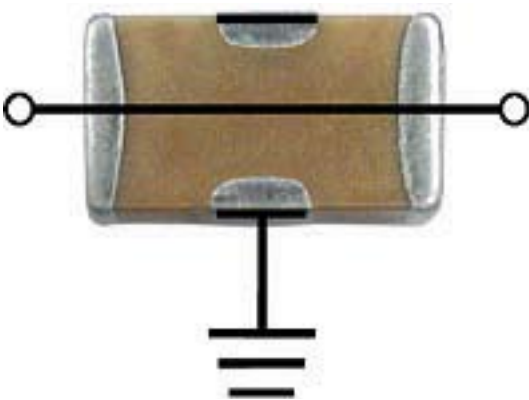


## MULTILAYER CERAMIC FEEDTHRU CHIP CAPACITORS



Today EMI Feedthru Filter Capacitors provide one of the most advantageous EMI filtering characteristics compared to some high cost/bigger size, complex design alternatives.

Although SMT Feedthru Capacitors use the same production technology and ceramic materials as standard MLCC, because of its unique design, Feedthru Capacitors provide more stable filtering results in wider radio frequency range.

### APPLICATIONS

#### Filtering

- Digital signal to RF interface
- RF amplifier gain filtering

#### Decoupling

- High frequency control line and signal
- High frequency clock and data
- High frequency power line

### ADVANTAGES

- Lower ESR compared to standard MLCC
- Surface mountable non-polar
- RoHS Compliant (100% Tin over Nickel Termination)
- Tin/Lead Termination option available
- PolyTerm® available on 1206 size.
- Available in two dielectrics (X7R & NPO)
- Capacitance ranges from 22 pF to 47 nF

### HOW TO ORDER

<b>500</b>	<b>F15</b>	<b>W</b>	<b>102</b>	<b>K</b>	<b>V</b>	<b>4</b>	<b>T</b>
<b>VOLTAGE</b> 250 = 25 V 500 = 50 V 101 = 100 V	<b>CASE SIZE</b> F14 = 0603 F15 = 0805 F18 = 1206	<b>DIELECTRIC</b> N = NPO W = X7R	<b>CAPACITANCE</b> 1st two digits are significant; third digit denotes number of zeros 220 = 22 pF 101 = 100 pF 102 = 0.001 μF	<b>TOLERANCE</b> J = ± 5% K = ± 10% M = ± 20%	<b>TERMINATION</b> V = Ni barrier w/ 100% Sn Plating T = Tin/Lead (Minimum 5% Pb) F = PolyTerm® (F18 size, End Termination only)	<b>MARKING</b> 4 = Unmarked 6 = EIA "J" Code	<b>TAPE MODIFIER</b> Code Type Reel U Embossed 13" R Punched 13" E Embossed 7" T Embossed 7" None = Bulk Packaging Tape specifications conform to EIA RS481

P/N written: 500F15W102KV4T

NOTE: Not all combinations of Johanson Dielectrics part numbers are valid. Please refer to the appropriate "Capacitance and Voltage Range" section for a particular product or contact your Sales Representative if you need assistance.

### FEEDTHRU CAPACITORS: CAPACITANCE AND VOLTAGE RANGE

			Capacitance Value										
			Voltage	22 pF	47 pF	100 pF	220 pF	470 pF	1000 pF	2200 pF	4700 pF	0.01 $\mu$ F	0.047 $\mu$ F
<b>F14 0603</b>	Inches	mm	25V										
	L .064 $\pm$ .005	1.62 $\pm$ 0.13											
	W .035 $\pm$ .005	0.90 $\pm$ 0.13	25V										
T .026 Max	0.66 max												
E/B .009 $\pm$ .004	0.23 $\pm$ 0.10												
C .018 $\pm$ .004	0.46 $\pm$ 0.10												
				220	470	101	221	471	102	222	472	103	473

DIELECTRIC
NPO
X7R

			Capacitance Value										
			Voltage	22 pF	47 pF	100 pF	220 pF	470 pF	1000 pF	2200 pF	4700 pF	0.01 $\mu$ F	0.047 $\mu$ F
<b>F15 0805</b>	Inches	mm	100V										
	L .080 $\pm$ .008	2.03 $\pm$ 0.20											
	W .050 $\pm$ .008	1.28 $\pm$ 0.20	50V										
T .040 Max	1.02 max												
E/B .009 $\pm$ .004	0.23 $\pm$ 0.10												
C .020 $\pm$ .005	0.56 $\pm$ 0.12												
				220	470	101	221	471	102	222	472	103	473

DIELECTRIC
NPO
X7R

			Capacitance Value										
			Voltage	22 pF	47 pF	100 pF	220 pF	470 pF	1000 pF	2200 pF	4700 pF	0.01 $\mu$ F	0.047 $\mu$ F
<b>F18 1206</b>	Inches	mm	100V										
	L .124 $\pm$ .010	3.15 $\pm$ 0.25											
	W .063 $\pm$ .010	1.60 $\pm$ 0.25	50V										
T .050 max	1.27 max												
E/B .009 $\pm$ .004	0.23 $\pm$ 0.10												
C .040 $\pm$ .005	1.02 $\pm$ 0.13												
				220	470	101	221	471	102	222	472	103	473

DIELECTRIC
NPO
X7R