

## NON-MAGNETIC HIGH Q MULTI-LAYER CAPACITORS



These Multi-Layer capacitors have been sold around the world for two decades. Made from highly stable, low loss dielectric formulations, these traditional porcelain MLCs are known for their high RF power handling capability. Available in all industry common case sizes, Voltronics offers capacitors with exactly the size, capacitance value, and voltage rating that your application requires. The special silver-palladium termination and the proprietary ceramic formulations guarantee consistent non-magnetic performance. All MLCs in these series are RoHS compliant.

Chips are available either with standard termination or can be fitted with ribbon leads, depending on your application.

Case Size Series	Dimensions inches	Working Voltage Range, Volts DC	Capacitance Range, pF
5	0.055" x 0.055"	Up to 250V	0.1 to 100
11	0.110" x 0.110"	Up to 1000V	0.1 to 1000
25	0.220" x 0.250"	Up to 2500V	1.0 to 2700
38	0.380" x 0.380"	Up to 7200V	1.0 to 5100

Codes	Capacitance Codes	Tolerance Codes	DC Working Voltage	Termination Codes	Material Codes	Lead Codes
11 25 38	0R1 0.1pF 100 10pF 101 100pF 102 1000pF	A ± 0.05pF B ± 0.10pF C ± 0.25pF D ± 0.50pF F ± 1% G ± 2% J ± 5% K ± 10%	50 100 200 300 500 600 1000 1500 2500 3600 7200	M New Flexible Polymer/Ag Layer, 400-μ-in Cu barrier, 200-μ-in Sn plate. (RoHS) S Original Pd/Ag plate. W New Ag Layer, 400-500μ-in Cu barrier, 200-μ-in 90/10 Sn plate. (RoHS)	H AH + 90±20ppm/°C F CF 0±15ppm/°C	Blank = no leads R = Ribbon leads

**11** Series — **7R5** Capacitance Code — **B** Tolerance — **1000** DC Working Voltage — **M** Termination — **H** Material — **R** Lead

Consult Factory for Complete Catalog

# FOR NMR PROBES AND MRI SURFACE COILS

## Description

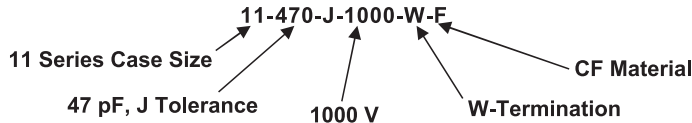
Porcelain Capacitors  
 Low ESR, High -Q  
 Capacitance Range 0.1 - 5100 pF  
 Zero TCC  
 Low Noise  
 High Self-resonance  
 Established reliability

## Functional Applications

Impedance Matching  
 DC Blocking  
 Bypass  
 Coupling  
 Tuning  
 Feedback

0.1 pF Increments  
 0.1 pF Increments

## Part Numbering System



## Electrical Specifications

Dissipation Factor	0.05% @ 1 MHz max.
Dielectric Withstanding Voltage Voltage Rating (WVDC) DWV	Please see Chart 250% of rated WVDC for 5 sec. Unless specified in chart
Insulation Resistance @ 25 °C @ 125 °C	10 <sup>6</sup> M   min. 10 <sup>5</sup> M   min.
Aging	None
Piezoeffects	None
Dielectric Absorption	None
Capacitance Tolerances	A, B, C, D below 10 pF F, G, J, and K, 10 pF and above

## Lead Types

Axial Ribbon*
Radial Ribbon*
Center Ribbon*
None

\*add -R and type of Ribbon to end of part number

## Packaging

Style	Package	Option
5 Series	Bulk in plastic bags	Tape & Reel - 3,500 pcs.
11 Series	Bulk in plastic bags	Tape & Reel - 2,350 pcs.
25 Series	Bulk in plastic bags	Tape & Reel - 500 pcs.
38 Series	Bulk in plastic bags	Tape & Reel - 250 pcs.

## Tolerance Codes

A	± .05pF
B	± .1pF
C	± .25pF
D	± .5pF
F	± 1%
G	± 2%
J	± 5%
K	± 10%

CAP CODE	CAP (pF)	5 Series 0505	11 Series 1111	25 Series 2225	38 Series 3838
0R1	0.1				
1R0	1				
2R0	2				
2R1	2.1				
2R2	2.2				
2R4	2.4				
2R7	2.7				
3R0	3.0				
3R3	3.3				
3R6	3.6				
3R9	3.9				
4R3	4.3				
4R7	4.7				
5R1	5.1				
5R6	5.6				
6R2	6.2				
6R8	6.8				
7R5	7.5				
8R2	8.2				
9R1	9.1				
100	10				
110	11				
120	12				
130	13				
150	15				
160	16				
180	18				
200	20				
220	22				
240	24				
270	27				
300	30				
330	33				
360	36				
390	39				
430	43				
470	47				
510	51				
560	56				
620	62				
680	68				
750	75				
820	82				
910	91				
101	100				
111	110				
121	120				
131	130				
151	150				
161	160				
181	180				
201	200				
221	220				
241	240				
271	270				
301	300				
331	330				
361	360				
391	390				
431	430				
471	470				
511	510				
561	560				
621	620				
681	680				
751	750				
821	820				
911	910				
102	1000				
122	1200				
152	1500				
182	1800				
222	2200				
272	2700				
332	3300				
392	3900				
472	4700				
512	5100				
Reel QTY		3500	2350	500	250