

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	0R1	0.1pF	A	± 0.05pF	50	M	New Flexible Polymer/Ag Layer, 400-μ-in Cu barrier, 200-μ-in Sn plate. (RoHS)	H AH + 90±20ppm/°C
25	100	10pF	B	± 0.10pF	100	S		F CF 0±15ppm/°C
38	101	100pF	C	± 0.25pF	200	W		
	102	1000pF	D	± 0.50pF	300			
			F	± 1%	500			
			G	± 2%	600			
			J	± 5%	1000			
			K	± 10%	1500			
					2500			
					3600			
					7200			

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

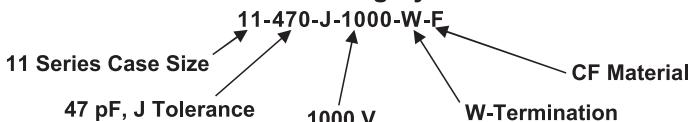
Functional Applications

Impedance Matching
DC Blocking
Bypass
Coupling
Tuning
Feedback

0.1 pF Increments
0.1 pF Increments

CAP CODE	CAP (pF)	5 Series 0505	11 Series 1111	25 Series 2225	38 Series 3838
0R1	0.1 to 1				
1R0	1 to 2				
2R0	2 to 2.1				
2R1	2.1 to 2.2				
2R2	2.2 to 2.4				
2R4	2.4 to 2.7				
2R7	2.7 to 3.0				
3R0	3.0 to 3.3				
3R3	3.3 to 3.6				
3R6	3.6 to 3.9				
3R9	3.9 to 4.3				
4R3	4.3 to 4.7				
4R7	4.7 to 5.1				
5R1	5.1 to 5.6				
5R6	5.6 to 6.2				
6R2	6.2 to 6.8				
6R8	6.8 to 7.5				
7R5	7.5 to 8.2				
8R2	8.2 to 9.1				
9R1	9.1 to 10				
100	10 to 11				
110	11 to 12				
120	12 to 13				
130	13 to 15				
150	15 to 16				
160	16 to 18				
180	18 to 20				
200	20 to 22				
220	22 to 24				
240	24 to 27				
270	27 to 30				
300	30 to 33				
330	33 to 36				
360	36 to 39				
390	39 to 43				
430	43 to 47				
470	47 to 51				
510	51 to 56				
560	56 to 62				
620	62 to 68				
680	68 to 75				
750	75 to 82				
820	82 to 91				
910	91 to 100				
101	100 to 110				
111	110 to 120				
121	120 to 130				
131	130 to 150				
151	150 to 160				
161	160 to 180				
181	180 to 200				
201	200 to 220				
221	220 to 240				
241	240 to 270				
271	270 to 300				
301	300 to 330				
331	330 to 360				
361	360 to 390				
391	390 to 430				
431	430 to 470				
471	470 to 510				
511	510 to 560				
561	560 to 620				
621	620 to 680				
681	680 to 750				
751	750 to 820				
821	820 to 910				
911	910 to 1000				
102	1000 to 1200				
122	1200 to 1500				
152	1500 to 1800				
182	1800 to 2200				
222	2200 to 2700				
272	2700 to 3300				
332	3300 to 3900				
392	3900 to 4700				
472	4700 to 5100				
512	5100 to 5500				
Reel QTY		3500	2350	500	250

Part Numbering System



Electrical Specifications

Dissipation Factor	0.05% @ 1 MHz max.
Dielectric Withstanding Voltage	
Voltage Rating (WVDC)	Please see Chart
DWV	250% of rated WVDC for 5 sec. Unless specified in chart
Insulation Resistance	
@ 25 °C	10^6 M min.
@ 125 °C	10^5 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	$\pm .05\text{pF}$
B	$\pm .1\text{pF}$
C	$\pm .25\text{pF}$
D	$\pm .5\text{pF}$
F	$\pm 1\%$
G	$\pm 2\%$
J	$\pm 5\%$
K	$\pm 10\%$

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Voltronics:

[38-220-G-7200-SH](#) [25-6R8-J-2500-M-H](#) [25-4R7-J-2500-M-H](#) [25-271-J-2500-M-H](#) [25-221-J-2500-M-H](#)