

NA Series: N30 Porcelain Capacitors



Description	Functional Applications	Benefits
Porcelain Capacitors NPO N30 ± 15 Low ESR, High Q Capacitance Range 0.1 - 1000 pF High Self-resonance Low Noise Established Reliability	Impedance Matching DC Blocking Bypass Coupling Tuning & Feedback Amplifier Matching Networks VCO Frequency Stabilization Filtering, Diplexers & Antenna Matching High RF Power Circuits	Oscillators Timing Circuits Filters RF Power Amplifiers & Delay Lines Stable TC, -55° to +125°C Operating Range High Q SMD Compatibility Lower ESR Power Handling, High Voltage

Dielectric Characteristics

Dielectric Material Code	Temperature Coefficient (ppm/°C Maximum)	Dissipation Factor (% @ 1MHz Maximum)	Dielectric Withstanding Voltage		Insulation Resistance (MΩ Minimum)		Aging	Piezoelectric Effects	Dielectric Absorption
			Voltage Rating (Volts)	DWV (Volts)	@ +25°C	@ +125°C			
NA	+30 ± 15	0.05	Please see chart (pg. 25)	250% of WVDC for 5 sec unless specified in chart (pg. 25)	10 ⁶	10 ⁵	None	None	None

Part Number Breakdown*

*C	17	NA	620	J	-	7	U	N	-	X	0	T
Multi Layer	Case Size	Material System	Capacitance Code	Tolerance Level	Voltage Code	Termination Code	Leading Code	Test Level	Marking Code	Packaging		

Available Termination Types

C11	T, U, S, Z, E, H
C17	T, U, S, Z, E, H

Code Termination System

T	Ag Term, Ni Barrier Layer, Heavy SnPb Plated Solder
U	Ag Termination, Ni Barrier Layer, SnPb Plated Solder
S	Ag Termination, Ni Barrier Layer, Gold Flash, RoHS
Z	Ag Termination, Ni Barrier Layer, Sn Plated Solder, RoHS
E	Ag Termination, Enhanced Ni Barrier, Sn Plated Solder, RoHS

Available Lead Types

C11	A, B, D
C17	A, B, C, D, E, F

Special Leading requirements available.

Code Lead Types

A	Axial Ribbon
B	Radial Ribbon
C	Center Ribbon
D	Customer Specified
E	Axial Wire
F	Radial Wire
N	None

Test Level – All Case Sizes

X	Standard
Y	Reduced Visual
A	MIL-PRF-55681 Group A
C	MIL-PRF-55681 Group C
D	Customer Specified

Available Laser Marking

C11	0, 1, 2, 5
C17	0, 1, 2, 3, 4, 5

Code Laser Marking

0	No marking
1	Single-side marked
2	Double-side marked
3	Large single-side marked
4	Large double-side marked
5	Vertical edge marked
9	Customer Specified

Available Packaging

C11	T, V, W, B, P, S
C17	T, V, W, B, P, S

Code Packaging

T	Tape & Reel – Horizontal
V	Tape & Reel – Vertical
W	Waffle Pack
B	Bulk
P	Plastic Box
S	Customer Specified

*See page 6 for complete part number system.

Capacitance and Voltage Table

CAP CODE	CAP (pF)	CASE SIZE C11 0505	CASE SIZE C17 1111
0R1	0.1	150V Code 8 DWV = 375V	1000V Code 7 DWV = 2500V
0R2	0.2		
0R3	0.3		
0R4	0.4		
0R5	0.5		
0R6	0.6		
0R7	0.7		
0R8	0.8		
0R9	0.9		
1R0	1.0		
1R1	1.1		
1R3	1.3		
1R4	1.4		
1R5	1.5		
1R6	1.6		
1R7	1.7		
1R8	1.8		
1R9	1.9		
2R0	2.0		
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		
			500V Code 4 DWV = 1250V
			200V Code 6 DWV = 500V
			100V Code 1 DWV = 250V
			50V Code 5 DWV = 125V

Reel QTY Horizontal

3500

2350

Special capacitance values available upon request.