

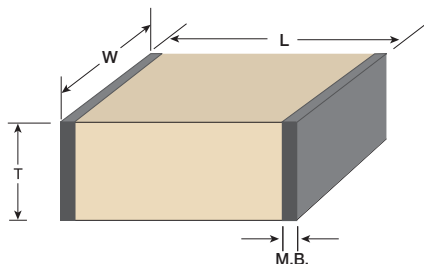
# 1010 NPO CERAMIC CAPACITORS FOR RF AND MICROWAVE

PRESIDIO PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
1010NPO0R1_6N1N-	0.1	A,B	500,1500
1010NPO0R2_6N1N-	0.2	A,B	500,1500
1010NPO0R3_6N1N-	0.3	A,B,C	500,1500
1010NPO0R4_6N1N-	0.4	A,B,C	500,1500
1010NPO0R5_6N1N-	0.5	A,B,C	500,1500
1010NPO0R6_6N1N-	0.6	A,B,C	500,1500
1010NPO0R7_6N1N-	0.7	A,B,C	500,1500
1010NPO0R8_6N1N-	0.8	A,B,C	500,1500
1010NPO0R9_6N1N-	0.9	A,B,C	500,1500
1010NPO1R0_6N1N-	1.0	A,B,C	500,1500
1010NPO1R1_6N1N-	1.1	A,B,C,D	500,1500
1010NPO1R2_6N1N-	1.2	A,B,C,D	500,1500
1010NPO1R3_6N1N-	1.3	A,B,C,D	500,1500
1010NPO1R5_6N1N-	1.5	A,B,C,D	500,1500
1010NPO1R6_6N1N-	1.6	A,B,C,D	500,1500
1010NPO1R8_6N1N-	1.8	A,B,C,D	500,1500
1010NPO2R0_6N1N-	2.0	A,B,C,D	500,1500
1010NPO2R2_6N1N-	2.2	A,B,C,D	500,1500
1010NPO2R4_6N1N-	2.4	A,B,C,D	500,1500
1010NPO2R7_6N1N-	2.7	A,B,C,D	500,1500
1010NPO3R0_6N1N-	3.0	A,B,C,D	500,1500
1010NPO3R3_6N1N-	3.3	A,B,C,D	500,1500
1010NPO3R6_6N1N-	3.6	A,B,C,D	500,1500
1010NPO3R9_6N1N-	3.9	A,B,C,D	500,1500
1010NPO4R3_6N1N-	4.3	A,B,C,D	500,1500
1010NPO4R7_6N1N-	4.7	A,B,C,D	500,1500
1010NPO5R1_6N1N-	5.1	A,B,C,D	500,1500
1010NPO5R6_6N1N-	5.6	A,B,C,D	500,1500
1010NPO6R2_6N1N-	6.2	A,B,C,D	500,1500
1010NPO6R8_6N1N-	6.8	A,B,C,D	500,1500
1010NPO7R5_6N1N-	7.5	A,B,C,D	500,1500

PRESIDIO PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
1010NPO8R2_6N1N-	8.2	A,B,C,D	500,1500
1010NPO9R1_6N1N-	9.1	A,B,C,D	500,1500
1010NPO100_6N1N-	10	F,G,J,K,M	500,1500
1010NPO110_6N1N-	11	F,G,J,K,M	500,1500
1010NPO120_6N1N-	12	F,G,J,K,M	500,1500
1010NPO130_6N1N-	13	F,G,J,K,M	500,1500
1010NPO150_6N1N-	15	F,G,J,K,M	500,1500
1010NPO160_6N1N-	16	F,G,J,K,M	500,1500
1010NPO180_6N1N-	18	F,G,J,K,M	500,1500
1010NPO200_6N1N-	20	F,G,J,K,M	500,1500
1010NPO220_6N1N-	22	F,G,J,K,M	500,1500
1010NPO240_6N1N-	24	F,G,J,K,M	500,1500
1010NPO270_6N1N-	27	F,G,J,K,M	500,1500
1010NPO300_6N1N-	30	F,G,J,K,M	500,1500
1010NPO330_6N1N-	33	F,G,J,K,M	500,1500
1010NPO360_6N1N-	36	F,G,J,K,M	500,1500
1010NPO390_6N1N-	39	F,G,J,K,M	500,1500
1010NPO430_6N1N-	43	F,G,J,K,M	500,1500
1010NPO470_6N1N-	47	F,G,J,K,M	500,1500
1010NPO510_6N1N-	51	F,G,J,K,M	500,1500
1010NPO560_6N1N-	56	F,G,J,K,M	500,1500
1010NPO620_6N1N-	62	F,G,J,K,M	500,1500
1010NPO680_6N1N-	68	F,G,J,K,M	500,1500
1010NPO750_6N1N-	75	F,G,J,K,M	500,1500
1010NPO820_6N1N-	82	F,G,J,K,M	500,1500
1010NPO910_6N1N-	91	F,G,J,K,M	500,1500
1010NPO101_6N1N-	100	F,G,J,K,M	500,1500
1010NPO111_5N1N-	110	F,G,J,K,M	300,1500
1010NPO121_5N1N-	120	F,G,J,K,M	300,1000
1010NPO131_5N1N-	130	F,G,J,K,M	300,1000
1010NPO151_5N1N-	150	F,G,J,K,M	300,1000

PRESIDIO PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
1010NPO161_5N1N-	160	F,G,J,K,M	300,1000
1010NPO181_5N1N-	180	F,G,J,K,M	300,1000
1010NPO201_5N1N-	200	F,G,J,K,M	300,1000
1010NPO221_4N1N-	220	F,G,J,K,M	200,1000
1010NPO241_4N1N-	240	F,G,J,K,M	200,600
1010NPO271_4N1N-	270	F,G,J,K,M	200,600
1010NPO301_4N1N-	300	F,G,J,K,M	200,600
1010NPO331_4N1N-	330	F,G,J,K,M	200,600
1010NPO361_4N1N-	360	F,G,J,K,M	200,600
1010NPO391_4N1N-	390	F,G,J,K,M	200,600
1010NPO431_4N1N-	430	F,G,J,K,M	200,600
1010NPO471_4N1N-	470	F,G,J,K,M	200,600
1010NPO511_3N1N-	510	F,G,J,K,M	100,300
1010NPO561_3N1N-	560	F,G,J,K,M	100,300
1010NPO621_3N1N-	620	F,G,J,K,M	100,300
1010NPO681_2N1N-	680	F,G,J,K,M	50,300
1010NPO751_2N1N-	750	F,G,J,K,M	50,300
1010NPO821_2N1N-	820	F,G,J,K,M	50,300
1010NPO911_2N1N-	910	F,G,J,K,M	50,300
1010NPO102_2N1N-	1000	F,G,J,K,M	50,300
1010NPO122_2N1N-	1200	F,G,J,K,M	50
1010NPO152_2N1N-	1500	F,G,J,K,M	50
1010NPO182_2N1N-	1800	F,G,J,K,M	50
1010NPO222_2N1N-	2200	F,G,J,K,M	50
1010NPO272_2N1N-	2700	F,G,J,K,M	50
1010NPO332_2N1N-	3300	F,G,J,K,M	50
1010NPO392_2N1N-	3900	F,G,J,K,M	50
1010NPO472_2N1N-	4700	F,G,J,K,M	50
1010NPO562_2N1N-	5600	F,G,J,K,M	50

For other cap values contact factory.  
Voltages in **BOLD** for military and space.



### Capacitance Codes for Multilayer Capacitor

First Two Digits = Significant Figures of Capacitance in Picofarads

Third Digit = Additional Number of Zeros

Example:  
 0R1 = 0.1 pF  
 1R0 = 1 pF  
 100 = 10 pF  
 101 = 100 pF  
 102 = 1,000 pF  
 103 = 10,000 pF

### Capacitance Tolerance Codes

Code	Tolerance	Cap Range
A	± 0.05 pF	< 10 pF
B	± 0.1 pF	< 10 pF
C	± 0.25 pF	< 10 pF
D	± 0.5 pF	< 10 pF
E	± 0.5%	≥ 10 pF
F	± 1%	≥ 10 pF
G	± 2%	≥ 10 pF
J	± 5%	≥ 10 pF
K	± 10%	≥ 10 pF
M	± 20%	≥ 10 pF

LENGTH (L) INCH (mm)	WIDTH (W) INCH (mm)	THICKNESS (T) INCH (mm)	METALIZATION BAND (M.B.) INCH (mm)
0.110 + 0.020/ - 0.010 (2.794 + 0.508/ - 0.254)	0.110 ± 0.015 (2.794 ± 0.381)	0.102 MAX (2.591 MAX)	0.005 to 0.030 (0.127 to 0.762)

### Termination Codes

Code	RoHS Comp.	Typical Application	Termination Build up	Recommended Reflow Temp.
T	Yes	Solder Reflow	100% Tin Plated Nickel Barrier Silver Base	220°C to 260°C Typical
X	Yes	Solder Reflow	100% Tin Plated Non-Magnetic Barrier Silver Base	220°C to 260°C Typical
N	No	Solder Reflow	90% Tin/10% Lead Plated Nickel Barrier Silver Base	220°C to 260°C Typical
P	Yes	Conductive Epoxy Non-Magnetic	Palladium-Silver	Cure Epoxy as per Manufacturer's Spec.
G	Yes	Conductive Epoxy, Wire Bondable	50 μ" Gold Typical Nickel Barrier Silver Base	Cure Epoxy as per Manufacturer's Spec.

### Working Voltage

Code	WVDC	Code	WVDC
1	25	5	300
2	50	6	500
3	100	#	800
A	150	9	1000
4	200	N	1500
&	250		

### Packaging Codes

1 = Tape and Reel  
 5 = Waffle Pack  
 Marking available upon request (extra cost)

### RoHS

Code	Compliant
N	No
C	Yes

Presidio's NPO capacitors can be upscreened to SPACE LEVEL testing. Consult the factory for details. Some voltage derating may apply.

### PART NUMBER EXAMPLE (How to Order)

1010	NPO	101	J	6	N	1	N	-
Size	Dielectric	Capacitance (100 pF)	Capacitance Tolerance (± 5%)	Voltage (500 V)	Termination (Plated SnPb)	Packaging (Tape and Reel)	Not RoHS Compliant	Design-In Code (See Page 19)

Call factory for digital copy of S2P files.

# A WORD TO THE DESIGN ENGINEER

After the design work is done, outsourcing manufacturing on a global basis is a management option. At Presidio Components, we are striving for complete customer satisfaction which includes “after” service for all of our products.

We added a “Design In” locator code for quick traceability, if needed. Please select your location from the list below and add the appropriate code at the end of the part number.

If you need assistance give us a call at **(858) 578-9390** or email us at **info@presidiocomponents.com**.

## UNITED STATES

## OUTSIDE THE UNITED STATES

USA	Code	USA	Code	Americas	Code	Europe	Code
Alabama	G	Nebraska	P	Canada	R	Austria	3
Alaska	P	Nevada, North	B	Mexico	R	Belgium	1
Arizona	D	Nevada, South	C	Caribbean	R	Denmark	5
Arkansas	P	New Hampshire	L	Central America	R	Finland	5
California, North	B	New Jersey	J	South America	R	France	2
California, South	C	New Mexico	D			Germany	3
Colorado	E	New York, Metro	J	<b>Pacific Rim</b>		Ireland	6
Connecticut	L	New York, Upstate	K	Australia	S	Italy	4
Delaware	I	North Carolina	G	China	T	Luxembourg	1
District of Columbia	H	North Dakota	O	Japan	U	Netherlands	1
Florida	G	Ohio	M	Korea, South	V	Norway	5
Georgia	G	Oklahoma	P	Malaysia	W	Sweden	5
Hawaii	P	Oregon	A	Singapore	X	Switzerland	3
Idaho	A	Pennsylvania	I	Other Pacific Rim Countries	Y	United Kingdom	6
Illinois	N	Rhode Island	L			Other European Countries	7
Indiana	M	South Carolina	G			<b>Other</b>	
Iowa	O	South Dakota	O			India	Z
Kansas	P	Tennessee	G			Israel	8
Kentucky	M	Texas	F			Rest of World	9
Louisiana	P	Utah	E				
Maine	L	Vermont	L				
Maryland	H	Virginia	H				
Massachusetts	L	Washington	A				
Michigan	N	West Virginia	P				
Minnesota	O	Wisconsin, East	N				
Mississippi	G	Wisconsin, West	O				
Missouri	N	Wyoming	E				
Montana	A						

**PART NUMBER EXAMPLE:**  
**0505NPO101FAN1NA**  
**PART DESCRIPTION: Ceramic Capacitor,**  
**0505, NPO, 100pF ± 1%,**  
**150 VDC, Plated SnPb, Tape and Reel,**  
**Non RoHS, Design-In Code A for**  
**Washington State.**