

# 0505 HIGH Q NPO CERAMIC CAPACITORS FOR RF & MICROWAVE

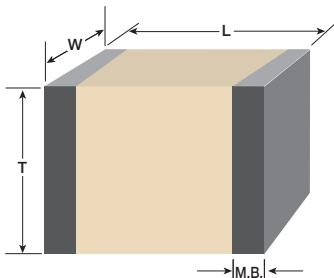
PRESIDIO PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
0505NPO05MAN1N-	0.05	M	150, 250
0505NPO0R1_AN1N-	0.1	A,B	150, 250
0505NPO0R2_AN1N-	0.2	A,B,C	150, 250
0505NPO0R3_AN1N-	0.3	A,B,C	150, 250
0505NPO0R4_AN1N-	0.4	A,B,C	150, 250
0505NPO0R5_AN1N-	0.5	A,B,C	150, 250
0505NPO0R6_AN1N-	0.6	A,B,C	150, 250
0505NPO0R7_AN1N-	0.7	A,B,C	150, 250
0505NPO0R8_AN1N-	0.8	A,B,C	150, 250
0505NPO0R9_AN1N-	0.9	A,B,C	150, 250
0505NPO1R0_AN1N-	1.0	A,B,C	150, 250
0505NPO1R1_AN1N-	1.1	A,B,C,D	150, 250
0505NPO1R2_AN1N-	1.2	A,B,C,D	150, 250
0505NPO1R3_AN1N-	1.3	A,B,C,D	150, 250
0505NPO1R5_AN1N-	1.5	A,B,C,D	150, 250
0505NPO1R6_AN1N-	1.6	A,B,C,D	150, 250
0505NPO1R8_AN1N-	1.8	A,B,C,D	150, 250
0505NPO2R0_AN1N-	2.0	A,B,C,D	150, 250
0505NPO2R2_AN1N-	2.2	A,B,C,D	150, 250
0505NPO2R4_AN1N-	2.4	A,B,C,D	150, 250
0505NPO2R7_AN1N-	2.7	A,B,C,D	150, 250
0505NPO3R0_AN1N-	3.0	A,B,C,D	150, 250
0505NPO3R3_AN1N-	3.3	A,B,C,D	150, 250
0505NPO3R6_AN1N-	3.6	A,B,C,D	150, 250
0505NPO3R9_AN1N-	3.9	A,B,C,D	150, 250
0505NPO4R3_AN1N-	4.3	A,B,C,D	150, 250
0505NPO4R7_AN1N-	4.7	A,B,C,D	150, 250
0505NPO5R1_AN1N-	5.1	A,B,C,D	150, 250

PRESIDIO PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
0505NPO5R6_AN1N-	5.6	A,B,C	150, 250
0505NPO6R2_AN1N-	6.2	A,B,C	150, 250
0505NPO6R8_AN1N-	6.8	A,B,C	150, 250
0505NPO7R5_AN1N-	7.5	A,B,C,D	150, 250
0505NPO8R2_AN1N-	8.2	A,B,C,D	150, 250
0505NPO9R1_AN1N-	9.1	A,B,C,D	150, 250
0505NPO100_AN1N-	10	F,G,J,K	150, 250
0505NPO110_AN1N-	11	F,G,J,K	150, 250
0505NPO120_AN1N-	12	F,G,J,K	150, 250
0505NPO130_AN1N-	13	F,G,J,K	150, 250
0505NPO150_AN1N-	15	F,G,J,K	150, 250
0505NPO160_AN1N-	16	F,G,J,K	150, 250
0505NPO180_AN1N-	18	F,G,J,K	150, 250
0505NPO200_AN1N-	20	F,G,J,K,M	150, 250
0505NPO220_AN1N-	22	F,G,J,K,M	150, 250
0505NPO240_AN1N-	24	F,G,J,K,M	150, 250
0505NPO270_AN1N-	27	F,G,J,K,M	150, 250
0505NPO300_AN1N-	30	F,G,J,K,M	150, 250
0505NPO330_AN1N-	33	F,G,J,K,M	150, 250
0505NPO360_AN1N-	36	F,G,J,K,M	150, 250
0505NPO390_AN1N-	39	F,G,J,K,M	150, 250
0505NPO430_AN1N-	43	F,G,J,K,M	150, 250
0505NPO470_AN1N-	47	F,G,J,K,M	150, 250
0505NPO510_AN1N-	51	F,G,J,K,M	150, 250
0505NPO560_AN1N-	56	F,G,J,K,M	150, 250
0505NPO620_AN1N-	62	F,G,J,K,M	150, 250
0505NPO680_AN1N-	68	F,G,J,K,M	150, 250
0505NPO750_AN1N-	75	F,G,J,K,M	150, 250

PRESIDIO PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
0505NPO820_AN1N-	82	F,G,J,K,M	150, 250
0505NPO910_AN1N-	91	F,G,J,K,M	150, 250
0505NPO101_AN1N-	100	F,G,J,K,M	150, 250
0505NPO111_AN1N-	110	F,G,J,K,M	150
0505NPO121_AN1N-	120	F,G,J,K,M	150
0505NPO131_AN1N-	130	F,G,J,K,M	150
0505NPO151_AN1N-	150	F,G,J,K,M	150
0505NPO161_AN1N-	160	F,G,J,K,M	150
0505NPO181_AN1N-	180	F,G,J,K,M	150
0505NPO201_AN1N-	200	F,G,J,K,M	150
0505NPO221_AN1N-	220	F,G,J,K,M	150
0505NPO241_AN1N-	240	F,G,J,K,M	150
0505NPO271_AN1N-	270	F,G,J,K,M	150
0505NPO301_AN1N-	300	F,G,J,K,M	150
0505NPO331_AN1N-	330	F,G,J,K,M	150
0505NPO361_AN1N-	360	F,G,J,K,M	150
0505NPO391_AN1N-	390	F,G,J,K,M	150
0505NPO431_AN1N-	430	F,G,J,K,M	150
0505NPO471_AN1N-	470	F,G,J,K,M	150
0505NPO511_AN1N-	510	F,G,J,K,M	150
0505NPO561_AN1N-	560	F,G,J,K,M	150
0505NPO621_AN1N-	620	F,G,J,K,M	150
0505NPO681_2N1N-*	680	F,G,J,K,M	50
0505NPO751_2N1N-*	750	F,G,J,K,M	50
0505NPO821_2N1N-*	820	F,G,J,K,M	50
0505NPO911_2N1N-*	910	F,G,J,K,M	50
0505NPO102_2N1N-*	1000	F,G,J,K,M	50

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

## PART NUMBER CODES AND DIMENSIONS



### 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

LENGTH (L) INCH (mm)	WIDTH (W) INCH (mm)	THICKNESS (T) INCH (mm)	METALIZATION BAND (M.B.) INCH (mm)
0.055 ± 0.015 / - 0.010 (1.397 ± 0.381 / - 0.254)	0.055 ± 0.015 (1.397 ± 0.381)	0.057 MAX (1.448 MAX)	0.005 (0.127) min. band 0.015 (0.381) min. space

### 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

### Termination Codes

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

### Working Voltage

Code	WVDC
1	25
2	50
3	100
A	150
4	200
&	250

### Packaging Codes

1 = Unmarked, Tape & Reel  
2 = Laser Marked, Tape & Reel  
5 = Unmarked, Waffle Pack  
6 = Laser Marked, Waffle Pack  
Laser Marking available  
at extra cost  
(except 0402 size)

### RoHS

Code	Compliant
N	No
C	Yes

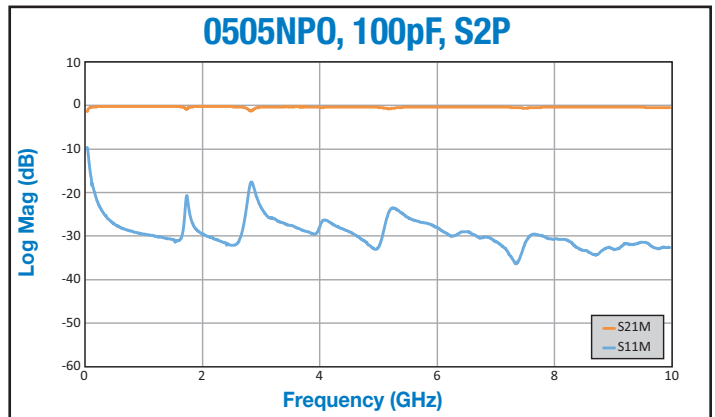
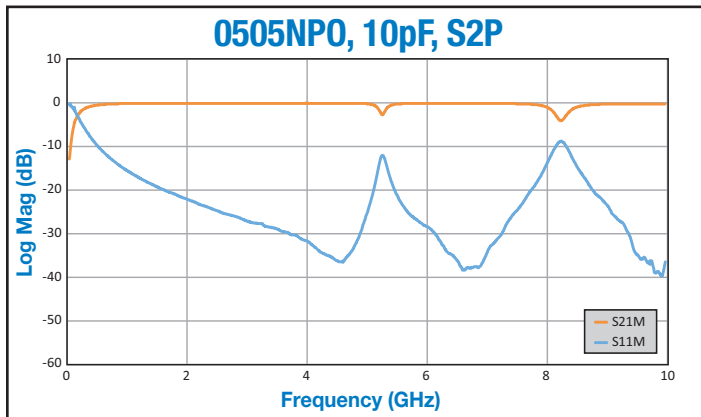
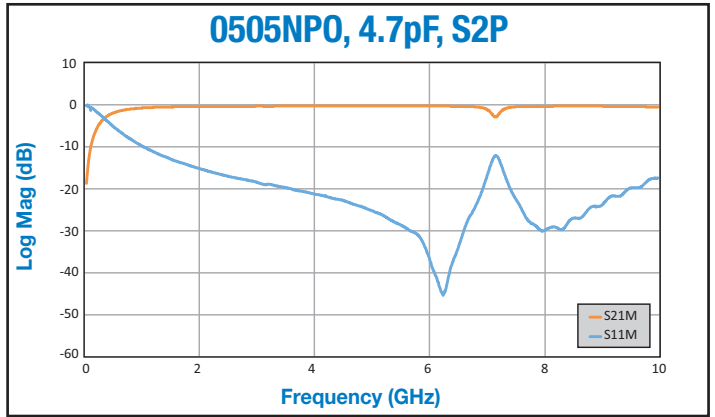
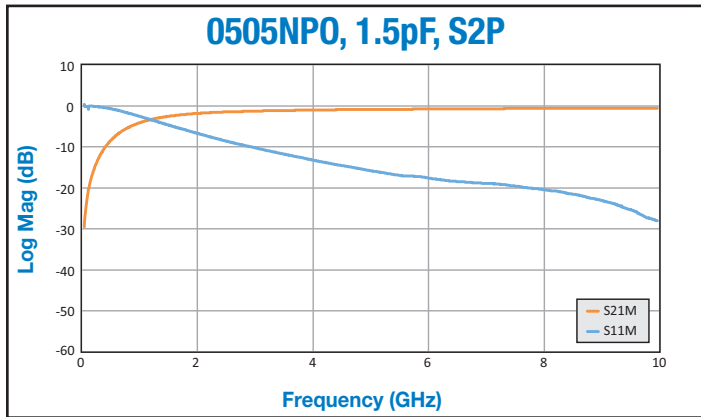
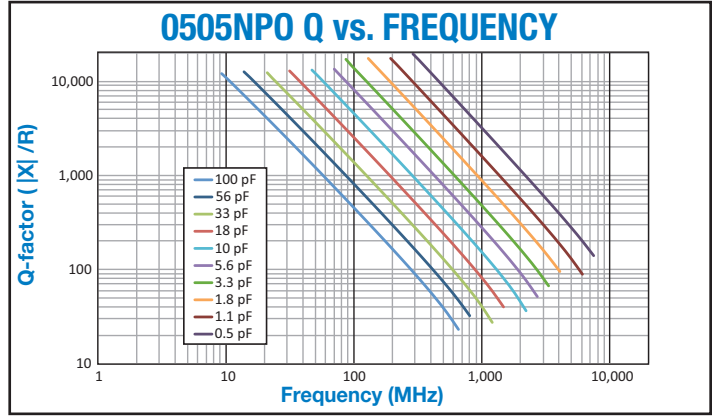
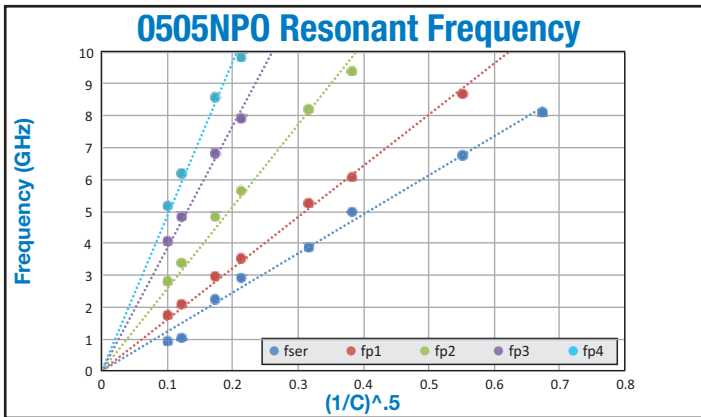
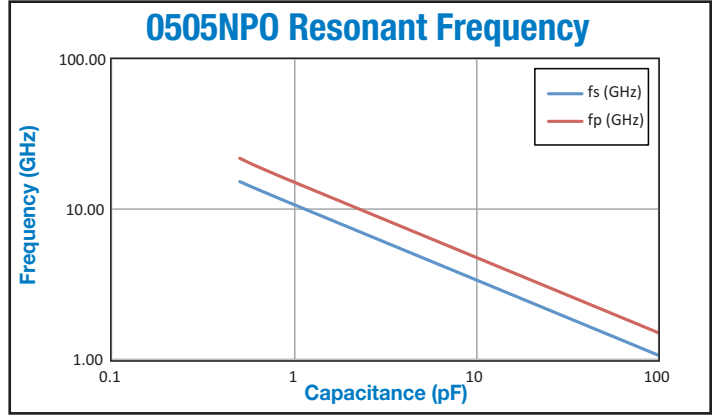
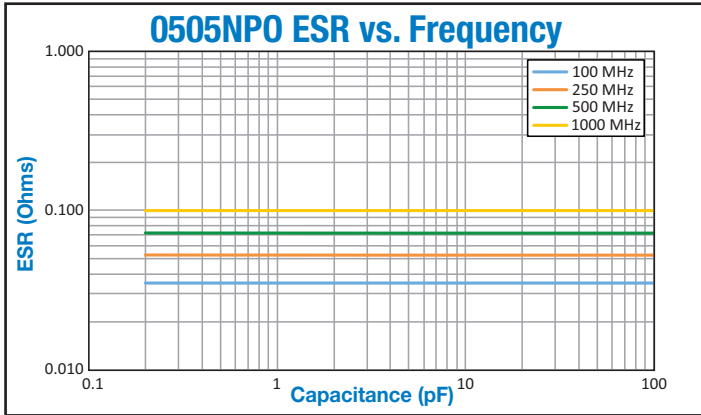
**Presidio's NPO capacitors can be prescreened to SPACE LEVEL testing. Consult the factory for details. Some voltage derating may apply.**

*Call factory for digital copy of S2P files.*

## PART NUMBER EXAMPLE (How to Order)

0505	NPO	101	F	A	N	1	N	_
Size	Dielectric	Capacitance (100 pF)	Capacitance Tolerance (± 1%)	Voltage (150 V)	Termination (Plated SnPb)	Packaging (Tape and Reel)	RoHS Compliant	Design-In Code (See end of catalog)

# 0505 HIGH Q NPO CERAMIC CAPACITORS PERFORMANCE CHARTS



Call factory for digital copy of the 0505 NPO S2P files.



PRESIDIO COMPONENTS, INC.

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# A WORD TO THE DESIGN ENGINEER

## About Presidio “Design In” Codes

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.**