

# 0603 NPO CERAMIC CAPACITORS FOR RF AND MICROWAVE

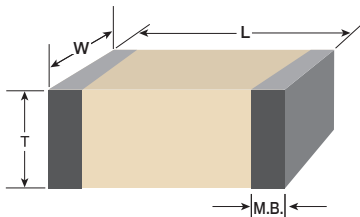
PRESIDIO PART NUMBER	CAP. (pF)	TOL.	WVDC
0603NPO05M&N1N-	0.05	M	<b>100, 250</b>
0603NPO0R1_&N1N-	0.1	A,B	<b>100, 250</b>
0603NPO0R2_&N1N-	0.2	A,B	<b>100, 250</b>
0603NPO0R3_&N1N-	0.3	A,B,C	<b>100, 250</b>
0603NPO0R4_&N1N-	0.4	A,B,C	<b>100, 250</b>
0603NPO0R5_&N1N-	0.5	A,B,C	<b>100, 250</b>
0603NPO0R6_&N1N-	0.6	A,B,C	<b>100, 250</b>
0603NPO0R7_&N1N-	0.7	A,B,C	<b>100, 250</b>
0603NPO0R8_&N1N-	0.8	A,B,C	<b>100, 250</b>
0603NPO0R9_&N1N-	0.9	A,B,C	<b>100, 250</b>
0603NPO1R0_&N1N-	1.0	A,B,C	<b>100, 250</b>
0603NPO1R1_&N1N-	1.1	A,B,C,D	<b>100, 250</b>
0603NPO1R2_&N1N-	1.2	A,B,C,D	<b>100, 250</b>
0603NPO1R3_&N1N-	1.3	A,B,C,D	<b>100, 250</b>
0603NPO1R5_&N1N-	1.5	A,B,C,D	<b>100, 250</b>
0603NPO1R6_&N1N-	1.6	A,B,C,D	<b>100, 250</b>
0603NPO1R8_&N1N-	1.8	A,B,C,D	<b>100, 250</b>
0603NPO2R0_&N1N-	2.0	A,B,C,D	<b>100, 250</b>
0603NPO2R2_&N1N-	2.2	A,B,C,D	<b>100, 250</b>
0603NPO2R4_&N1N-	2.4	A,B,C,D	<b>100, 250</b>

PRESIDIO PART NUMBER	CAP. (pF)	TOL.	WVDC
0603NPO2R7_&N1N-	2.7	A,B,C,D	<b>100, 250</b>
0603NPO3R0_&N1N-	3.0	A,B,C,D	<b>100, 250</b>
0603NPO3R3_&N1N-	3.3	A,B,C,D	<b>100, 250</b>
0603NPO3R6_&N1N-	3.6	A,B,C,D	<b>100, 250</b>
0603NPO3R9_&N1N-	3.9	A,B,C,D	<b>100, 250</b>
0603NPO4R3_&N1N-	4.3	A,B,C,D	<b>100, 250</b>
0603NPO4R7_&N1N-	4.7	A,B,C,D	<b>100, 250</b>
0603NPO5R1_&N1N-	5.1	A,B,C,D	<b>100, 250</b>
0603NPO5R6_&N1N-	5.6	A,B,C,D	<b>100, 250</b>
0603NPO6R2_&N1N-	6.2	A,B,C,D	<b>100, 250</b>
0603NPO6R8_&N1N-	6.8	A,B,C,D	<b>100, 250</b>
0603NPO7R5_&N1N-	7.5	A,B,C,D	<b>100, 250</b>
0603NPO8R2_&N1N-	8.2	A,B,C,D	<b>100, 250</b>
0603NPO9R1_&N1N-	9.1	A,B,C,D	<b>100, 250</b>
0603NPO100_&N1N-	10	F,G,J,K	<b>100, 250</b>
0603NPO110_&N1N-	11	F,G,J,K	<b>100, 250</b>
0603NPO120_&N1N-	12	F,G,J,K	<b>100, 250</b>
0603NPO130_&N1N-	13	F,G,J,K	<b>100, 250</b>
0603NPO150_&N1N-	15	F,G,J,K	<b>100, 250</b>
0603NPO160_&N1N-	16	F,G,J,K	<b>100, 250</b>

PRESIDIO PART NUMBER	CAP. (pF)	TOL.	WVDC
0603NPO180_&N1N-	18	F,G,J,K	<b>100, 250</b>
0603NPO200_&N1N-	20	F,G,J,K	<b>100, 250</b>
0603NPO220_&N1N-	22	F,G,J,K	<b>100, 250</b>
0603NPO240_&N1N-	24	F,G,J,K	<b>100, 250</b>
0603NPO270_&N1N-	27	F,G,J,K	<b>100, 250</b>
0603NPO300_&N1N-	30	F,G,J,K	<b>100, 250</b>
0603NPO330_&N1N-	33	F,G,J,K	<b>100, 250</b>
0603NPO360_&N1N-	36	F,G,J,K	<b>100, 250</b>
0603NPO390_&N1N-	39	F,G,J,K	<b>100, 250</b>
0603NPO430_&N1N-	43	F,G,J,K	<b>100, 250</b>
0603NPO470_&N1N-	47	F,G,J,K	<b>100, 250</b>
0603NPO510_&N1N-	51	F,G,J,K	<b>100, 250</b>
0603NPO560_&N1N-	56	F,G,J,K	<b>100, 250</b>
0603NPO620_&N1N-	62	F,G,J,K	<b>100, 250</b>
0603NPO680_&N1N-	68	F,G,J,K	<b>100, 250</b>
0603NPO750_&N1N-	75	F,G,J,K	<b>100, 250</b>
0603NPO820_&N1N-	82	F,G,J,K	<b>100, 250</b>
0603NPO910_&N1N-	91	F,G,J,K	<b>100, 250</b>
0603NPO101_&N1N-	100	F,G,J,K	<b>100, 250</b>

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  
**Examples:**  
 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)
0.063 ± 0.006 (1.60 ± 0.15)	0.032 ± 0.006 (0.81 ± 0.15)	0.035 MAX (0.89 MAX)	0.005 (0.127) min. band 0.020 (0.508) min. space

### 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
P	Yes	Conductive Epoxy	Palladium-Silver Non-Magnetic	Cure Epoxy as per Manufacturer's Spec.

Other terminations available. Please contact factory.

### Working Voltage

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

### Packaging Codes

1 = Tape and Reel  
 5 = Waffle Pack

Marking available upon request (extra cost)

RoHS Code	Compliant
N	No
C	Yes

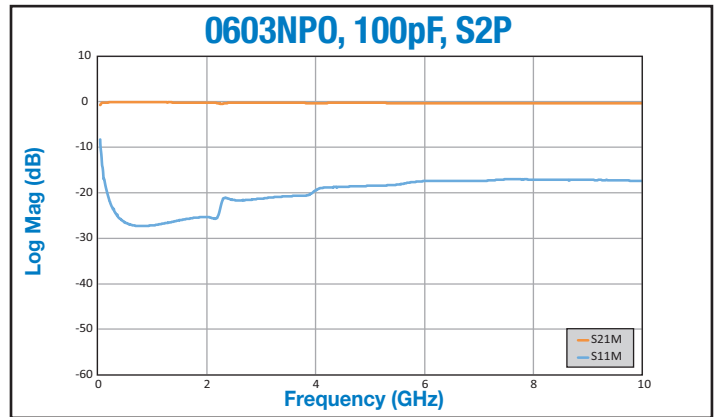
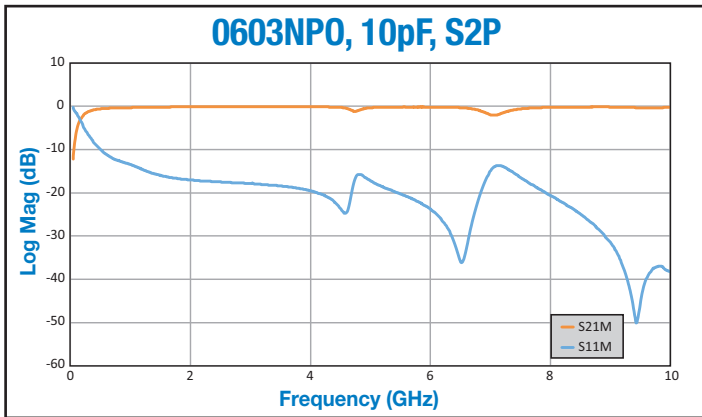
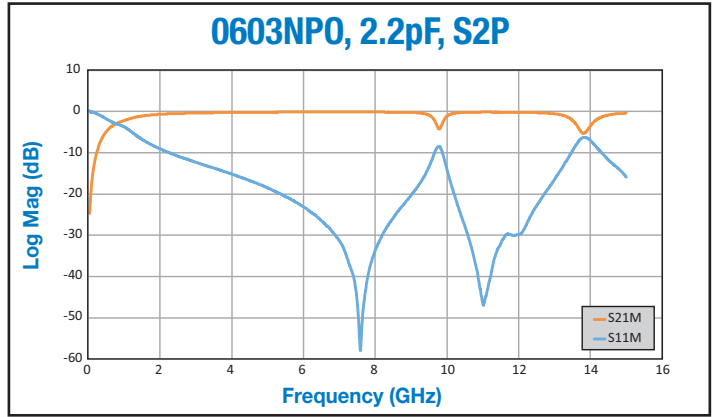
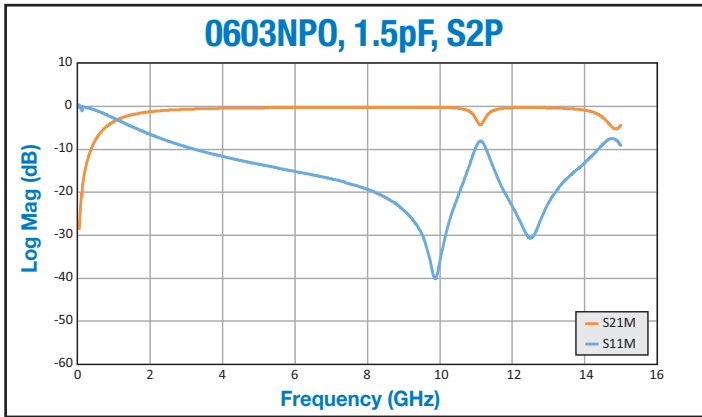
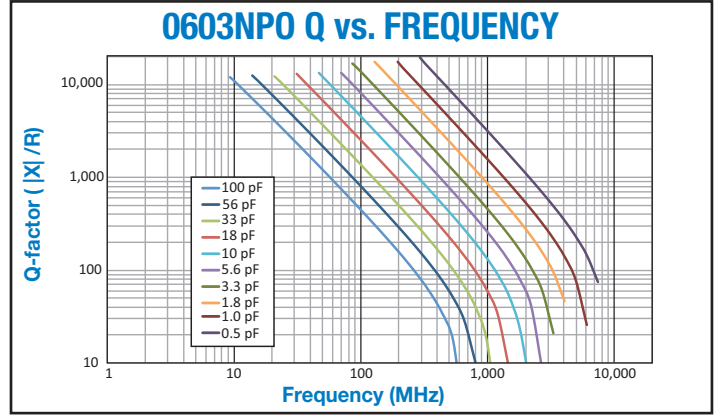
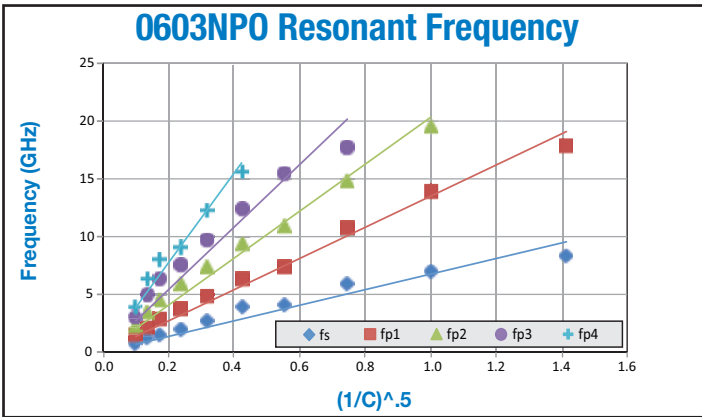
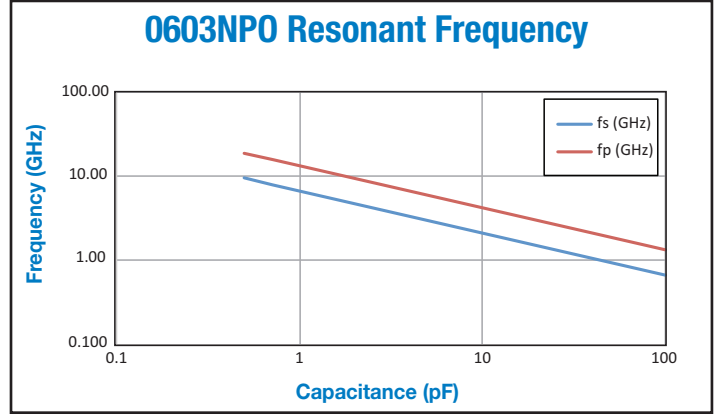
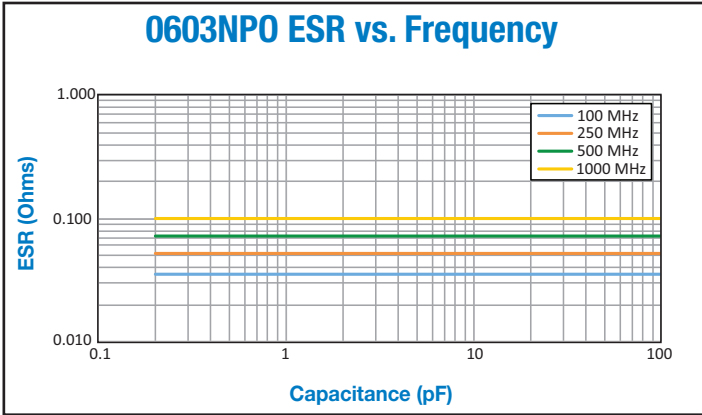
Call factory for digital copy of S2P files.

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)

0603	NPO	270	F	&	N	1	N	—
Size	Dielectric	Capacitance (27 pF)	Capacitance Tolerance (±1%)	Voltage (250V)	Termination (Plated SnPb)	Packaging (Tape & Reel)	Not RoHS Compliant	Design-In Code (See Page 19)

# 0603 NPO CERAMIC CAPACITORS PERFORMANCE CHARTS



Call factory for digital copy of the 0603 NPO 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.**