



0505 HIGH Q NPO CERAMIC CAPACITORS FOR RF & MICROWAVE

- Low ESR, High Q
- For Use Up to Ku-Band
- Superior Mechanical Strength
- Q = 10,000 at 1 MHz
- 100% Made in U.S.A.
- Suitable for Military and Space

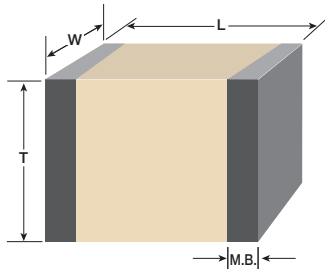
| PRESIDIO PART NUMBER | CAP. (pF) | TOL. | WVDC STD, EXT |
|----------------------|-----------|---------|---------------|
| 0505NPO05MAN1N- | 0.05 | M | 150, 250 |
| 0505NPO0R1_AN1N- | 0.1 | A,B | 150, 250 |
| 0505NPO0R2_AN1N- | 0.2 | A,B,C | 150, 250 |
| 0505NPO0R3_AN1N- | 0.3 | A,B,C | 150, 250 |
| 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

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) |
|--|----------------------------------|----------------------------|---|
| 0.055 + 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 |

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 | Palladium-Silver Non-Magnetic | Cure Epoxy as per Manufacturer's Spec. |
| X | Yes | Solder Reflow | 100% Tin Plated Non-Magnetic Barrier Silver Base | 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 |

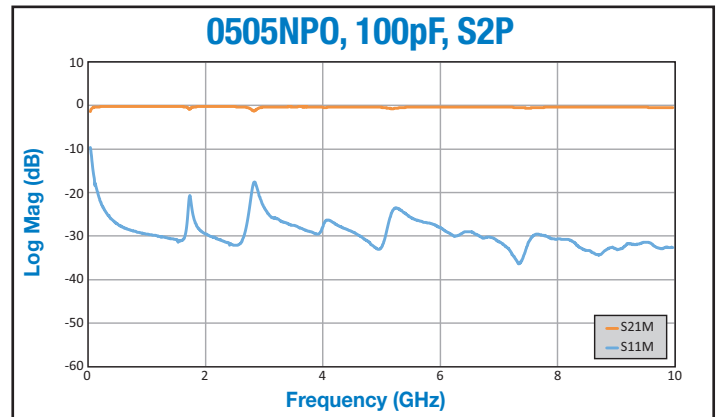
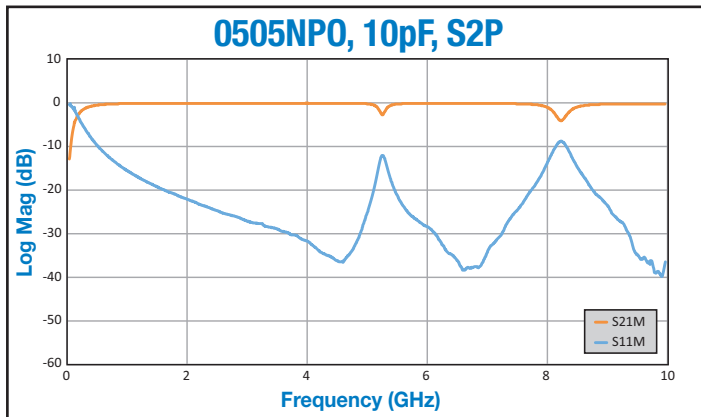
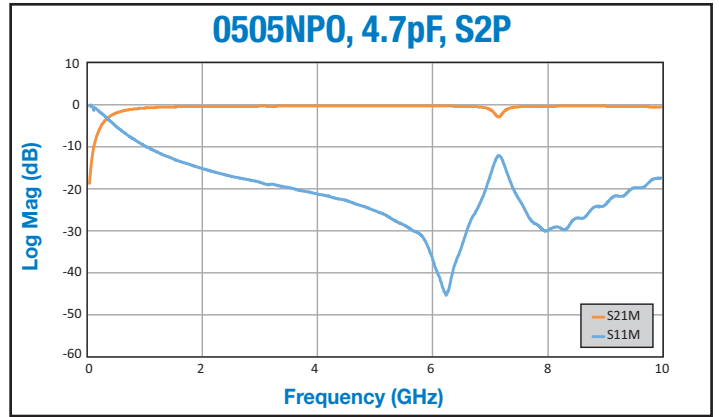
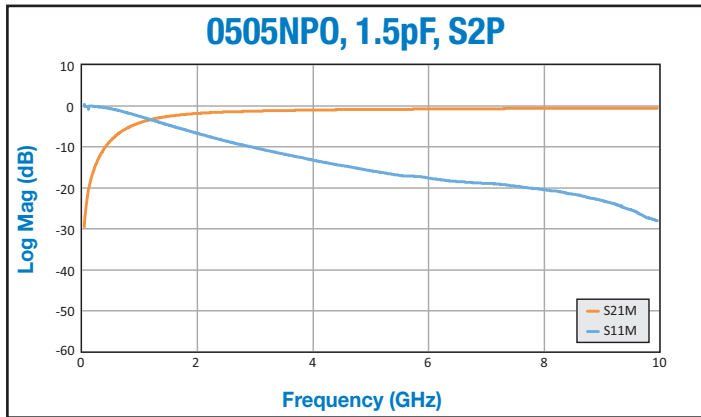
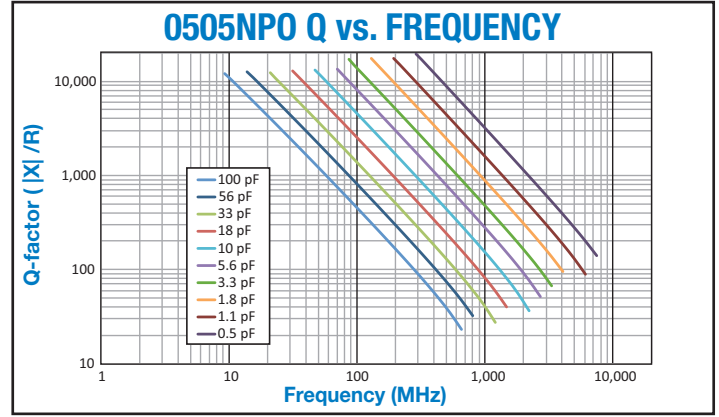
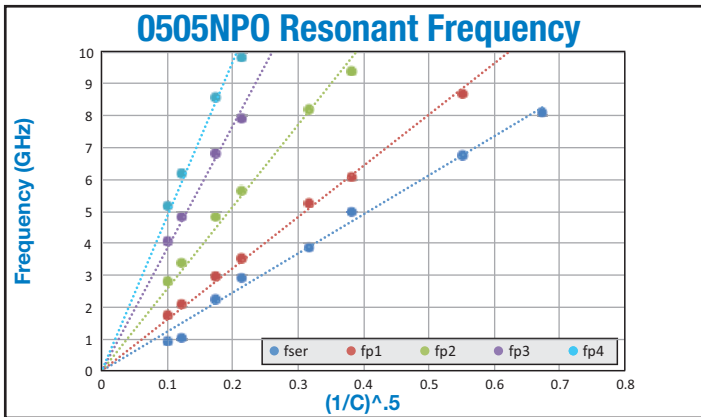
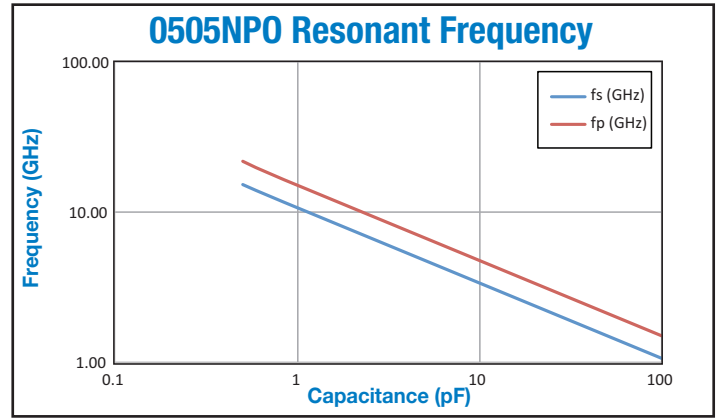
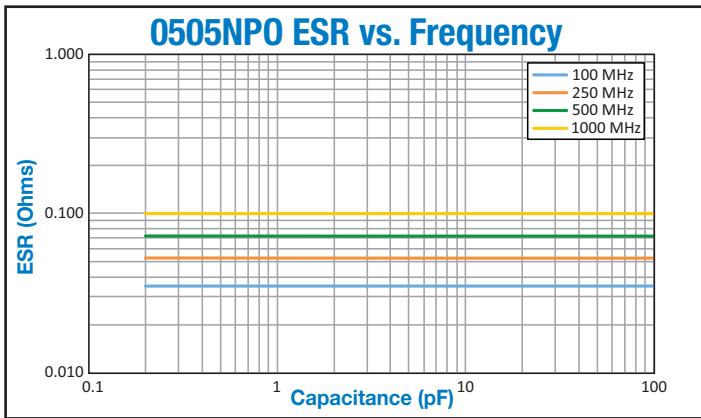
Presidio's NPO capacitors can be upscreened to SPACE LEVEL testing. Consult the factory for details. Some voltage derating may apply.

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 Page 19) |

0505 HIGH Q NPO CERAMIC CAPACITORS PERFORMANCE CHARTS



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



PRESIDIO COMPONENTS, INC.

7169 Construction Court, San Diego, CA 92121 • (858) 578-9390 • info@presidiocomponents.com