



## 0201 HIGH Q NPO CERAMIC CAPACITORS FOR RF & MICROWAVE

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

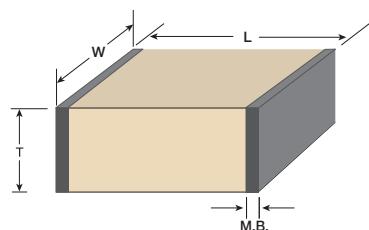
| PRESIDIO PART NUMBER | CAP. (pF) | TOL.    | WVDC |
|----------------------|-----------|---------|------|
| 0201NPO05M1N1N-      | 0.05      | M       | 25   |
| 0201NPO0R1_1N1N-     | 0.1       | A,B     | 25   |
| 0201NPO0R2_1N1N-     | 0.2       | A,B     | 25   |
| 0201NPO0R3_1N1N-     | 0.3       | A,B,C   | 25   |
| 0201NPO0R4_1N1N-     | 0.4       | A,B,C   | 25   |
| 0201NPO0R5_1N1N-     | 0.5       | A,B,C   | 25   |
| 0201NPO0R6_1N1N-     | 0.6       | A,B,C   | 25   |
| 0201NPO0R7_1N1N-     | 0.7       | A,B,C   | 25   |
| 0201NPO0R8_1N1N-     | 0.8       | A,B,C   | 25   |
| 0201NPO0R9_1N1N-     | 0.9       | A,B,C   | 25   |
| 0201NPO1R0_1N1N-     | 1.0       | A,B,C   | 25   |
| 0201NPO1R1_1N1N-     | 1.1       | A,B,C,D | 25   |
| 0201NPO1R2_1N1N-     | 1.2       | A,B,C,D | 25   |
| 0201NPO1R3_1N1N-     | 1.3       | A,B,C,D | 25   |
| 0201NPO1R5_1N1N-     | 1.5       | A,B,C,D | 25   |
| 0201NPO1R6_1N1N-     | 1.6       | A,B,C,D | 25   |
| 0201NPO1R8_1N1N-     | 1.8       | A,B,C,D | 25   |
| 0201NPO2R0_1N1N-     | 2.0       | A,B,C,D | 25   |
| 0201NPO2R2_1N1N-     | 2.2       | A,B,C,D | 25   |
| 0201NPO2R4_1N1N-     | 2.4       | A,B,C,D | 25   |

| PRESIDIO PART NUMBER | CAP. (pF) | TOL.    | WVDC |
|----------------------|-----------|---------|------|
| 0201NPO2R7_1N1N-     | 2.7       | A,B,C,D | 25   |
| 0201NPO3R0_1N1N-     | 3.0       | A,B,C,D | 25   |
| 0201NPO3R3_1N1N-     | 3.3       | A,B,C,D | 25   |
| 0201NPO3R6_1N1N-     | 3.6       | A,B,C,D | 25   |
| 0201NPO3R9_1N1N-     | 3.9       | A,B,C,D | 25   |
| 0201NPO4R3_1N1N-     | 4.3       | A,B,C,D | 25   |
| 0201NPO4R7_1N1N-     | 4.7       | A,B,C,D | 25   |
| 0201NPO5R1_1N1N-     | 5.1       | A,B,C,D | 25   |
| 0201NPO5R6_1N1N-     | 5.6       | A,B,C,D | 25   |
| 0201NPO6R2_1N1N-     | 6.2       | A,B,C,D | 25   |
| 0201NPO6R8_1N1N-     | 6.8       | A,B,C,D | 25   |
| 0201NPO7R5_1N1N-     | 7.5       | A,B,C,D | 25   |
| 0201NPO8R2_1N1N-     | 8.2       | A,B,C,D | 25   |
| 0201NPO9R1_1N1N-     | 9.1       | A,B,C,D | 25   |
| 0201NPO100_1N1N-     | 10        | F,G,J,K | 25   |
| 0201NPO110_1N1N-     | 11        | F,G,J,K | 25   |
| 0201NPO120_1N1N-     | 12        | F,G,J,K | 25   |
| 0201NPO130_1N1N-     | 13        | F,G,J,K | 25   |
| 0201NPO150_1N1N-     | 15        | F,G,J,K | 25   |
| 0201NPO160_1N1N-     | 16        | F,G,J,K | 25   |

| PRESIDIO PART NUMBER | CAP. (pF) | TOL.    | WVDC |
|----------------------|-----------|---------|------|
| 0201NPO180_1N1N-     | 18        | F,G,J,K | 25   |
| 0201NPO200_1N1N-     | 20        | F,G,J,K | 25   |
| 0201NPO220_1N1N-     | 22        | F,G,J,K | 25   |
| 0201NPO240_1N1N-     | 24        | F,G,J,K | 25   |
| 0201NPO270_1N1N-     | 27        | F,G,J,K | 25   |
| 0201NPO300_1N1N-     | 30        | F,G,J,K | 25   |
| 0201NPO330_1N1N-     | 33        | F,G,J,K | 25   |
| 0201NPO360_1N1N-     | 36        | F,G,J,K | 25   |
| 0201NPO390_1N1N-     | 39        | F,G,J,K | 25   |
| 0201NPO430_1N1N-     | 43        | F,G,J,K | 25   |
| 0201NPO470_1N1N-     | 47        | F,G,J,K | 25   |
| 0201NPO510_1N1N-     | 51        | F,G,J,K | 25   |
| 0201NPO560_1N1N-     | 56        | F,G,J,K | 25   |
| 0201NPO620_1N1N-     | 62        | F,G,J,K | 25   |
| 0201NPO680_1N1N-     | 68        | F,G,J,K | 25   |
| 0201NPO750_1N1N-     | 75        | F,G,J,K | 25   |
| 0201NPO820_1N1N-     | 82        | F,G,J,K | 25   |
| 0201NPO910_1N1N-     | 91        | F,G,J,K | 25   |
| 0201NPO101_1N1N-     | 100       | F,G,J,K | 25   |

### PART NUMBER CODES AND DIMENSIONS

For other cap values, tolerances and voltages contact factory.



#### 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)<br>INCH (mm)        | WIDTH (W)<br>INCH (mm)           | THICKNESS (T)<br>INCH (mm) | METALIZATION BAND (M.B.)<br>INCH (mm)             |
|--------------------------------|----------------------------------|----------------------------|---------------------------------------------------|
| 0.023 ± 0.002<br>(0.60 ± 0.05) | 0.0130 ± 0.002<br>(0.325 ± 0.05) | 0.013 MAX<br>(0.33) MAX    | 0.002 (0.10) min. band<br>0.008 (0.20) 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 Silver Base                        | 220°C to 260°C Typical                 |
| P    | Yes        | Conductive Epoxy    | <b>Palladium-Silver Non-Magnetic</b>               | Cure Epoxy as per Manufacturer's Spec. |

Other terminations available. Please contact factory.

#### Working Voltage

| Code | WVDC |
|------|------|
| 1    | 25   |

#### Packaging Codes

1 = Unmarked, Tape & Reel  
 5 = Unmarked, Waffle Pack

#### RoHS

| Code | Compliant |
|------|-----------|
| N    | No        |
| C    | Yes       |

### PART NUMBER EXAMPLE (How to Order)

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

| 0201 | NPO                     | 5R1                  | C                                | 1             | T                       | 1                       | C              | —                         |
|------|-------------------------|----------------------|----------------------------------|---------------|-------------------------|-------------------------|----------------|---------------------------|
| Size | Dielectric (High Q NPO) | Capacitance (5.1 pF) | Capacitance Tolerance (±0.25 pF) | Voltage (25V) | Termination (Plated Sn) | Packaging (Tape & Reel) | RoHS Compliant | Design-In Code (Optional) |

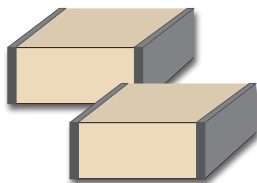


# PRESIDIO COMPONENTS

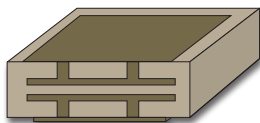
U.S. Manufacturer of High-Rel Ceramic Capacitors Since 1980

100% U.S. MADE • 100% U.S. OWNED

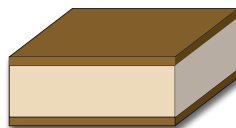
## HIGH RELIABILITY CERAMIC CAPACITORS



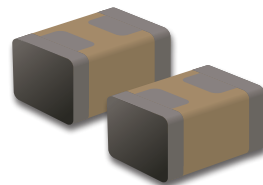
**HIGH Q NPO LOW ESR  
RF CAPACITORS**



**SMALLEST & MOST STABLE  
WIREBONDABLE SINGLE LAYER**



**BYPASS & BROADBAND  
VL/VB SERIES**



**BROADBAND DC BLOCK  
BB SERIES**



**10V to 10kV in Multiple Dielectrics  
X7R, BX, N2200, NPO**

**High Q NPO – Low ESR  
for RF Power Amplifiers & Filtering**

**QPL 'S' Level for CDR 11, 12, 13 & 14  
QML for DLA Dwg. 06019 & 06022**

**High Voltage & High Temperature  
GaN & SiC Applications**

**Smallest Most Stable Wirebondable  
Single Layer Capacitors**

**Wirebondable Bypass and Broadband  
Bypass VL/VB Series**

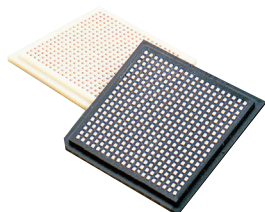
**Best in Class Broadband  
DC Block BB Series**

**Qualified Military and Space Supplier**

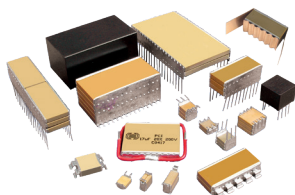
**MIL-PRF-123, -49467, -49470, -55681, -32535**

**MIL-STD-202 and MIL-STD-790**

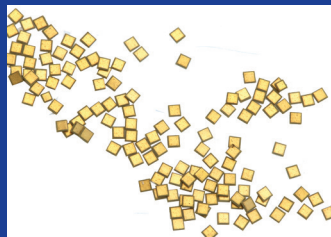
**NASA S311-P-829 is Part of EPPL2**



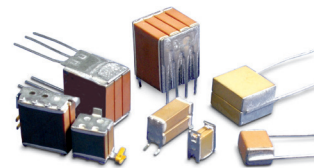
**CERAMIC CHIPS  
0201 to 2225**



**SMPS STACKS  
MIL-PRF-49470**



**WIREBONDABLE  
SINGLE LAYER**



**CUSTOM STACKED  
CUSTOM ASSEMBLY**