

# PRESIDIO ULTRA-PORCELAIN™ CAPACITORS

## SIZE 0505

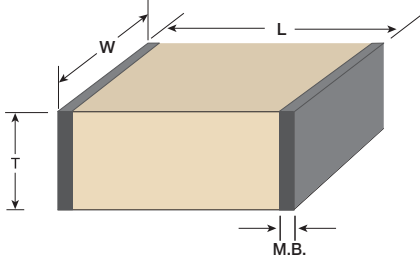
COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
0505UPR05MAT1C-*	0.05	M	150, 250
0505UP0R1_AT1C-*	0.1	A,B	150, 250
0505UP0R2_AT1C-*	0.2	A,B,C	150, 250
0505UP0R3_AT1C-*	0.3	A,B,C	150, 250
0505UP0R4_AT1C-*	0.4	A,B,C	150, 250
0505UP0R5_AT1C-*	0.5	A,B,C	150, 250
0505UP0R6_AT1C-*	0.6	A,B,C	150, 250
0505UP0R7_AT1C-*	0.7	A,B,C	150, 250
0505UP0R8_AT1C-*	0.8	A,B,C	150, 250
0505UP0R9_AT1C-*	0.9	A,B,C	150, 250
0505UP1R0_AT1C-*	1.0	A,B,C	150, 250
0505UP1R1_AT1C-*	1.1	A,B,C,D	150, 250
0505UP1R2_AT1C-*	1.2	A,B,C,D	150, 250
0505UP1R3_AT1C-*	1.3	A,B,C,D	150, 250
0505UP1R5_AT1C-*	1.5	A,B,C,D	150, 250
0505UP1R6_AT1C-*	1.6	A,B,C,D	150, 250
0505UP1R8_AT1C-*	1.8	A,B,C,D	150, 250
0505UP2R0_AT1C-*	2.0	A,B,C,D	150, 250
0505UP2R2_AT1C-*	2.2	A,B,C,D	150, 250
0505UP2R4_AT1C-*	2.4	A,B,C,D	150, 250
0505UP2R7_AT1C-*	2.7	A,B,C,D	150, 250
0505UP3R0_AT1C-*	3.0	A,B,C,D	150, 250
0505UP3R3_AT1C-*	3.3	A,B,C,D	150, 250
0505UP3R6_AT1C-*	3.6	A,B,C,D	150, 250
0505UP3R9_AT1C-*	3.9	A,B,C,D	150, 250
0505UP4R3_AT1C-*	4.3	A,B,C,D	150, 250
0505UP4R7_AT1C-*	4.7	A,B,C,D	150, 250
0505UP5R1_AT1C-*	5.1	A,B,C,D	150, 250

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
0505UP5R6_AT1C-*	5.6	A,B,C	150, 250
0505UP6R2_AT1C-*	6.2	A,B,C	150, 250
0505UP6R8_AT1C-*	6.8	A,B,C	150, 250
0505UP7R5_AT1C-*	7.5	A,B,C,D	150, 250
0505UP8R2_AT1C-*	8.2	A,B,C,D	150, 250
0505UP9R1_AT1C-*	9.1	A,B,C,D	150, 250
0505UP100_AT1C-*	10	F,G,J,K	150, 250
0505UP110_AT1C-*	11	F,G,J,K	150, 250
0505UP120_AT1C-*	12	F,G,J,K	150, 250
0505UP130_AT1C-*	13	F,G,J,K	150, 250
0505UP150_AT1C-*	15	F,G,J,K	150, 250
0505UP160_AT1C-*	16	F,G,J,K	150, 250
0505UP180_AT1C-*	18	F,G,J,K	150, 250
0505UP200_AT1C-*	20	F,G,J,K,M	150, 250
0505UP220_AT1C-*	22	F,G,J,K,M	150, 250
0505UP240_AT1C-*	24	F,G,J,K,M	150, 250
0505UP270_AT1C-*	27	F,G,J,K,M	150, 250
0505UP300_AT1C-*	30	F,G,J,K,M	150, 250
0505UP330_AT1C-*	33	F,G,J,K,M	150, 250
0505UP360_AT1C-*	36	F,G,J,K,M	150, 250
0505UP390_AT1C-*	39	F,G,J,K,M	150, 250
0505UP430_AT1C-*	43	F,G,J,K,M	150, 250
0505UP470_AT1C-*	47	F,G,J,K,M	150, 250
0505UP510_AT1C-*	51	F,G,J,K,M	150, 250
0505UP560_AT1C-*	56	F,G,J,K,M	150, 250
0505UP620_AT1C-*	62	F,G,J,K,M	150, 250
0505UP680_AT1C-*	68	F,G,J,K,M	150, 250
0505UP750_AT1C-*	75	F,G,J,K,M	150, 250

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
0505UP820_AT1C-*	82	F,G,J,K,M	150, 250
0505UP910_AT1C-*	91	F,G,J,K,M	150, 250
0505UP101_AT1C-*	100	F,G,J,K,M	150, 250
0505NPO111_AT1C-*	110	F,G,J,K,M	150
0505NPO121_AT1C-*	120	F,G,J,K,M	150
0505NPO131_AT1C-*	130	F,G,J,K,M	150
0505NPO151_AT1C-*	150	F,G,J,K,M	150
0505NPO161_AT1C-*	160	F,G,J,K,M	150
0505NPO181_AT1C-*	180	F,G,J,K,M	150
0505NPO201_AT1C-*	200	F,G,J,K,M	150
0505NPO221_AT1C-*	220	F,G,J,K,M	150
0505NPO241_AT1C-*	240	F,G,J,K,M	150
0505NPO271_AT1C-*	270	F,G,J,K,M	150
0505NPO301_AT1C-*	300	F,G,J,K,M	150
0505NPO331_AT1C-*	330	F,G,J,K,M	150
0505NPO361_AT1C-*	360	F,G,J,K,M	150
0505NPO391_AT1C-*	390	F,G,J,K,M	150
0505NPO431_AT1C-*	430	F,G,J,K,M	150
0505NPO471_AT1C-*	470	F,G,J,K,M	150
0505NPO511_AT1C-*	510	F,G,J,K,M	150
0505NPO561_AT1C-*	560	F,G,J,K,M	150
0505NPO621_AT1C-*	620	F,G,J,K,M	150
0505NPO681_2T1C-*	680	F,G,J,K,M	50
0505NPO751_2T1C-*	750	F,G,J,K,M	50
0505NPO821_2T1C-*	820	F,G,J,K,M	50
0505NPO911_2T1C-*	910	F,G,J,K,M	50
0505NPO102_2T1C-*	1000	F,G,J,K,M	50

For other cap values contact factory.  
Voltages in **BOLD** 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:** 100 = 10 pF  
 102 = 1,000 pF  
 104 = 100,000 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.
T	Yes	Solder Reflow	100% Tin Plated Nickel 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.
M	Yes	Solder Reflow	100% Tin Plated Non-Magnetic	220°C to 260°C Typical*

#### Working Voltage

Code	WVDC	Code	WVDC
1	25	9	1000
2	50	N	1500
3	100	P	2000
A	150	Q	2500
4	200	R	3000
&	250	S	3600
5	300	U	5000
6	500	+	7200
#	800		

#### Packaging Codes

1 = Tape and Reel  
 2 = Tape and Reel with Marking  
 5 = Waffle Pack  
 6 = Waffle Pack with Marking

**RoHS**

Code	Compliant
N	No
R	Legacy (Ended 2012)
C	Yes (Started 1/2013)

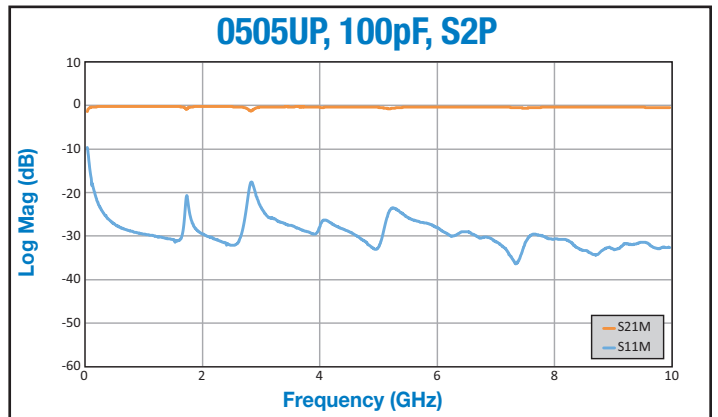
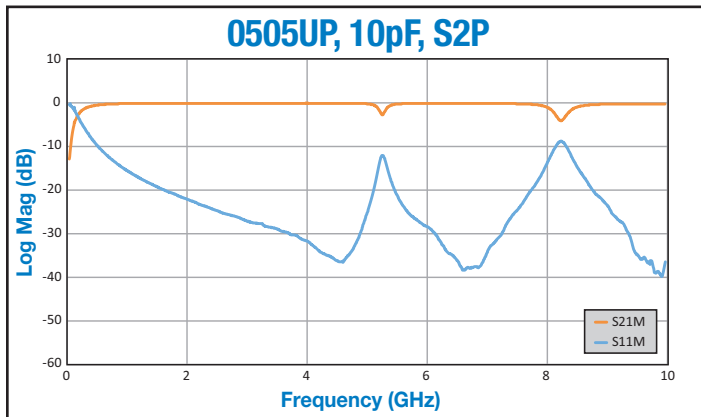
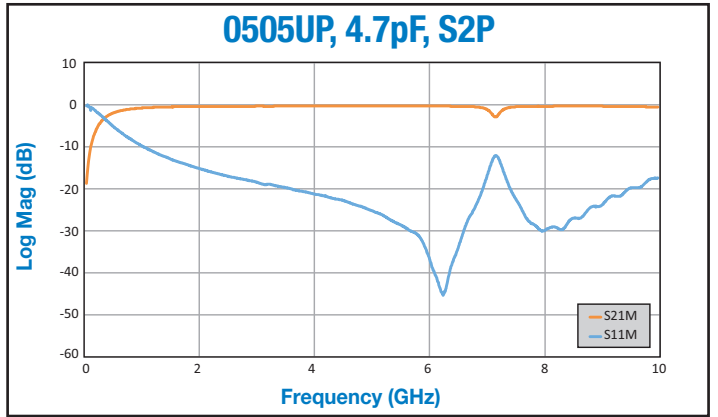
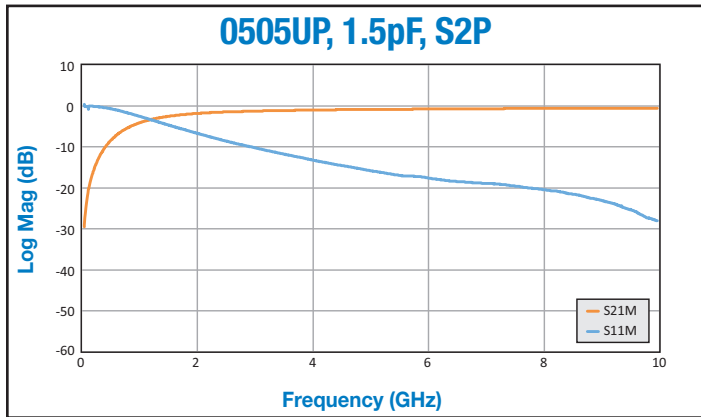
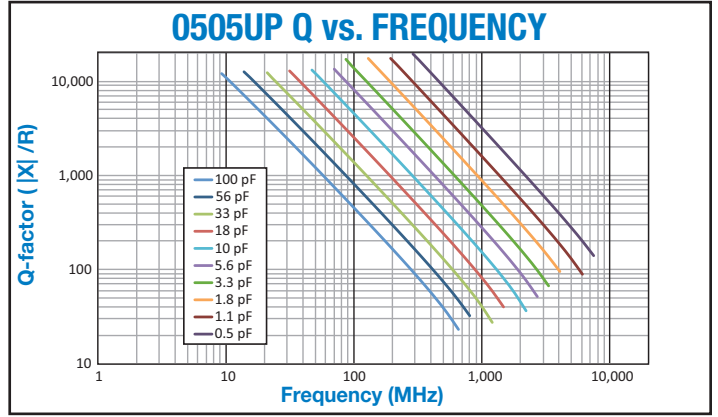
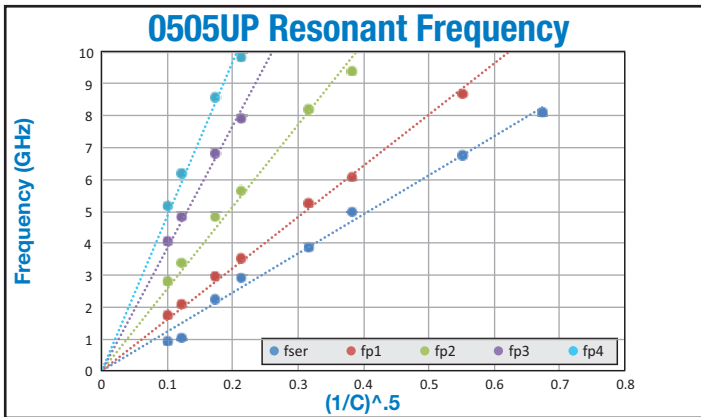
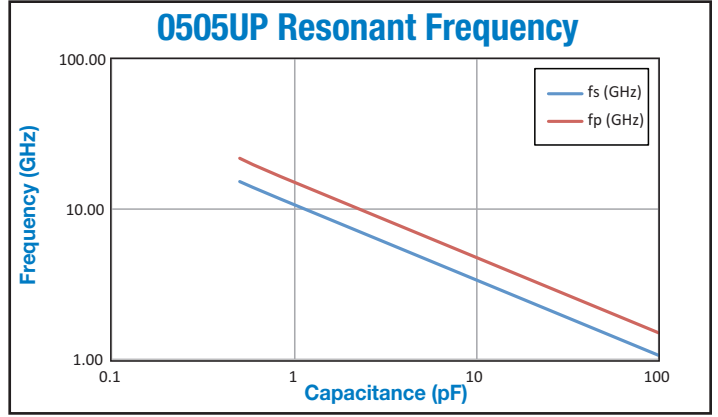
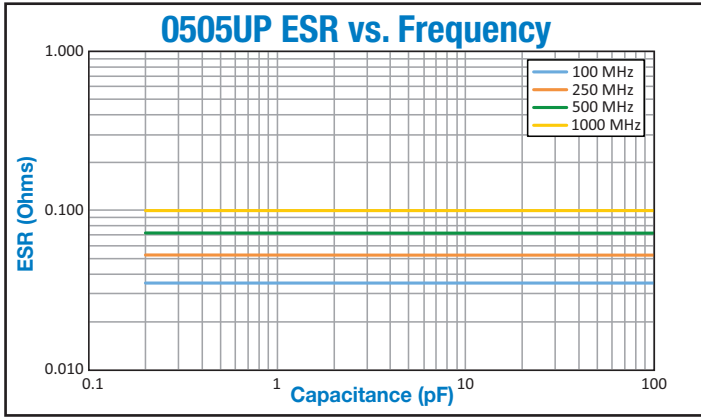
Presidio's UP capacitors can be upscreened to SPACE LEVEL testing. Consult the factory for details. Some voltage derating may apply.

### COMMERCIAL PART NUMBER EXAMPLE (How to Order)

0505	UP	101	J	&	T	1	C	A
Size	Dielectric (See Page 3)	Capacitance	Capacitance Tolerance	Voltage 250 V	Termination	Packaging	RoHS Compliant	Design-In Code (See Page 19)

# PRESIDIO ULTRA-PORCELAIN™ CAPACITORS

## 0505 PERFORMANCE CHARTS



Call factory for digital copy of the 0505UP S21P files.



PRESIDIO COMPONENTS, INC.

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

# 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:**  
**0505UP101JAT1CA**

**PART DESCRIPTION: Ceramic Capacitor, 0505, Ultra-Porcelain™, 100pF ± 5%, 150 VDC, Tin, Tape and Reel, RoHS, Design-In Code A for Washington State.**