

# PRESIDIO ULTRA-PORCELAIN™ CAPACITORS

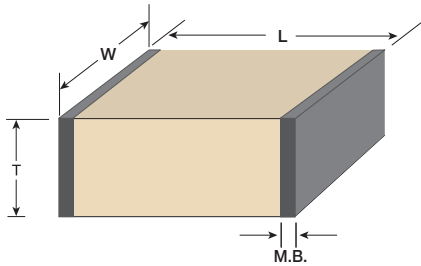
## SIZE 1010

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
1010UP0R1_6T1C~*	0.1	A,B	500,1500
1010UP0R2_6T1C~*	0.2	A,B	500,1500
1010UP0R3_6T1C~*	0.3	A,B,C	500,1500
1010UP0R4_6T1C~*	0.4	A,B,C	500,1500
1010UP0R5_6T1C~*	0.5	A,B,C	500,1500
1010UP0R6_6T1C~*	0.6	A,B,C	500,1500
1010UP0R7_6T1C~*	0.7	A,B,C	500,1500
1010UP0R8_6T1C~*	0.8	A,B,C	500,1500
1010UP0R9_6T1C~*	0.9	A,B,C	500,1500
1010UP1R0_6T1C~*	1.0	A,B,C	500,1500
1010UP1R1_6T1C~*	1.1	A,B,C,D	500,1500
1010UP1R2_6T1C~*	1.2	A,B,C,D	500,1500
1010UP1R3_6T1C~*	1.3	A,B,C,D	500,1500
1010UP1R5_6T1C~*	1.5	A,B,C,D	500,1500
1010UP1R6_6T1C~*	1.6	A,B,C,D	500,1500
1010UP1R8_6T1C~*	1.8	A,B,C,D	500,1500
1010UP2R0_6T1C~*	2.0	A,B,C,D	500,1500
1010UP2R2_6T1C~*	2.2	A,B,C,D	500,1500
1010UP2R4_6T1C~*	2.4	A,B,C,D	500,1500
1010UP2R7_6T1C~*	2.7	A,B,C,D	500,1500
1010UP3R0_6T1C~*	3.0	A,B,C,D	500,1500
1010UP3R3_6T1C~*	3.3	A,B,C,D	500,1500
1010UP3R6_6T1C~*	3.6	A,B,C,D	500,1500
1010UP3R9_6T1C~*	3.9	A,B,C,D	500,1500
1010UP4R3_6T1C~*	4.3	A,B,C,D	500,1500
1010UP4R7_6T1C~*	4.7	A,B,C,D	500,1500
1010UP5R1_6T1C~*	5.1	A,B,C,D	500,1500
1010UP5R6_6T1C~*	5.6	A,B,C,D	500,1500
1010UP6R2_6T1C~*	6.2	A,B,C,D	500,1500
1010UP6R8_6T1C~*	6.8	A,B,C,D	500,1500
1010UP7R5_6T1C~*	7.5	A,B,C,D	500,1500

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
1010UP8R2_6T1C~*	8.2	A,B,C,D	500,1500
1010UP9R1_6T1C~*	9.1	A,B,C,D	500,1500
1010UP100_6T1C~*	10	F,G,J,K,M	500,1500
1010UP110_6T1C~*	11	F,G,J,K,M	500,1500
1010UP120_6T1C~*	12	F,G,J,K,M	500,1500
1010UP130_6T1C~*	13	F,G,J,K,M	500,1500
1010UP150_6T1C~*	15	F,G,J,K,M	500,1500
1010UP160_6T1C~*	16	F,G,J,K,M	500,1500
1010UP180_6T1C~*	18	F,G,J,K,M	500,1500
1010UP200_6T1C~*	20	F,G,J,K,M	500,1500
1010UP220_6T1C~*	22	F,G,J,K,M	500,1500
1010UP240_6T1C~*	24	F,G,J,K,M	500,1500
1010UP270_6T1C~*	27	F,G,J,K,M	500,1500
1010UP300_6T1C~*	30	F,G,J,K,M	500,1500
1010UP330_6T1C~*	33	F,G,J,K,M	500,1500
1010UP360_6T1C~*	36	F,G,J,K,M	500,1500
1010UP390_6T1C~*	39	F,G,J,K,M	500,1500
1010UP430_6T1C~*	43	F,G,J,K,M	500,1500
1010UP470_6T1C~*	47	F,G,J,K,M	500,1500
1010UP510_6T1C~*	51	F,G,J,K,M	500,1500
1010UP560_6T1C~*	56	F,G,J,K,M	500,1500
1010UP620_6T1C~*	62	F,G,J,K,M	500,1500
1010UP680_6T1C~*	68	F,G,J,K,M	500,1500
1010UP750_6T1C~*	75	F,G,J,K,M	500,1500
1010UP820_6T1C~*	82	F,G,J,K,M	500,1500
1010UP910_6T1C~*	91	F,G,J,K,M	500,1500
1010UP101_6T1C~*	100	F,G,J,K,M	500,1500
1010UP111_5T1C~*	110	F,G,J,K,M	300,1500
1010UP121_5T1C~*	120	F,G,J,K,M	300,1000
1010UP131_5T1C~*	130	F,G,J,K,M	300,1000
1010UP151_5T1C~*	150	F,G,J,K,M	300,1000

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
1010UP161_5T1C~*	160	F,G,J,K,M	300,1000
1010UP181_5T1C~*	180	F,G,J,K,M	300,1000
1010UP201_5T1C~*	200	F,G,J,K,M	300,1000
1010UP221_4T1C~*	220	F,G,J,K,M	200,1000
1010UP241_4T1C~*	240	F,G,J,K,M	200,600
1010UP271_4T1C~*	270	F,G,J,K,M	200,600
1010UP301_4T1C~*	300	F,G,J,K,M	200,600
1010UP331_4T1C~*	330	F,G,J,K,M	200,600
1010UP361_4T1C~*	360	F,G,J,K,M	200,600
1010UP391_4T1C~*	390	F,G,J,K,M	200,600
1010UP431_4T1C~*	430	F,G,J,K,M	200,600
1010UP471_4T1C~*	470	F,G,J,K,M	200,600
1010UP511_3T1C~*	510	F,G,J,K,M	100,300
1010UP561_3T1C~*	560	F,G,J,K,M	100,300
1010UP621_3T1C~*	620	F,G,J,K,M	100,300
1010UP681_2T1C~*	680	F,G,J,K,M	50,300
1010UP751_2T1C~*	750	F,G,J,K,M	50,300
1010UP821_2T1C~*	820	F,G,J,K,M	50,300
1010UP911_2T1C~*	910	F,G,J,K,M	50,300
1010UP102_2T1C~*	1000	F,G,J,K,M	50,300
1010NPO122_2T1C~*	1200	F,G,J,K,M	50
1010NPO152_2T1C~*	1500	F,G,J,K,M	50
1010NPO182_2T1C~*	1800	F,G,J,K,M	50
1010NPO222_2T1C~*	2200	F,G,J,K,M	50
1010NPO272_2T1C~*	2700	F,G,J,K,M	50
1010NPO332_2T1C~*	3300	F,G,J,K,M	50
1010NPO392_2T1C~*	3900	F,G,J,K,M	50
1010NPO472_2T1C~*	4700	F,G,J,K,M	50
1010NPO562_2T1C~*	5600	F,G,J,K,M	50

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



### 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)
0.110 + 0.020/ - 0.010 (2.794 + 0.508/ - 0.254)	0.110 ± 0.015 (2.794 ± 0.381)	0.102 MAX (2.591 MAX)	0.005 to 0.030 (0.127 to 0.762)

### 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.

### Working Voltage

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

### Packaging Codes

1 = Tape and Reel  
 5 = Waffle Pack

### RoHS

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

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

1010	UP	101	J	6	T	1	C	A
Size	Dielectric (See Page 3)	Capacitance	Capacitance Tolerance	Voltage	Termination	Packaging	RoHS Compliant	Design-In Code (See Page 19)

# 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.