

# PRESIDIO ULTRA-PORCELAIN™ CAPACITORS

## SIZE 3838

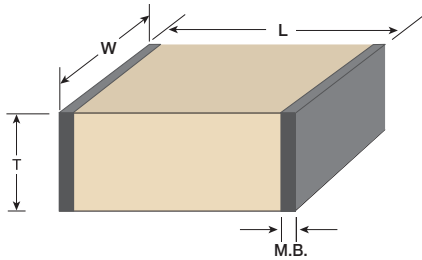
COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
3838UP1R0_ST1C-*	1.0	B,C,D	<b>3.6K</b> , 7.2K
3838UP1R1_ST1C-*	1.1	B,C,D	<b>3.6K</b> , 7.2K
3838UP1R2_ST1C-*	1.2	B,C,D	<b>3.6K</b> , 7.2K
3838UP1R3_ST1C-*	1.3	B,C,D	<b>3.6K</b> , 7.2K
3838UP1R5_ST1C-*	1.5	B,C,D	<b>3.6K</b> , 7.2K
3838UP1R6_ST1C-*	1.6	B,C,D	<b>3.6K</b> , 7.2K
3838UP1R8_ST1C-*	1.8	B,C,D	<b>3.6K</b> , 7.2K
3838UP2R0_ST1C-*	2.0	B,C,D	<b>3.6K</b> , 7.2K
3838UP2R2_ST1C-*	2.2	B,C,D	<b>3.6K</b> , 7.2K
3838UP2R4_ST1C-*	2.4	B,C,D	<b>3.6K</b> , 7.2K
3838UP2R7_ST1C-*	2.7	B,C,D	<b>3.6K</b> , 7.2K
3838UP3R0_ST1C-*	3.0	B,C,D	<b>3.6K</b> , 7.2K
3838UP3R3_ST1C-*	3.3	B,C,D	<b>3.6K</b> , 7.2K
3838UP3R6_ST1C-*	3.6	B,C,D	<b>3.6K</b> , 7.2K
3838UP3R9_ST1C-*	3.9	B,C,D	<b>3.6K</b> , 7.2K
3838UP4R3_ST1C-*	4.3	B,C,D	<b>3.6K</b> , 7.2K
3838UP4R7_ST1C-*	4.7	B,C,D	<b>3.6K</b> , 7.2K
3838UP5R1_ST1C-*	5.1	B,C,D	<b>3.6K</b> , 7.2K
3838UP5R6_ST1C-*	5.6	B,C,D	<b>3.6K</b> , 7.2K
3838UP6R2_ST1C-*	6.2	B,C,D	<b>3.6K</b> , 7.2K
3838UP6R8_ST1C-*	6.8	B,C,D	<b>3.6K</b> , 7.2K
3838UP7R5_ST1C-*	7.5	B,C,D	<b>3.6K</b> , 7.2K
3838UP8R2_ST1C-*	8.2	B,C,D	<b>3.6K</b> , 7.2K
3838UP9R1_ST1C-*	9.1	B,C,D	<b>3.6K</b> , 7.2K
3838UP100_ST1C-*	10	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP110_ST1C-*	11	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP120_ST1C-*	12	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP130_ST1C-*	13	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP150_ST1C-*	15	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP160_ST1C-*	16	F,G,J,K,M	<b>3.6K</b> , 7.2K

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
3838UP180_ST1C-*	18	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP200_ST1C-*	20	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP220_ST1C-*	22	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP240_ST1C-*	24	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP270_ST1C-*	27	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP300_ST1C-*	30	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP330_ST1C-*	33	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP360_ST1C-*	36	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP390_ST1C-*	39	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP430_ST1C-*	43	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP470_ST1C-*	47	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP510_ST1C-*	51	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP560_ST1C-*	56	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP620_ST1C-*	62	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP680_ST1C-*	68	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP750_ST1C-*	75	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP820_ST1C-*	82	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP910_ST1C-*	91	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP101_ST1C-*	100	F,G,J,K,M	<b>3.6K</b> , 7.2K
3838UP111_ST1C-*	110	F,G,J,K,M	<b>3.6K</b> , 5.0K
3838UP121_ST1C-*	120	F,G,J,K,M	<b>3.6K</b> , 5.0K
3838UP131_ST1C-*	130	F,G,J,K,M	<b>3.6K</b> , 5.0K
3838UP151_ST1C-*	150	F,G,J,K,M	<b>3.6K</b> , 5.0K
3838UP161_ST1C-*	160	F,G,J,K,M	<b>3.6K</b> , 5.0K
3838UP181_ST1C-*	180	F,G,J,K,M	<b>3.6K</b> , 5.0K
3838UP201_ST1C-*	200	F,G,J,K,M	<b>3.6K</b> , 5.0K
3838UP221_ST1C-*	220	F,G,J,K,M	<b>3600</b>
3838UP241_ST1C-*	240	F,G,J,K,M	<b>3600</b>
3838UP271_ST1C-*	270	F,G,J,K,M	<b>3600</b>
3838UP301_ST1C-*	300	F,G,J,K,M	<b>3600</b>

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
3838UP331_ST1C-*	330	F,G,J,K,M	<b>3600</b>
3838UP361_ST1C-*	360	F,G,J,K,M	<b>3600</b>
3838UP391_ST1C-*	390	F,G,J,K,M	<b>3600</b>
3838UP431_QT1C-*	430	F,G,J,K,M	<b>2500</b>
3838UP471_QT1C-*	470	F,G,J,K,M	<b>2500</b>
3838UP511_QT1C-*	510	F,G,J,K,M	<b>2500</b>
3838UP561_QT1C-*	560	F,G,J,K,M	<b>2500</b>
3838UP621_QT1C-*	620	F,G,J,K,M	<b>2500</b>
3838UP681_QT1C-*	680	F,G,J,K,M	<b>2500</b>
3838UP751_QT1C-*	750	F,G,J,K,M	<b>2500</b>
3838UP821_9T1C-*	820	F,G,J,K,M	<b>1000</b>
3838UP911_9T1C-*	910	F,G,J,K,M	<b>1000</b>
3838UP102_9T1C-*	1000	F,G,J,K,M	<b>1000</b>
3838NPO122_9T1C-*	1200	F,G,J,K,M	<b>1000</b>
3838NPO152_9T1C-*	1500	F,G,J,K,M	<b>1000</b>
3838NPO182_9T1C-*	1800	F,G,J,K,M	<b>1000</b>
3838NPO222_9T1C-*	2200	F,G,J,K,M	<b>1000</b>
3838NPO272_6T1C-*	2700	F,G,J,K,M	<b>500</b>
3838NPO332_6T1C-*	3300	F,G,J,K,M	<b>500</b>
3838NPO392_6T1C-*	3900	F,G,J,K,M	<b>500</b>
3838NPO472_6T1C-*	4700	F,G,J,K,M	<b>500</b>
3838NPO562_4T1C-*	5600	G,J,K,M	<b>200</b>
3838NPO682_4T1C-*	6800	G,J,K,M	<b>200</b>
3838NPO822_4T1C-*	8200	G,J,K,M	<b>200</b>
3838NPO103_4T1C-*	10,000	G,J,K,M	<b>200</b>

Voltages in **BOLD** for Hi-Rel.

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



### 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
B	± 0.1 pF	< 10 pF
C	± 0.25 pF	< 10 pF
D	± 0.5 pF	< 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)
0.380 ± 0.020 (9.652 ± 0.508)	0.380 ± 0.020 (9.652 ± 0.508)	0.190 MAX (4.822 MAX)	0.010 to 0.040 (0.254 to 1.016)

### 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
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)

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

3838	UP	101	J	S	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.