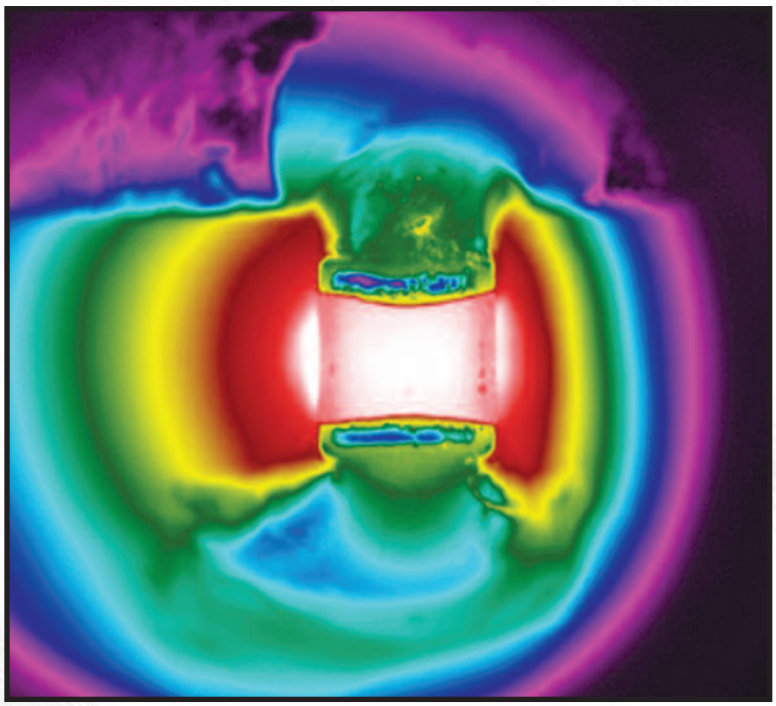
PRESIDIO COMPONENTS, INC.

ULTRA-PORCELAIN™ RF CAPACITORS



VERY COOL PERFORMANCE WITH RF POWER

CATALOG 7100
REV. F

SURFACE MOUNT
ULTRA PORCELAIN™ CAPACITORS

PRESIDIO ADVANTAGE

- Ultra Lowest ESL
- Ultra Combination of ESR and Q
- Ultra Stable Over Time — No Aging
- Amplified High Power Tuning
- High Reliability – Low Profile
- Ultra Highest Q
- Ultra Stable NPO
- Ultra Compliant — Strontium Free
- Matching Oscillator Design
- Typical Designs from DC to 6 GHz+

DIELECTRIC

Porcelain UP: Ultra temperature stable dielectric. Extremely low ESR. For RF power and high Q applications.

Porcelain P90: Dielectric increases over temperature (90ppm/C). Extremely low ESR. For temperature compensation.

Ceramic NPO: Ultra temperature stable dielectric. Low ESR. Suited for higher capacitance applications.

Ceramic BX: Temperature stable X7R dielectric. Suited for highest capacitance value applications.

HI-REL SPACE APPLICATIONS

For information on our Ultra-Porcelain™ Hi-Rel Capacitors for Space
See Pages 16 and 17

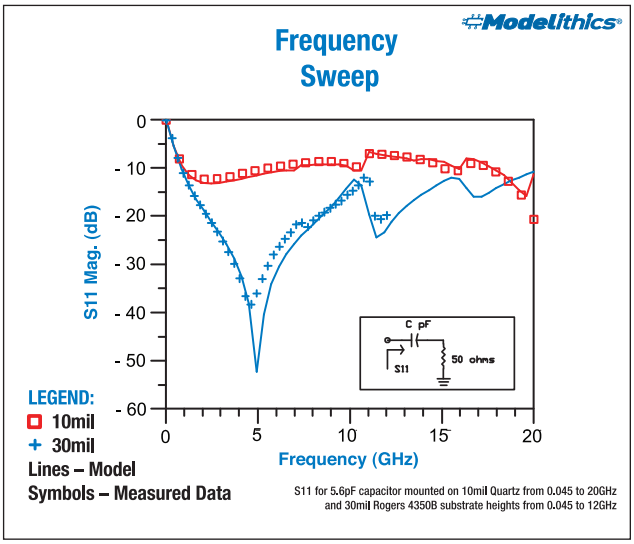
TYPICAL APPLICATIONS

Filter Capacitors

A filter design requires a specific capacitance value, cF, and at the upper end of the filter response, fF, the effective capacity must not exceed cF by more than a specified amount of delta C. Once cF is determined, case size, voltage rating and temperature characteristics can be selected.

DC Block and RF Bypass

The bandwidth over which the insertion loss meets specification is determined by the location of parallel resonances. Minimum insertion loss at the band center is achieved by choosing a capacitor whose lowest series resonance is approximately at this frequency. Low impedance is typically more important than the capacitance value.



Low Noise Applications

Dissipation loss is the consideration. ESR is very small at the series resonance, very large at the parallel resonance. The neighboring parallel resonances determine the bandwidth.

Presidio's capacitors are available in various screening levels from Commercial to Space Grade (See Page15).

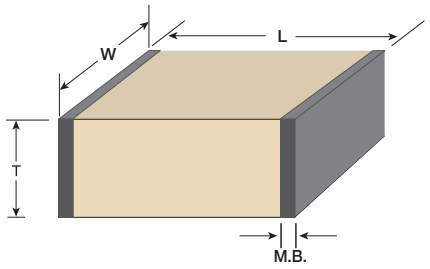
Front Cover: Thermal image of 0505 10pF during RF Power Test

PRESIDIO COMPONENTS, INC.
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www.presidiocomponents.com • info@presidiocomponents.com

COMMERCIAL & HIGH RELIABILITY PART NUMBERS
RF, MICROWAVE & POWER

Specifications

ELECTRICAL SPECIFICATIONS	UP Dielectric Code: UP	P90 Dielectric Code: P90	NPO Dielectric Code: NPO	X7R Dielectric Code: X7R	Testing Method MIL-STD-55681
Temperature Coefficient of Capacitance, 0 Volt	0 ± 30 ppm/°C	90 ± 20 ppm/°C	0 ± 30 ppm/°C	± 15%	Para 3.23
Typical Q	20,000	20,000	2,000	80 (1kHz)	
Rated Operating Temperature Range	-55° to +125° C	-55° to +125° C	-55° to +125° C	-55° to +125° C	Para 3.14
Capacitance up to 1000pF	1 MHz, 1.0 V AC RMS	1 MHz, 1.0 V AC RMS	1 MHz, 1.0 V AC RMS		Para 3.7
Capacitance >1000pF	1 kHz, 1.0 V AC RMS	1 kHz, 1.0 V AC RMS	1 kHz, 1.0 V AC RMS	1 kHz, 1.0 V AC RMS	
Dissipation Factor, max.	0.05% max.	0.05% max.	0.15% max.	2.5% max.	Para 3.8
Insulation Resistance @ +25° C at WVDC	1,000,000 MΩ min.	1,000,000 MΩ min.	100,000 MΩ min.	1,000 MΩ Farad	Para 3.9
Insulation Resistance @ +125° C at WVDC	100,000 MΩ min.	100,000 MΩ min.	10,000 MΩ min.	100 MΩ Farad	Para 3.12
Dielectric Withstanding Voltage (DWV)	250% of WVDC ≤ 300V 200% of WVDC = 500V	250% of WVDC ≤ 300V 200% of WVDC = 500V	250% of WVDC ≤ 300V 200% of WVDC = 500V	250% of WVDC ≤ 300V 200% of WVDC = 500V	
Aging Effects	None	None	None	2.5% max/decade hr	



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

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)

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	K	2	T	1	C	A
Size	Dielectric (See Above)	Capacitance	Capacitance Tolerance	Voltage	Termination	Packaging	RoHS Compliant	Design-In Code (See Page 19)

PRESIDIO COMPONENTS, INC.
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PRESIDIO ULTRA-PORCELAIN™ CAPACITORS
SIZE 0402

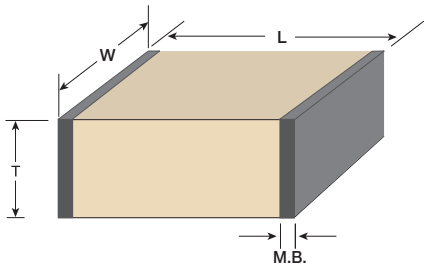
COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC
0402UPR05M4T1C–*	0.05	M	200
0402UP0R1_4T1C–*	0.1	A,B	200
0402UP0R2_4T1C–*	0.2	A,B	200
0402UP0R3_4T1C–*	0.3	A,B,C	200
0402UP0R4_4T1C–*	0.4	A,B,C	200
0402UP0R5_4T1C–*	0.5	A,B,C	200
0402UP0R6_4T1C–*	0.6	A,B,C	200
0402UP0R7_4T1C–*	0.7	A,B,C	200
0402UP0R8_4T1C–*	0.8	A,B,C	200
0402UP0R9_4T1C–*	0.9	A,B,C	200
0402UP1R0_4T1C–*	1.0	A,B,C,D	200
0402UP1R1_4T1C–*	1.1	A,B,C,D	200
0402UP1R2_4T1C–*	1.2	A,B,C,D	200
0402UP1R3_4T1C–*	1.3	A,B,C,D	200
0402UP1R5_4T1C–*	1.5	A,B,C,D	200

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC
0402UP1R6_4T1C–*	1.6	A,B,C,D	200
0402UP1R8_4T1C–*	1.8	A,B,C,D	200
0402UP2R0_4T1C–*	2.0	A,B,C,D	200
0402UP2R2_4T1C–*	2.2	A,B,C,D	200
0402UP2R4_4T1C–*	2.4	A,B,C,D	200
0402UP2R7_4T1C–*	2.7	A,B,C,D	200
0402UP3R0_4T1C–*	3.0	A,B,C,D	200
0402UP3R3_4T1C–*	3.3	A,B,C,D	200
0402UP3R6_4T1C–*	3.6	A,B,C,D	200
0402UP3R9_4T1C–*	3.9	A,B,C,D	200
0402UP4R3_4T1C–*	4.3	A,B,C,D	200
0402UP4R7_4T1C–*	4.7	A,B,C,D	200
0402UP5R1_4T1C–*	5.1	A,B,C,D	200
0402UP5R6_4T1C–*	5.6	A,B,C,D	200
0402UP6R2_4T1C–*	6.2	A,B,C,D	200

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC
0402UP6R8_4T1C–*	6.8	A,B,C,D	200
0402UP7R5_4T1C–*	7.5	A,B,C,D	200
0402UP8R2_4T1C–*	8.2	A,B,C,D	200
0402UP9R1_4T1C–*	9.1	A,B,C,D	200
0402UP100_4T1C–*	10	F,G,J	200
0402UP110_4T1C–*	11	F,G,J	200
0402UP120_4T1C–*	12	F,G,J	200
0402UP130_4T1C–*	13	F,G,J	200
0402UP150_4T1C–*	15	F,G,J	200
0402UP160_4T1C–*	16	F,G,J	200
0402UP180_4T1C–*	18	F,G,J	200
0402UP200_4T1C–*	20	F,G,J	200
0402UP220_4T1C–*	22	F,G,J	200
0402UP240_4T1C–*	24	F,G,J	200
0402UP270_4T1C–*	27	F,G,J	200

For other cap values contact factory.

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:
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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)
0.040 ± 0.004 (1.02 ± 0.10)	0.020 ± 0.004 (0.508 ± 0.10)	0.024 MAX (0.61) MAX	0.004 (0.102) 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.

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)

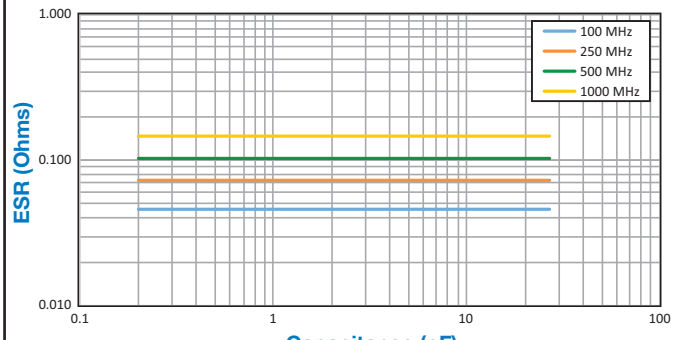
Presidio's UP capacitors can be upscreened to SPACE LEVEL testing. Consult the factory for details. Some voltage derating may apply.

COMMERCIAL PART NUMBER EXAMPLE (How to Order)

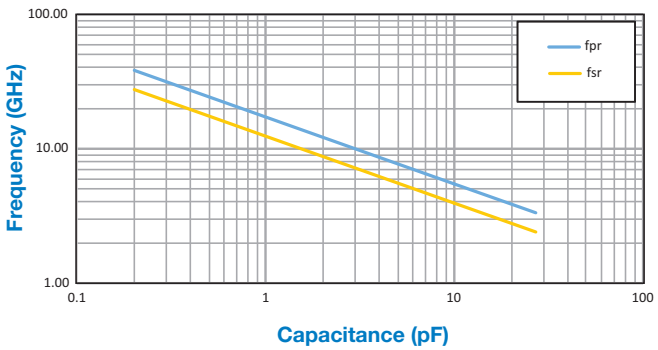
0402	UP	270	J	4	T	1	C	A
Size	Dielectric (See Page 3)	Capacitance	Capacitance Tolerance	Voltage	Termination	Packaging	RoHS Compliant	Design-In Code (See Page 19)

PRESIDIO ULTRA-PORCELAIN™ CAPACITORS
0402 PERFORMANCE CHARTS

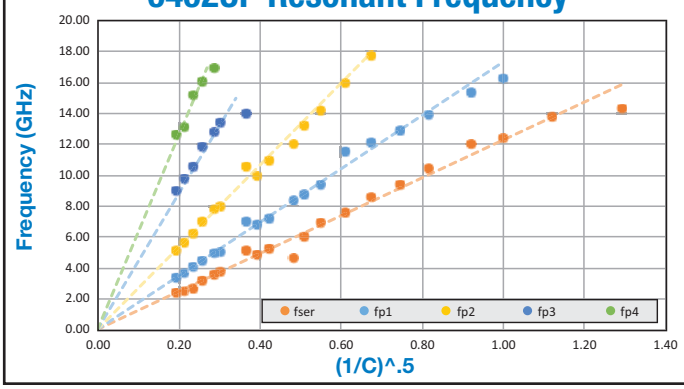
0402UP ESR vs. Frequency



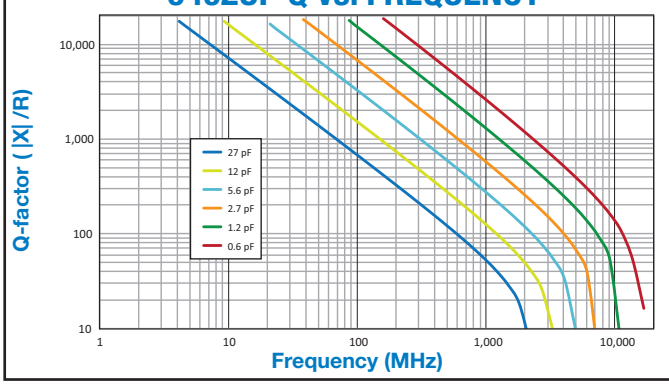
0402UP Resonant Frequency



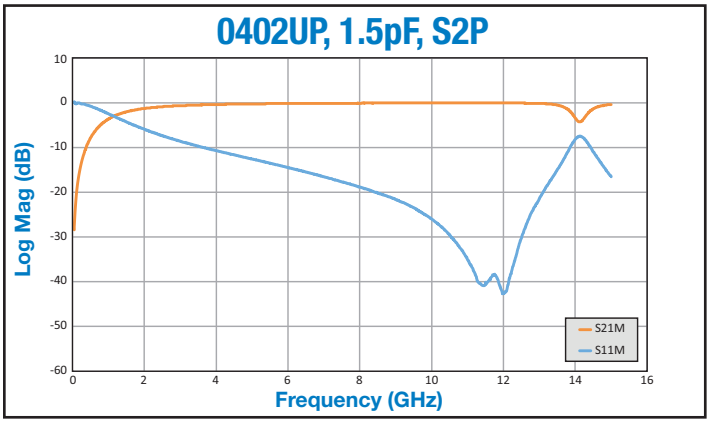
0402UP Resonant Frequency



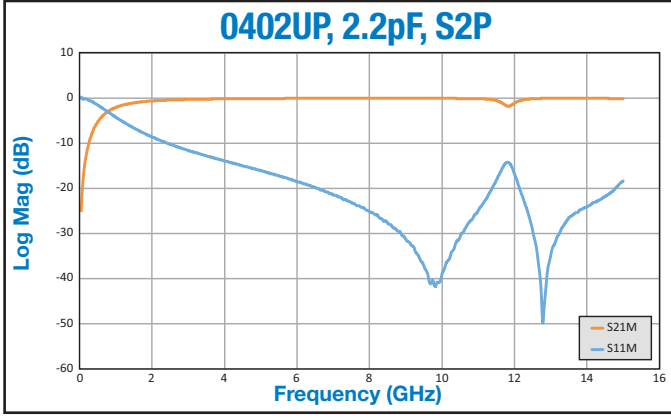
0402UP Q vs. FREQUENCY



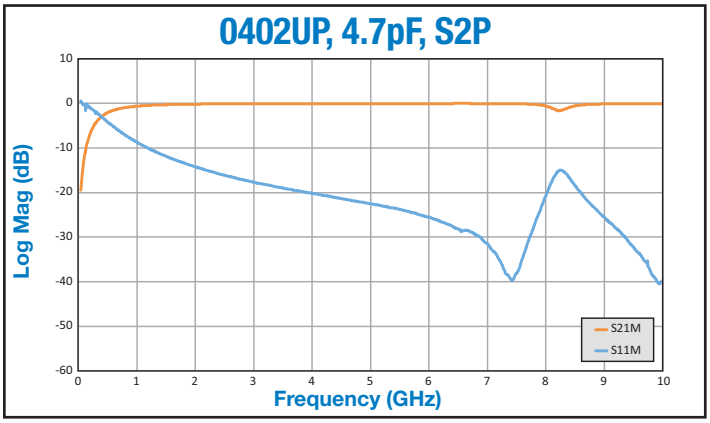
0402UP, 1.5pF, S2P



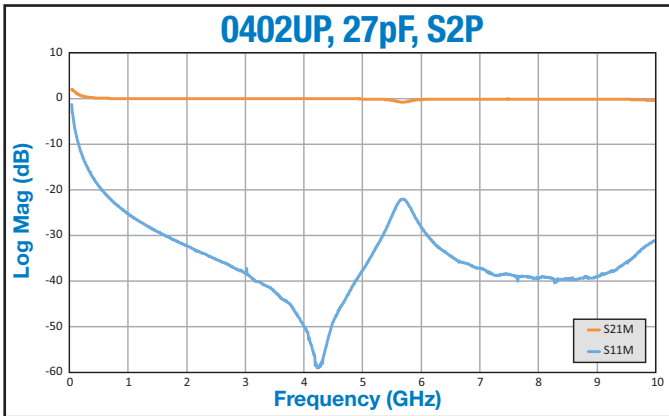
0402UP, 2.2pF, S2P



0402UP, 4.7pF, S2P



0402UP, 27pF, S2P



Call factory for digital copy of the 0402UP S2P files.

PRESIDIO COMPONENTS, INC.

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PRESIDIO ULTRA-PORCELAIN™ CAPACITORS
SIZE 0505

250 WVDC to 100 pF

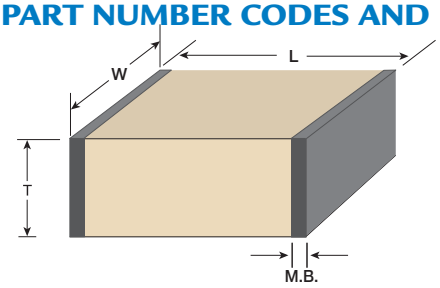
COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
0505UPR05MAT1C–*	0.05	M	**150**, 250
0505UP0R1_AT1C–*	0.1	A,B	**150**, 250
0505UP0R2_AT1C–*	0.2	A,B,C	**150**, 250
0505UP0R3_AT1C–*	0.3	A,B,C	**150**, 250
0505UP0R4_AT1C–*	0.4	A,B,C	**150**, 250
0505UP0R5_AT1C–*	0.5	A,B,C	**150**, 250
0505UP0R6_AT1C–*	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.

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

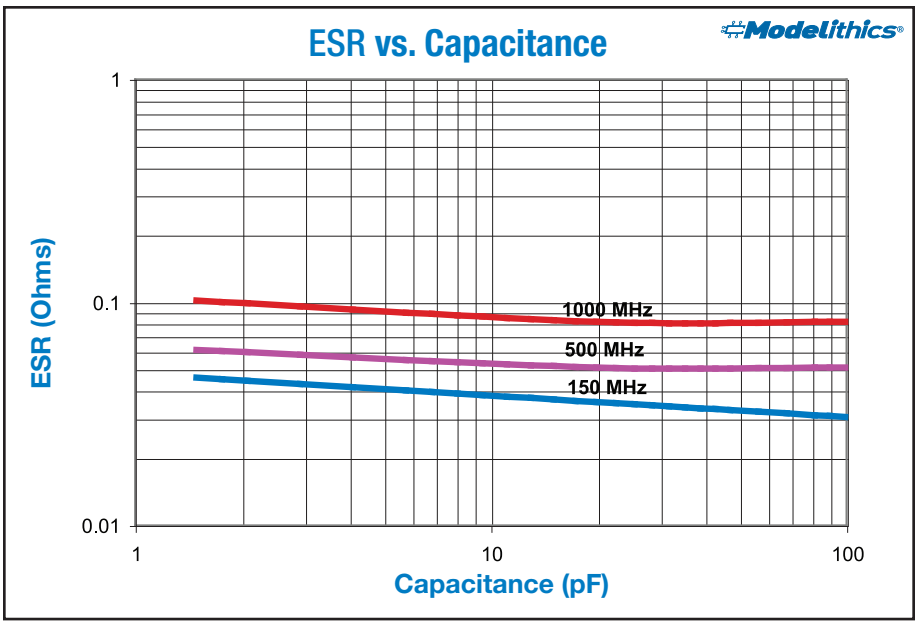
Code	Compliant
N	No
R	Legacy (Ended 2012)
C	Yes (Started 1/2013)

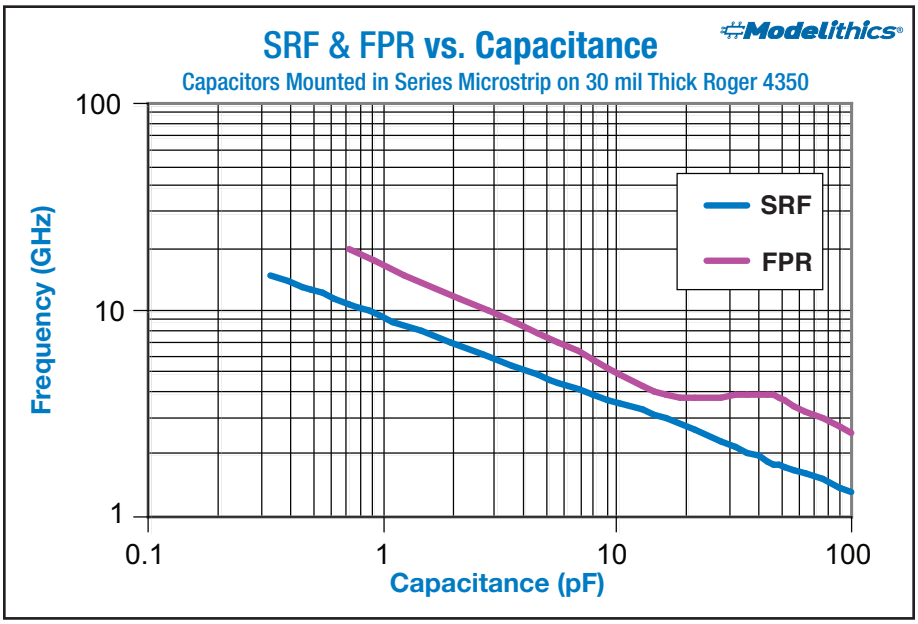
Presidio's UP capacitors can be upscreened to SPACE LEVEL testing. Consult the factory for details. Some voltage derating may apply.

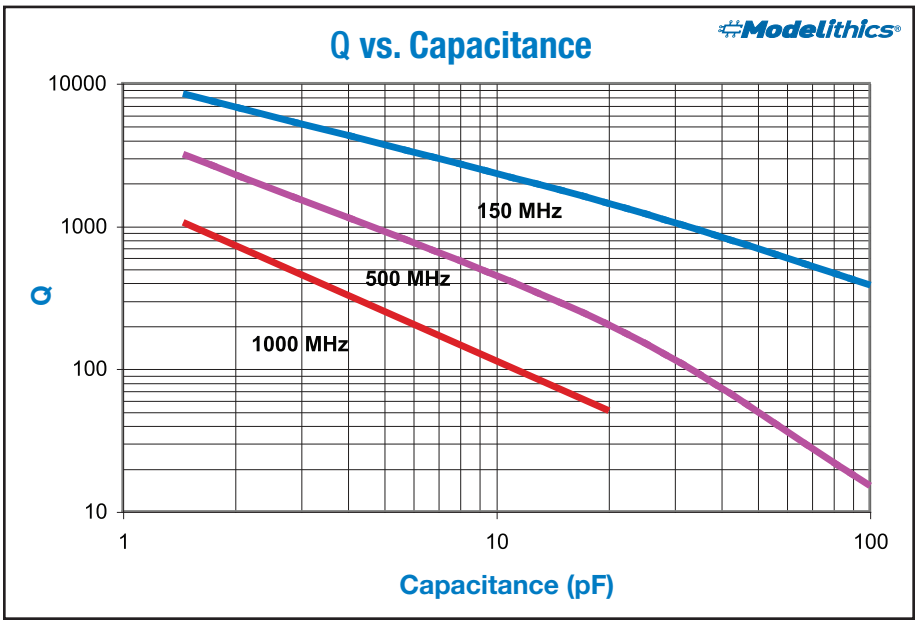
COMMERCIAL PART NUMBER EXAMPLE (How to Order)

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





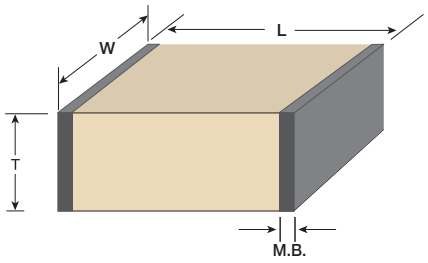


PRESIDIO ULTRA-PORCELAIN™ CAPACITORS
SIZE 0603

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC
0603UPR05M&T1C–*	0.05	M	250
0603UP0R1_&T1C–*	0.1	A,B	250
0603UP0R2_&T1C–*	0.2	A,B	250
0603UP0R3_&T1C–*	0.3	A,B,C	250
0603UP0R4_&T1C–*	0.4	A,B,C	250
0603UP0R5_&T1C–*	0.5	A,B,C	250
0603UP0R6_&T1C–*	0.6	A,B,C	250
0603UP0R7_&T1C–*	0.7	A,B,C	250
0603UP0R8_&T1C–*	0.8	A,B,C	250
0603UP0R9_&T1C–*	0.9	A,B,C	250
0603UP1R0_&T1C–*	1.0	A,B,C	250
0603UP1R1_&T1C–*	1.1	A,B,C,D	250
0603UP1R2_&T1C–*	1.2	A,B,C,D	250
0603UP1R3_&T1C–*	1.3	A,B,C,D	250
0603UP1R5_&T1C–*	1.5	A,B,C,D	250
0603UP1R6_&T1C–*	1.6	A,B,C,D	250
0603UP1R8_&T1C–*	1.8	A,B,C,D	250
0603UP2R0_&T1C–*	2.0	A,B,C,D	250
0603UP2R2_&T1C–*	2.2	A,B,C,D	250
0603UP2R4_&T1C–*	2.4	A,B,C,D	250
0603UP2R7_&T1C–*	2.7	A,B,C,D	250
0603UP3R0_&T1C–*	3.0	A,B,C,D	250
0603UP3R3_&T1C–*	3.3	A,B,C,D	250
0603UP3R6_&T1C–*	3.6	A,B,C,D	250
0603UP3R9_&T1C–*	3.9	A,B,C,D	250
0603UP4R3_&T1C–*	4.3	A,B,C,D	250
0603UP4R7_&T1C–*	4.7	A,B,C,D	250
0603UP5R1_&T1C–*	5.1	A,B,C,D	250
0603UP5R6_&T1C–*	5.6	A,B,C,D	250
0603UP6R2_&T1C–*	6.2	A,B,C,D	250
0603UP6R8_&T1C–*	6.8	A,B,C,D	250
0603UP7R5_&T1C–*	7.5	A,B,C,D	250
0603UP8R2_&T1C–*	8.2	A,B,C,D	250
0603UP9R1_&T1C–*	9.1	A,B,C,D	250
0603UP100_&T1C–*	10	F,G,J,K	250
0603UP110_&T1C–*	11	F,G,J,K	250
0603UP120_&T1C–*	12	F,G,J,K	250
0603UP130_&T1C–*	13	F,G,J,K	250
0603UP150_&T1C–*	15	F,G,J,K	250
0603UP160_&T1C–*	16	F,G,J,K	250
0603UP180_&T1C–*	18	F,G,J,K	250
0603UP200_&T1C–*	20	F,G,J,K	250
0603UP220_&T1C–*	22	F,G,J,K	250
0603UP240_&T1C–*	24	F,G,J,K	250
0603UP270_&T1C–*	27	F,G,J,K	250
0603UP300_&T1C–*	30	F,G,J,K	250
0603UP330_&T1C–*	33	F,G,J,K	250
0603UP360_&T1C–*	36	F,G,J,K	250
0603UP390_&T1C–*	39	F,G,J,K	250
0603UP430_&T1C–*	43	F,G,J,K	250
0603UP470_&T1C–*	47	F,G,J,K	250
0603UP510_&T1C–*	51	F,G,J,K	250
0603UP560_&T1C–*	56	F,G,J,K	250
0603UP620_&T1C–*	62	F,G,J,K	250
0603UP680_&T1C–*	68	F,G,J,K	250
0603UP750_&T1C–*	75	F,G,J,K	250
0603UP820_&T1C–*	82	F,G,J,K	250
0603UP910_&T1C–*	91	F,G,J,K	250
0603UP101_&T1C–*	100	F,G,J,K	250

PART NUMBER CODES AND DIMENSIONS

For other cap values contact factory.



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

LENGTH (L) INCH (mm)	WIDTH (W) INCH (mm)	THICKNESS (T) INCH (mm)	METALIZATION BAND (M.B.) INCH (mm)
0.063 ± 0.006 (1.60 ± 0.15)	0.032 ± 0.006 (0.81 ± 0.15)	0.035 MAX (0.89 MAX)	0.005 (0.127) min. band 0.020 (0.508) min. space

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

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)

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

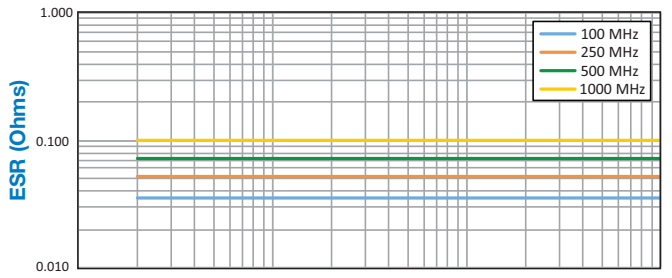
COMMERCIAL PART NUMBER EXAMPLE (How to Order)

0603	UP	270	J	&	T	1	C	A
Size	Dielectric (See Page 3)	Capacitance	Capacitance Tolerance	Voltage	Termination	Packaging	RoHS Compliant	Design-In Code (See Page 19)

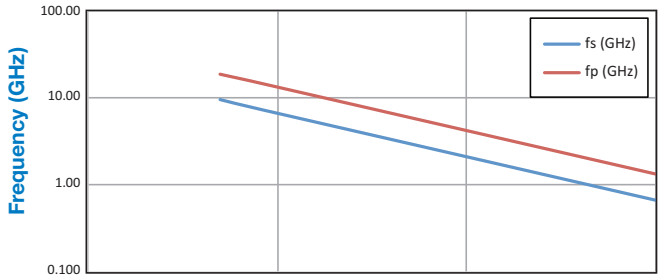
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PRESIDIO ULTRA-PORCELAIN™ CAPACITORS
0603 PERFORMANCE CHARTS

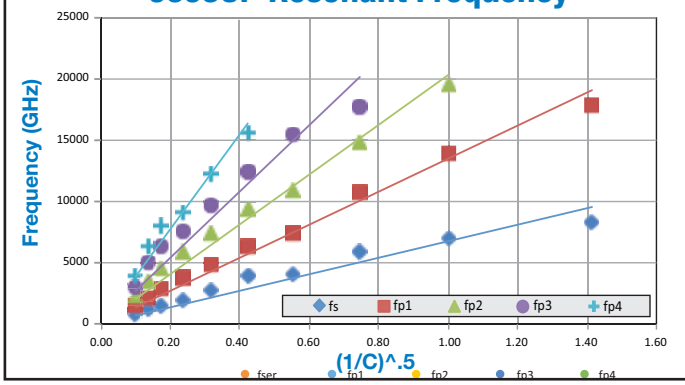
0603UP ESR vs. Frequency



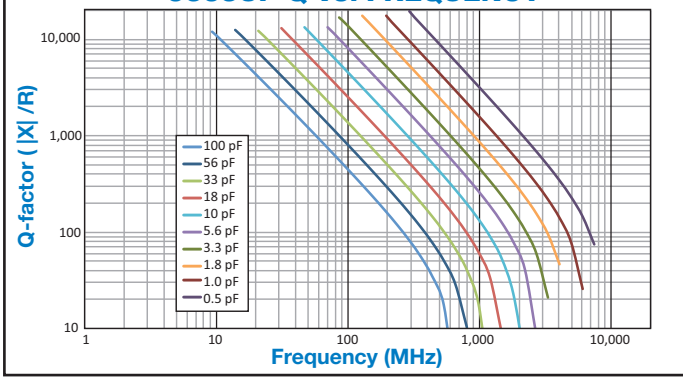
0603UP Resonant Frequency



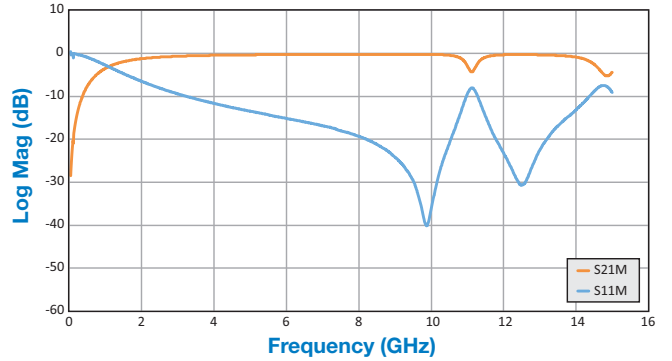
0603UP Resonant Frequency



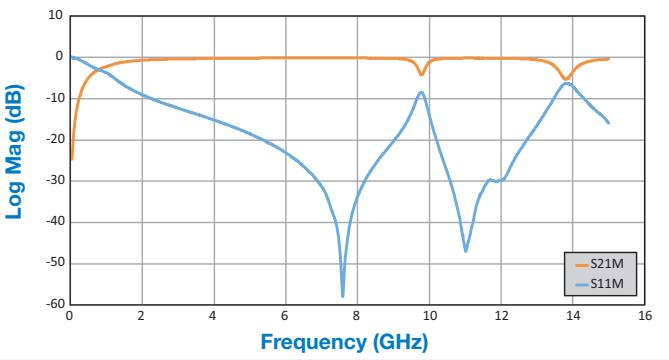
0603UP Q vs. FREQUENCY



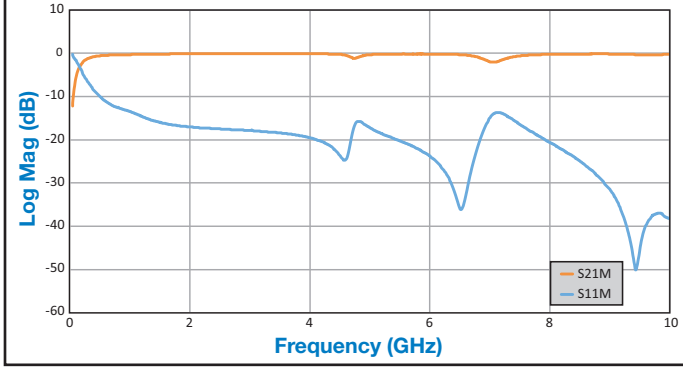
0603UP, 1.5pF, S2P



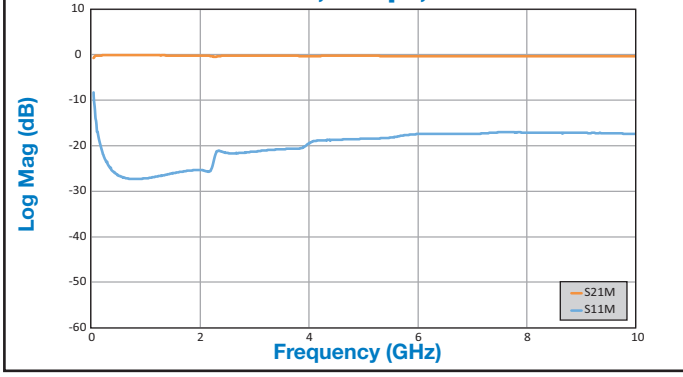
0603UP, 2.2pF, S2P



0603UP, 10pF, S2P



0603UP, 100pF, S2P



Call factory for digital copy of the 06030UP S2P files.

PRESIDIO COMPONENTS, INC.

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

PRESIDIO ULTRA-PORCELAIN™ CAPACITORS
SIZE 0711

Low Inductance

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC
0711UP1R0_6T1C–*	1.0	A,B,C,D	500
0711UP1R1_6T1C–*	1.1	A,B,C,D	500
0711UP1R2_6T1C–*	1.2	A,B,C,D	500
0711UP1R3_6T1C–*	1.3	A,B,C,D	500
0711UP1R5_6T1C–*	1.5	A,B,C,D	500
0711UP1R6_6T1C–*	1.6	A,B,C,D	500
0711UP1R8_6T1C–*	1.8	A,B,C,D	500
0711UP2R0_6T1C–*	2.0	A,B,C,D	500
0711UP2R2_6T1C–*	2.2	A,B,C,D	500
0711UP2R4_6T1C–*	2.4	A,B,C,D	500
0711UP2R7_6T1C–*	2.7	A,B,C,D	500
0711UP3R0_6T1C–*	3.0	A,B,C,D	500
0711UP3R3_6T1C–*	3.3	A,B,C,D	500
0711UP3R6_6T1C–*	3.6	A,B,C,D	500
0711UP3R9_6T1C–*	3.9	A,B,C,D	500
0711UP4R3_6T1C–*	4.3	A,B,C,D	500
0711UP4R7_6T1C–*	4.7	A,B,C,D	500

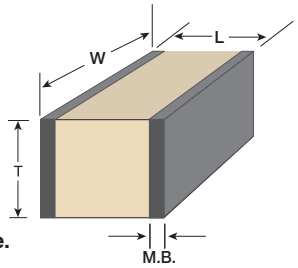
COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC
0711UP5R1_6T1C–*	5.1	A,B,C,D	500
0711UP5R6_6T1C–*	5.6	A,B,C,D	500
0711UP6R2_6T1C–*	6.2	A,B,C,D	500
0711UP6R8_6T1C–*	6.8	A,B,C,D	500
0711UP7R5_6T1C–*	7.5	A,B,C,D	500
0711UP8R2_6T1C–*	8.2	A,B,C,D	500
0711UP9R1_6T1C–*	9.1	A,B,C,D	500
0711UP100_6T1C–*	10	F,G,J,K	500
0711UP110_6T1C–*	11	F,G,J,K	500
0711UP120_6T1C–*	12	F,G,J,K	500
0711UP130_6T1C–*	13	F,G,J,K	500
0711UP150_6T1C–*	15	F,G,J,K	500
0711UP160_6T1C–*	16	F,G,J,K	500
0711UP180_6T1C–*	18	F,G,J,K	500
0711UP200_6T1C–*	20	F,G,J,K	500
0711UP220_6T1C–*	22	F,G,J,K	500

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC
0711UP240_6T1C–*	24	F,G,J,K	500
0711UP270_6T1C–*	27	F,G,J,K	500
0711UP300_6T1C–*	30	F,G,J,K	500
0711UP330_6T1C–*	33	F,G,J,K	500
0711UP360_6T1C–*	36	F,G,J,K	500
0711UP390_6T1C–*	39	F,G,J,K	500
0711UP430_6T1C–*	43	F,G,J,K	500
0711UP470_6T1C–*	47	F,G,J,K	500
0711UP510_6T1C–*	51	F,G,J,K	500
0711UP560_6T1C–*	56	F,G,J,K	500
0711UP620_6T1C–*	62	F,G,J,K	500
0711UP680_6T1C–*	68	F,G,J,K	500
0711UP750_6T1C–*	75	F,G,J,K	500
0711UP820_6T1C–*	82	F,G,J,K	500
0711UP910_6T1C–*	91	F,G,J,K	500
0711UP101_6T1C–*	100	F,G,J,K	500

For other cap values contact factory.

PART NUMBER CODES AND DIMENSIONS

Note: Reverse geometry offering a lower inductance.



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)
0.070 ± 0.015 (1.778 ± .381)	0.105 ± 0.01 (2.667 ± 0.254)	0.090 MAX (2.286 MAX)	0.005 to 0.020 (0.127 to 0.508)

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)

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)

0711	UP	270	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)

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

PRESIDIO ULTRA-PORCELAIN™ CAPACITORS
SIZE 0805

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC
0805UP0R1_&T1C–*	0.1	A,B	250
0805UP0R2_&T1C–*	0.2	A,B	250
0805UP0R3_&T1C–*	0.3	A,B,C	250
0805UP0R4_&T1C–*	0.4	A,B,C	250
0805UP0R5_&T1C–*	0.5	A,B,C	250
0805UP0R6_&T1C–*	0.6	A,B,C	250
0805UP0R7_&T1C–*	0.7	A,B,C	250
0805UP0R8_&T1C–*	0.8	A,B,C	250
0805UP0R9_&T1C–*	0.9	A,B,C	250
0805UP1R0_&T1C–*	1.0	A,B,C	250
0805UP1R1_&T1C–*	1.1	A,B,C,D	250
0805UP1R2_&T1C–*	1.2	A,B,C,D	250
0805UP1R3_&T1C–*	1.3	A,B,C,D	250
0805UP1R5_&T1C–*	1.5	A,B,C,D	250
0805UP1R6_&T1C–*	1.6	A,B,C,D	250
0805UP1R8_&T1C–*	1.8	A,B,C,D	250
0805UP2R0_&T1C–*	2.0	A,B,C,D	250
0805UP2R2_&T1C–*	2.2	A,B,C,D	250
0805UP2R4_&T1C–*	2.4	A,B,C,D	250
0805UP2R7_&T1C–*	2.7	A,B,C,D	250
0805UP3R0_&T1C–*	3.0	A,B,C,D	250
0805UP3R3_&T1C–*	3.3	A,B,C,D	250
0805UP3R6_&T1C–*	3.6	A,B,C,D	250

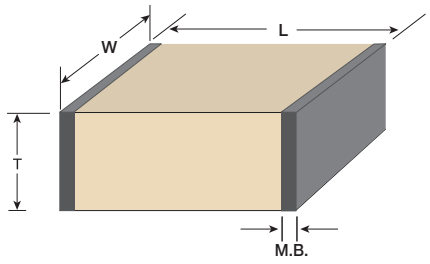
COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC
0805UP3R9_&T1C–*	3.9	A,B,C,D	250
0805UP4R3_&T1C–*	4.3	A,B,C,D	250
0805UP4R7_&T1C–*	4.7	A,B,C,D	250
0805UP5R1_&T1C–*	5.1	A,B,C,D	250
0805UP5R6_&T1C–*	5.6	A,B,C,D	250
0805UP6R2_&T1C–*	6.2	A,B,C,D	250
0805UP6R8_&T1C–*	6.8	A,B,C,D	250
0805UP7R5_&T1C–*	7.5	A,B,C,D	250
0805UP8R2_&T1C–*	8.2	A,B,C,D	250
0805UP9R1_&T1C–*	9.1	A,B,C,D	250
0805UP100_&T1C–*	10	F,G,J,K	250
0805UP110_&T1C–*	11	F,G,J,K	250
0805UP120_&T1C–*	12	F,G,J,K	250
0805UP130_&T1C–*	13	F,G,J,K	250
0805UP150_&T1C–*	15	F,G,J,K	250
0805UP160_&T1C–*	16	F,G,J,K	250
0805UP180_&T1C–*	18	F,G,J,K	250
0805UP200_&T1C–*	20	F,G,J,K	250
0805UP220_&T1C–*	22	F,G,J,K	250
0805UP240_&T1C–*	24	F,G,J,K	250
0805UP270_&T1C–*	27	F,G,J,K	250
0805UP300_&T1C–*	30	F,G,J,K	250
0805UP330_&T1C–*	33	F,G,J,K	250

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC
0805UP360_&T1C–*	36	F,G,J,K	250
0805UP390_&T1C–*	39	F,G,J,K	250
0805UP430_&T1C–*	43	F,G,J,K	250
0805UP470_&T1C–*	47	F,G,J,K	250
0805UP510_&T1C–*	51	F,G,J,K	250
0805UP560_&T1C–*	56	F,G,J,K	250
0805UP620_&T1C–*	62	F,G,J,K	250
0805UP680_&T1C–*	68	F,G,J,K	250
0805UP750_&T1C–*	75	F,G,J,K	250
0805UP820_&T1C–*	82	F,G,J,K	250
0805UP910_&T1C–*	91	F,G,J,K	250
0805UP101_&T1C–*	100	F,G,J,K	250
0805UP111_&T1C–*	110	F,G,J,K	250
0805UP121_&T1C–*	120	F,G,J,K	250
0805UP131_&T1C–*	130	F,G,J,K	250
0805UP151_&T1C–*	150	F,G,J,K	250
0805UP161_&T1C–*	160	F,G,J,K	250
0805UP181_&T1C–*	180	F,G,J,K	250
0805UP201_&T1C–*	200	F,G,J,K	250
0805UP221_&T1C–*	220	F,G,J,K	250
0805UP241_&T1C–*	240	F,G,J,K	250

For other cap values contact factory.

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

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)
0.080 ± 0.010 (2.03 ± 0.25)	0.050 ± 0.010 (1.27 ± 0.25)	0.055 MAX (1.40 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)

0805	UP	101	J	&	T	1	C	A
Size	Dielectric (See Page 3)	Capacitance	Capacitance Tolerance	Voltage	Termination	Packaging	RoHS Compliant	Design-In Code (See Page 19)

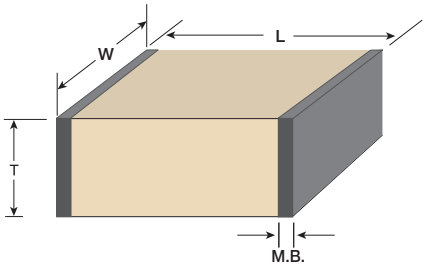
PRESIDIO ULTRA-PORCELAIN™ CAPACITORS
SIZE 1010

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)

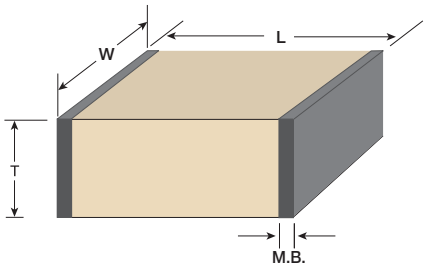
COMMERCIAL PART NUMBER EXAMPLE (How to Order)

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)

PRESIDIO ULTRA-PORCELAIN™ CAPACITORS
SIZE 2525

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
2525UP0R1_QT1C–*	0.1	B,C,D	**2.5K**, 3.6K
2525UP0R2_QT1C–*	0.2	B,C,D	**2.5K**, 3.6K
2525UP0R3_QT1C–*	0.3	B,C,D	**2.5K**, 3.6K
2525UP0R4_QT1C–*	0.4	B,C,D	**2.5K**, 3.6K
2525UP0R5_QT1C–*	0.5	B,C,D	**2.5K**, 3.6K
2525UP0R6_QT1C–*	0.6	B,C,D	**2.5K**, 3.6K
2525UP0R7_QT1C–*	0.7	B,C,D	**2.5K**, 3.6K
2525UP0R8_QT1C–*	0.8	B,C,D	**2.5K**, 3.6K
2525UP0R9_QT1C–*	0.9	B,C,D	**2.5K**, 3.6K
2525UP1R0_QT1C–*	1.0	B,C,D	**2.5K**, 3.6K
2525UP1R1_QT1C–*	1.1	B,C,D	**2.5K**, 3.6K
2525UP1R2_QT1C–*	1.2	B,C,D	**2.5K**, 3.6K
2525UP1R3_QT1C–*	1.3	B,C,D	**2.5K**, 3.6K
2525UP1R5_QT1C–*	1.5	B,C,D	**2.5K**, 3.6K
2525UP1R6_QT1C–*	1.6	B,C,D	**2.5K**, 3.6K
2525UP1R8_QT1C–*	1.8	B,C,D	**2.5K**, 3.6K
2525UP2R0_QT1C–*	2.0	B,C,D	**2.5K**, 3.6K
2525UP2R2_QT1C–*	2.2	B,C,D	**2.5K**, 3.6K
2525UP2R4_QT1C–*	2.4	B,C,D	**2.5K**, 3.6K
2525UP2R7_QT1C–*	2.7	B,C,D	**2.5K**, 3.6K
2525UP3R0_QT1C–*	3.0	B,C,D	**2.5K**, 3.6K
2525UP3R3_QT1C–*	3.3	B,C,D	**2.5K**, 3.6K
2525UP3R6_QT1C–*	3.6	B,C,D	**2.5K**, 3.6K
2525UP3R9_QT1C–*	3.9	B,C,D	**2.5K**, 3.6K
2525UP4R3_QT1C–*	4.3	B,C,D	**2.5K**, 3.6K
2525UP4R7_QT1C–*	4.7	B,C,D	**2.5K**, 3.6K
2525UP5R1_QT1C–*	5.1	B,C,D	**2.5K**, 3.6K
2525UP5R6_QT1C–*	5.6	B,C,D	**2.5K**, 3.6K
2525UP6R2_QT1C–*	6.2	B,C,D	**2.5K**, 3.6K
2525UP6R8_QT1C–*	6.8	B,C,D	**2.5K**, 3.6K
2525UP7R5_QT1C–*	7.5	B,C,D	**2.5K**, 3.6K
2525UP8R2_QT1C–*	8.2	B,C,D	**2.5K**, 3.6K
2525UP9R1_QT1C–*	9.1	B,C,D	**2.5K**, 3.6K
2525UP100_QT1C–*	10	F,G,J,K,M	**2.5K**, 3.6K
2525UP110_QT1C–*	11	F,G,J,K,M	**2.5K**, 3.6K
2525UP120_QT1C–*	12	F,G,J,K,M	**2.5K**, 3.6K
2525UP130_QT1C–*	13	F,G,J,K,M	**2.5K**, 3.6K
2525UP150_QT1C–*	15	F,G,J,K,M	**2.5K**, 3.6K
2525UP160_QT1C–*	16	F,G,J,K,M	**2.5K**, 3.6K
2525UP180_QT1C–*	18	F,G,J,K,M	**2.5K**, 3.6K
2525UP200_QT1C–*	20	F,G,J,K,M	**2.5K**, 3.6K
2525UP220_QT1C–*	22	F,G,J,K,M	**2.5K**, 3.6K
2525UP240_QT1C–*	24	F,G,J,K,M	**2.5K**, 3.6K
2525UP270_QT1C–*	27	F,G,J,K,M	**2.5K**, 3.6K
2525UP300_QT1C–*	30	F,G,J,K,M	**2.5K**, 3.6K
2525UP330_QT1C–*	33	F,G,J,K,M	**2.5K**, 3.6K
2525UP360_QT1C–*	36	F,G,J,K,M	**2.5K**, 3.6K
2525UP390_QT1C–*	39	F,G,J,K,M	**2.5K**, 3.6K
2525UP430_QT1C–*	43	F,G,J,K,M	**2.5K**, 3.6K
2525UP470_QT1C–*	47	F,G,J,K,M	**2.5K**, 3.6K
2525UP510_QT1C–*	51	F,G,J,K,M	**2.5K**, 3.6K
2525UP560_QT1C–*	56	F,G,J,K,M	**2.5K**, 3.6K
2525UP620_QT1C–*	62	F,G,J,K,M	**2.5K**, 3.6K
2525UP680_QT1C–*	68	F,G,J,K,M	**2.5K**, 3.6K
2525UP750_QT1C–*	75	F,G,J,K,M	**2.5K**, 3.6K
2525UP820_QT1C–*	82	F,G,J,K,M	**2.5K**, 3.6K
2525UP910_QT1C–*	91	F,G,J,K,M	**2.5K**, 3.6K
2525UP101_QT1C–*	100	F,G,J,K,M	**2.5K**, 3.6K
2525UP111_QT1C–*	110	F,G,J,K,M	**2.5K**, 3.0K
2525UP121_QT1C–*	120	F,G,J,K,M	**2.5K**, 3.0K
2525UP131_QT1C–*	130	F,G,J,K,M	**2.5K**, 3.0K
2525UP151_QT1C–*	150	F,G,J,K,M	**2.5K**, 3.0K
2525UP161_QT1C–*	160	F,G,J,K,M	**2.5K**, 3.0K
2525UP181_QT1C–*	180	F,G,J,K,M	**2.5K**, 3.0K
2525UP201_QT1C–*	200	F,G,J,K,M	**2.5K**, 3.0K
2525UP221_QT1C–*	220	F,G,J,K,M	**2.5K**, 3.0K
2525UP241_QT1C–*	240	F,G,J,K,M	**2.5K**, 3.0K
2525UP271_QT1C–*	270	F,G,J,K,M	**2.5K**, 3.0K
2525UP301_PT1C–*	300	F,G,J,K,M	**1.5K**, 2.0K
2525UP331_PT1C–*	330	F,G,J,K,M	**1.5K**, 2.0K
2525UP361_PT1C–*	360	F,G,J,K,M	**1.5K**, 2.0K
2525UP391_PT1C–*	390	F,G,J,K,M	**1.5K**, 2.0K
2525UP431_PT1C–*	430	F,G,J,K,M	**1.5K**, 2.0K
2525UP471_PT1C–*	470	F,G,J,K,M	**1.5K**, 2.0K
2525UP511_NT1C–*	510	F,G,J,K,M	**1.0K**, 1.5K
2525UP561_NT1C–*	560	F,G,J,K,M	**1.0K**, 1.5K
2525UP621_NT1C–*	620	F,G,J,K,M	**1.0K**, 1.5K
2525UP681_NT1C–*	680	F,G,J,K,M	**1.0K**, 1.5K
2525UP751_NT1C–*	750	F,G,J,K,M	**1.0K**, 1.5K
2525UP821_NT1C–*	820	F,G,J,K,M	**1.0K**, 1.5K
2525UP911_NT1C–*	910	F,G,J,K,M	**1.0K**, 1.5K
2525UP102_NT1C–*	1000	F,G,J,K,M	**1.0K**, 1.5K
2525NPO122_NT1C–*	1200	F,G,J,K,M	**1.0K**, 1.5K
2525NPO152_#T1C–*	1500	F,G,J,K,M	**0.5K**, 0.8K
2525NPO182_#T1C–*	1800	F,G,J,K,M	**0.5K**, 0.8K
2525NPO222_6T1C–*	2200	F,G,J,K,M	**0.3K**, 0.5K
2525NPO272_6T1C–*	2700	F,G,J,K,M	**0.3K**, 0.5K
2525NPO332_6T1C–*	3300	F,G,J,K,M	**0.3K**, 0.5K
2525NPO392_6T1C–*	3900	F,G,J,K,M	**0.3K**, 0.5K
2525NPO472_6T1C–*	4700	F,G,J,K,M	**0.3K**, 0.5K
1010NPO562_2T1C–*	5600	F,G,J,K,M	**0.3K**, 0.5K

For other cap values contact factory.
Voltages in **BOLD** for Hi-Rel.



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)
0.250 ± 0.020 (6.35 ± 0.508)	0.250 ± 0.020 (6.35 ± 0.508)	0.165 MAX (4.19 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
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)

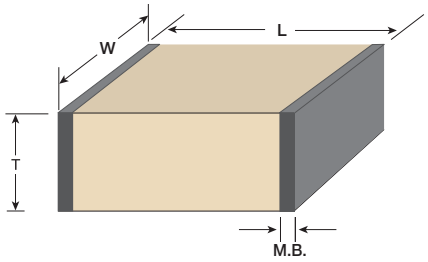
2525	UP	101	J	Q	T	1	C	A
Size	Dielectric (See Page 3)	Capacitance	Capacitance Tolerance	Voltage	Termination	Packaging	RoHS Compliant	Design-In Code (See Page 19)

PRESIDIO ULTRA-PORCELAIN™ CAPACITORS
SIZE 3838

COMMERCIAL PART NUMBER	CAP. (pF)	TOL.	WVDC STD, EXT
3838UP1R0_ST1C–*	1.0	B,C,D	**3.6K**, 7.2K
3838UP1R1_ST1C–*	1.1	B,C,D	**3.6K**, 7.2K
3838UP1R2_ST1C–*	1.2	B,C,D	**3.6K**, 7.2K
3838UP1R3_ST1C–*	1.3	B,C,D	**3.6K**, 7.2K
3838UP1R5_ST1C–*	1.5	B,C,D	**3.6K**, 7.2K
3838UP1R6_ST1C–*	1.6	B,C,D	**3.6K**, 7.2K
3838UP1R8_ST1C–*	1.8	B,C,D	**3.6K**, 7.2K
3838UP2R0_ST1C–*	2.0	B,C,D	**3.6K**, 7.2K
3838UP2R2_ST1C–*	2.2	B,C,D	**3.6K**, 7.2K
3838UP2R4_ST1C–*	2.4	B,C,D	**3.6K**, 7.2K
3838UP2R7_ST1C–*	2.7	B,C,D	**3.6K**, 7.2K
3838UP3R0_ST1C–*	3.0	B,C,D	**3.6K**, 7.2K
3838UP3R3_ST1C–*	3.3	B,C,D	**3.6K**, 7.2K
3838UP3R6_ST1C–*	3.6	B,C,D	**3.6K**, 7.2K
3838UP3R9_ST1C–*	3.9	B,C,D	**3.6K**, 7.2K
3838UP4R3_ST1C–*	4.3	B,C,D	**3.6K**, 7.2K
3838UP4R7_ST1C–*	4.7	B,C,D	**3.6K**, 7.2K
3838UP5R1_ST1C–*	5.1	B,C,D	**3.6K**, 7.2K
3838UP5R6_ST1C–*	5.6	B,C,D	**3.6K**, 7.2K
3838UP6R2_ST1C–*	6.2	B,C,D	**3.6K**, 7.2K
3838UP6R8_ST1C–*	6.8	B,C,D	**3.6K**, 7.2K
3838UP7R5_ST1C–*	7.5	B,C,D	**3.6K**, 7.2K
3838UP8R2_ST1C–*	8.2	B,C,D	**3.6K**, 7.2K
3838UP9R1_ST1C–*	9.1	B,C,D	**3.6K**, 7.2K
3838UP100_ST1C–*	10	F,G,J,K,M	**3.6K**, 7.2K
3838UP110_ST1C–*	11	F,G,J,K,M	**3.6K**, 7.2K
3838UP120_ST1C–*	12	F,G,J,K,M	**3.6K**, 7.2K
3838UP130_ST1C–*	13	F,G,J,K,M	**3.6K**, 7.2K
3838UP150_ST1C–*	15	F,G,J,K,M	**3.6K**, 7.2K
3838UP160_ST1C–*	16	F,G,J,K,M	**3.6K**, 7.2K
3838UP180_ST1C–*	18	F,G,J,K,M	**3.6K**, 7.2K
3838UP200_ST1C–*	20	F,G,J,K,M	**3.6K**, 7.2K
3838UP220_ST1C–*	22	F,G,J,K,M	**3.6K**, 7.2K
3838UP240_ST1C–*	24	F,G,J,K,M	**3.6K**, 7.2K
3838UP270_ST1C–*	27	F,G,J,K,M	**3.6K**, 7.2K
3838UP300_ST1C–*	30	F,G,J,K,M	**3.6K**, 7.2K
3838UP330_ST1C–*	33	F,G,J,K,M	**3.6K**, 7.2K
3838UP360_ST1C–*	36	F,G,J,K,M	**3.6K**, 7.2K
3838UP390_ST1C–*	39	F,G,J,K,M	**3.6K**, 7.2K
3838UP430_ST1C–*	43	F,G,J,K,M	**3.6K**, 7.2K
3838UP470_ST1C–*	47	F,G,J,K,M	**3.6K**, 7.2K
3838UP510_ST1C–*	51	F,G,J,K,M	**3.6K**, 7.2K
3838UP560_ST1C–*	56	F,G,J,K,M	**3.6K**, 7.2K
3838UP620_ST1C–*	62	F,G,J,K,M	**3.6K**, 7.2K
3838UP680_ST1C–*	68	F,G,J,K,M	**3.6K**, 7.2K
3838UP750_ST1C–*	75	F,G,J,K,M	**3.6K**, 7.2K
3838UP820_ST1C–*	82	F,G,J,K,M	**3.6K**, 7.2K
3838UP910_ST1C–*	91	F,G,J,K,M	**3.6K**, 7.2K
3838UP101_ST1C–*	100	F,G,J,K,M	**3.6K**, 7.2K
3838UP111_ST1C–*	110	F,G,J,K,M	**3.6K**, 5.0K
3838UP121_ST1C–*	120	F,G,J,K,M	**3.6K**, 5.0K
3838UP131_ST1C–*	130	F,G,J,K,M	**3.6K**, 5.0K
3838UP151_ST1C–*	150	F,G,J,K,M	**3.6K**, 5.0K
3838UP161_ST1C–*	160	F,G,J,K,M	**3.6K**, 5.0K
3838UP181_ST1C–*	180	F,G,J,K,M	**3.6K**, 5.0K
3838UP201_ST1C–*	200	F,G,J,K,M	**3.6K**, 5.0K
3838UP221_ST1C–*	220	F,G,J,K,M	**3600**
3838UP241_ST1C–*	240	F,G,J,K,M	**3600**
3838UP271_ST1C–*	270	F,G,J,K,M	**3600**
3838UP301_ST1C–*	300	F,G,J,K,M	**3600**
3838UP331_ST1C–*	330	F,G,J,K,M	**3600**
3838UP361_ST1C–*	360	F,G,J,K,M	**3600**
3838UP391_ST1C–*	390	F,G,J,K,M	**3600**
3838UP431_QT1C–*	430	F,G,J,K,M	**2500**
3838UP471_QT1C–*	470	F,G,J,K,M	**2500**
3838UP511_QT1C–*	510	F,G,J,K,M	**2500**
3838UP561_QT1C–*	560	F,G,J,K,M	**2500**
3838UP621_QT1C–*	620	F,G,J,K,M	**2500**
3838UP681_QT1C–*	680	F,G,J,K,M	**2500**
3838UP751_QT1C–*	750	F,G,J,K,M	**2500**
3838UP821_9T1C–*	820	F,G,J,K,M	**1000**
3838UP911_9T1C–*	910	F,G,J,K,M	**1000**
3838UP102_9T1C–*	1000	F,G,J,K,M	**1000**
3838NPO122_9T1C–*	1200	F,G,J,K,M	**1000**
3838NPO152_9T1C–*	1500	F,G,J,K,M	**1000**
3838NPO182_9T1C–*	1800	F,G,J,K,M	**1000**
3838NPO222_9T1C–*	2200	F,G,J,K,M	**1000**
3838NPO272_6T1C–*	2700	F,G,J,K,M	**500**
3838NPO332_6T1C–*	3300	F,G,J,K,M	**500**
3838NPO392_6T1C–*	3900	F,G,J,K,M	**500**
3838NPO472_6T1C–*	4700	F,G,J,K,M	**500**
3838NPO562_4T1C–*	5600	G,J,K,M	**200**
3838NPO682_4T1C–*	6800	G,J,K,M	**200**
3838NPO822_4T1C–*	8200	G,J,K,M	**200**
3838NPO103_4T1C–*	10,000	G,J,K,M	**200**

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)	0.180 MAX (4.572 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
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)

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)

PRESIDIO SCREENING LEVELS

COMMERCIAL • HR • CR • SR#M123 • SR#N1 • HR#N2 • CDR • 06019

	SCREENING LEVELS See Descriptions on Website		Commercial*	Voltage Cond. Per Group A of MIL-PRF-55681	DPA & Voltage Cond. Per Group A of MIL-PRF-55681	Group A & B Per MIL-PRF-123	NASA EEE-INST-002 Level 1	NASA EEE-INST-002 Level 2	MIL-PRF-55681 CDR TYPE Capacitors	06019
	PREFIX:		(Blank)	HR	CR	SR	SR	HR	CDR11/12/13/14	SR
	SCREENING LEVEL CODES:		(Blank)	(Blank)	(Blank)	#M123	#N1	#N2	(See Pg. 14 & 15)	(Blank)
BASIC TESTING	Capacitance		100%	100%	100%	100%	100%	100%	100%	100%
	Dissipation Factor		100%	100%	100%	100%	100%	100%	100%	100%
	Dielectric Withstanding Voltage (DWV)		100%	100%	100%	100%	100%	100%	100%	100%
	Insulation Resistance (IR at 25°C)		100%	100%	100%	100%	100%	100%	100%	100%
	Insulation Resistance (IR at 125°C)		NO	NO	NO	100%	100%	NO	SAMPLE Only	100%
	Solderability or Wirebonding Test		YES	YES	YES	YES	YES	YES	YES	YES
ENVIRONMENTAL TESTING AND RELIABILITY SCREENING	Thermal Shock (20 Cycles)	GROUP A	NO	NO	NO	YES	YES	YES 5 Cycles	Periodic Testing (5 cycles)	YES 20 Cycles
	Voltage Conditioning (100%)	GROUP A	NO	8 Hrs. Min.	100 Hrs.	168 Hrs. Min. with 0.1% or 1 pc. in the last 48 Hrs.	160 Hrs.	96 Hrs.	100 Hrs.	168 Hrs. Min. with 0.1% or 1 pc. in the last 48 hours
	Percent Defective Allowed (PDA)	GROUP A	NO	8%	8%	5%	5%	10%	8%	3%
	Destructive Physical Analysis (DPA)	GROUP A	NO	NO	YES	YES	YES	YES	NO	YES
	Voltage Temperature Limit	GROUP A	NO	NO	NO	12 pcs. (when applicable)	12 pcs. (when applicable)	6 pcs. (when applicable)	Periodic Testing	12 pcs.
	Visual Inspection	GROUP A	Samples	Samples	Samples	100%	100%	100%	Samples	100%
	Mechanical Inspection (Dimensions)	GROUP A	YES	YES	YES	YES	YES	YES	YES	YES
	Thermal Shock (100 Cycles)	GROUP B	NO	NO	NO	YES	NO	NO	Periodic Testing (5 cycles)	100 cycles
	Life-Test	GROUP B	NO	NO	NO	Rejects allowed for 1000 Hrs 0/25, 1/80, 2/125 pcs.	2000 Hrs., 22 pcs., **0 rejects allowed**	1000 Hrs., 22 pcs. 1 reject allowed	Periodic Testing (5 cycles)	Rejects allowed for 1000 Hrs, 0/25, 1/80, 2/125 pcs.
	Ultrasonic Examination	GROUP B	NO	NO	NO	Code A = 100% Code B = None	NO	NO	NO	100%
	Humidity Steady State Low Voltage	GROUP B	NO	NO	NO	YES	YES	YES	NO (only for qualification once a year)	YES
	Moisture Resistance	GROUP B	NO	NO	NO	Optional for Size 0805 and larger	YES for Size 0805 and larger	YES for Size 0805 & larger	NO (only for qualification once a year)	YES
	Terminal Strength	GROUP C	NO	NO	NO	OPTIONAL	NO	NO	NO	Periodic Testing
	Solderability	GROUP C	NO	NO	NO	OPTIONAL	YES	YES	YES	YES
	Resistance to Soldering Heat	GROUP C	NO	NO	NO	OPTIONAL	YES	YES	NO	Periodic Testing
	Equivalent Series Resonance (ESR) In Accordance with MIL-PRF-55681		N/A	N/A	N/A	N/A	N/A	N/A	YES	YES 6 pcs.
	Series Resonance In Accordance with MIL-PRF-55681		N/A	N/A	N/A	N/A	N/A	N/A	YES Periodic Testing	YES 6 pcs.
	RECOMMENDED FOR SPACE FLIGHTS		**NO**	**NO**	**NO**	**YES**	**YES**	**YES**	**YES for S-Level**	**YES**
	LEAD-TIME ARO (Weeks)		**3 to 13**	**3 to 13**	**3 to 13**	**3 to 22**	**3 to 28**	**3 to 22**	**3 to 13**	**3 to 22**

Contact Presidio for more information about our screening options.

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

PART NUMBER EXAMPLE (How to Order)

SR	1010	UP	101	J	6	T	1	C	(A)	#M123	A
Prefix *	Size	Dielectric (See Pg. 3)	Capacitance	Capacitance Tolerance	Voltage	Termination	Packaging	RoHS Compliant	Design-In Code (See Page 19)	Screening Level (See Above)	Ultrasonic A = 100% B = None

MILITARY SPECIFICATION PART NUMBERS
CDR11 AND CDR12 — MIL-PRF-55681

CAPACITOR CHARACTERISTICS — SIZE 0505

SPACE LEVEL 'S' **DSCC DWG 06019**

Type Designation	Capacitance (pF)	Cap. Tolerance	Rated Temp. & Voltage-Temp. Limits	Rated Voltage (V dc)
CDR1-B-0R1-B - -	0.1	B	BG, BP	50, 150
CDR1-B-0R2-B - -	0.2	B	BG, BP	50, 150
CDR1-B-0R3 - - - -	0.3	B, C	BG, BP	50, 150
CDR1-B-0R4 - - - -	0.4	B, C	BG, BP	50, 150
CDR1-B-0R5 - - - -	0.5	B, C, D	BG, BP	50, 150
CDR1-B-0R6 - - - -	0.6	B, C, D	BG, BP	50, 150
CDR1-B-0R7 - - - -	0.7	B, C, D	BG, BP	50, 150
CDR1-B-0R8 - - - -	0.8	B, C, D	BG, BP	50, 150
CDR1-B-0R9 - - - -	0.9	B, C, D	BG, BP	50, 150
CDR1-B-1R0 - - - -	1	B, C, D	BG, BP	50, 150
CDR1-B-1R1 - - - -	1.1	B, C, D	BG, BP	50, 150
CDR1-B-1R2 - - - -	1.2	B, C, D	BG, BP	50, 150
CDR1-B-1R3 - - - -	1.3	B, C, D	BC, BP	50, 150
CDR1-B-1R4 - - - -	1.4	B, C, D	BG, BP	50, 150
CDR1-B-1R5 - - - -	1.5	B, C, D	BG, BP	50, 150
CDR1-B-1R6 - - - -	1.6	B, C, D	BG, BP	50, 150
CDR1-B-1R7 - - - -	1.7	B, C, D	BG, BP	50, 150
CDR1-B-1R8 - - - -	1.8	B, C, D	BG, BP	50, 150
CDR1-B-1R9 - - - -	1.9	B, C, D	BG, BP	50, 150
CDR1-B-2R0 - - - -	2	B, C, D	BG, BP	50, 150
CDR1-B-2R1 - - - -	2.1	B, C, D	BG, BP	50, 150
CDR1-B-2R2 - - - -	2.2	B, C, D	BG, BP	50, 150
CDR1-B-2R4 - - - -	2.4	B, C, D	BG, BP	50, 150
CDR1-B-2R7 - - - -	2.7	B, C, D	BG, BP	50, 150
CDR1-B-3R0 - - - -	3	B, C, D	BC, BP	50, 150
CDR1-B-3R3 - - - -	3.3	B, C, D	BG, BP	50, 150
CDR1-B-3R6 - - - -	3.6	B, C, D	BG, BP	50, 150
CDR1-B-3R9 - - - -	3.9	B, C, D	BG, BP	50, 150
CDR1-B-4R3 - - - -	4.3	8, C, D	BG, BP	50, 150
CDR1-B-4R7 - - - -	4.7	B, C, D	BG, BP	50, 150
CDR1-B-5R1 - - - -	5.1	B, C, D	BG, BP	50, 150
CDR1-B-5R6 - - - -	5.6	B, C, D	BG, BP	50, 150
CDR1-B-6R2 - - - -	6.2	B, C, D	BG, BP	50, 150
CDR1-B-6R8 - - - -	6.8	B, C, J, K, M	BC, BP	50, 150
CDR1-B-7R5 - - - -	7.5	B, C, J, K, M	BG, BP	50, 150
CDR1-B-8R2 - - - -	8.2	B, C, J, K, M	BG, BP	50, 150
CDR1-B-9R1 - - - -	9.1	B, C, J, K, M	BG, BP	50, 150
CDR1-B-100 - - - -	10	F, G, J, K, M	BG, BP	50, 150
CDR1-B-110 - - - -	11	F, G, J, K, M	BG, BP	50, 150
CDR1-B-120 - - - -	12	F, G, J, K, M	BG, BP	50, 150
CDR1-B-130 - - - -	13	F, G. J, K, M	BG, BP	50, 150
CDR1-B-150 - - - -	15	F, G, J, K, M	BG, BP	50, 150
CDR1-B-160 - - - -	16	F, G, J, K, M	BG, BP	50, 150

Type Designation	Capacitance (pF)	Cap. Tolerance	Rated Temp. & Voltage-Temp. Limits	Rated Voltage (V dc)
CDR1-B-180 - - - -	18	F, G, J, K, M	BG, BP	50, 150
CDR1-B-200 - - - -	20	F, G, J, K, M	BG, BP	50, 150
CDR1-B-220 - - - -	22	F, G, J, K, M	BG, BP	50, 150
CDR1-B-240 - - - -	24	F, G, J, K, M	BG, BP	50, 150
CDR1-B-270 - - - -	27	F, G, J, K, M	BG, BP	50, 150
CDR1-B-300 - - - -	30	F, G, J, K, M	BG, BP	50, 150
CDR1-B-330 - - - -	33	F, G, J, K, M	BG, BP	50, 150
CDR1-B-360 - - - -	36	F, G, J, K, M	BG, BP	50, 150
CDR1-B-390 - - - -	39	F, G, J, K, M	BG, BP	50, 150
CDR1-B-430 - - - -	43	F, G, J, K, M	BG, BP	50, 150
CDR1-B-470 - - - -	47	F, G, J, K, M	BG, BP	50, 150
CDR1-B-510 - - - -	51	F, G, J, K, M	BG, BP	50, 150
CDR1-B-560 - - - -	56	F, G, J, K, M	BG, BP	50, 150
CDR1-B-620 - - - -	62	F, G, J, K, M	BG, BP	50, 150
CDR1-B-680 - - - -	68	F, G, J, K, M	BG, BP	50, 150
CDR1-B-750 - - - -	75	F, G, J, K, M	BG, BP	50, 150
CDR1-B-820 - - - -	82	F, G, J, K, M	BG, BP	50, 150
CDR1-B-910 - - - -	91	F, G, J, K, M	BG, BP	50, 150
CDR1-B-101 - - - -	100	F, G, J, K, M	BG, BP	50, 150
CDR1-BP111A - - -	110	F, G, J, K, M	BP	50, 100
CDR1-BP121A- - -	120	F, G, J, K, M	BP	50, 100
CDR1-BP131A - - -	130	F, G, J, K, M	BP	50, 100
CDR1-BP151A - - -	150	F, G, J, K, M	BP	50, 100
CDR1-BP161A - - -	160	F, G, J, K, M	BP	50, 100
CDR1-BP181A- --	180	F, G, J, K, M	BP	50, 100
CDR1-BP201A - - -	200	F, G, J, K, M	BP	50, 100
CDR1-BP221A - - -	220	F, G, J, K, M	BP	50, 100
CDR1-BP241A - - -	240	F, G, J, K, M	BP	50, 100
CDR1-BP271A - - -	270	F, G, J, K, M	BP	50, 100
CDR1-BP301A - - -	300	F, G, J, K, M	BP	50, 100
CDR1-BP331A - - -	330	F, G, J, K, M	BP	50, 100
CDR1-BP361A - - -	360	F, G, J, K, M	BP	50, 100
CDR1-BP391A - - -	390	F, G, J, K, M	BP	50, 100
CDR1-BP431A - - -	430	F, G, J, K, M	BP	50, 100
CDR1-BP471A - - -	470	F, G, J, K, M	BP	50, 100
CDR1-BP511A - --	510	F, G, J, K, M	BP	50, 100
CDR1-BP561A - - -	560	F, G, J, K, M	BP	50, 100
CDR1-BP621A - - -	620	F, G, J, K, M	BP	50, 100
CDR1-BP681A - - -	680	F, G, J, K, M	BP	50, 100
CDR1-BP751A - - -	750	F, G, J, K, M	BP	50, 100
CDR1-BP821A - - -	820	F, G, J, K, M	BP	50, 100
CDR1-BP911A - - -	910	F, G, J, K, M	BP	50, 100
CDR1-BP102A - - -	1,000	F, G, J, K, M	BP	50, 100

PART NUMBER EXAMPLE (How to Order)

Visit our website for the complete MIL-PRF-55681 Specification

CDR11	BP	101	A	F	M		S
Mil Style	Voltage Temperature Limits	Capacitance	Rated Voltage Code	Cap Tolerance Code	Termination Finish		Failure Rate Level
CDR11 **CDR12** **Size 0505**	BG = 90 ± 20 ppm / °C BP = 0 ± 30 ppm / °C	3 Digit EIA Code	A = 50V B = 100V K = 150V	B = ± .10 pF < 10pF C = ± .25 pF < 10 pF D = ± .50 pF < 10 pF F = ± 1% G = ± 2% J = ± 5% K = ± 10% M = ± 20%	M = Palladium/Silver N = Silver-Nickel-Gold	CDR11 Only	M = 1.0% P = 0.1% R = 0.01% S = 0.001%
					S = Solder Coated, Final with a Minimum of 4% Lead U = Base Metalization, Barrier Metal, Solder Coated (Tin/Lead Alloy with a Minimum of 4% Lead) Z = Base Metalization, Barrier Metal, Tinned (Tin/Lead Alloy with Minimum of 4% Lead)	CDR12 Only	

DIMENSIONS — CDR11 AND CDR12 CAPACITORS

Style Per MIL-C-55681	Length (L) Inches (mm)	Width (W) Inches (mm)	Thickness (T) Min Inches (mm)	Thickness (T) Max Inches (mm)	Metalization Band (M.B.) Inches (mm)
CDR11	0.055 ± 0.015 (1.40 ± 0.381)	0.055 ± 0.015 (1.40 ± 0.381)	0.020 (0.508)	0.057 (1.45)	0.010 – 0.005 + 0.010 (0.254 – 0.127 + 0.254)
CDR12	0.055 ± 0.025 (1.40 ± 0.635)	0.055 ± 0.015 (1.40 ± 0.381)	0.020 (0.508)	0.057 (1.45)	0.010 – 0.005 + 0.010 (0.254 – 0.127 + 0.254)

See capacitor diagram on Page 17.

Consult factory for current qualification status.

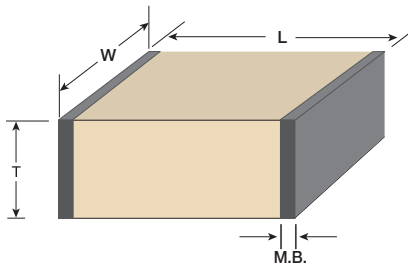
MILITARY SPECIFICATION PART NUMBERS
CDR13 AND CDR14 — MIL-PRF-55681

CAPACITOR CHARACTERISTICS — SIZE 1010

SPACE LEVEL 'S' **DSCC DWG 06019**

Type Designation	Capacitance (pF)	Cap. Tolerance	Rated Temp. & Voltage-Temp. Limits	Rated Voltage (V dc)
CDR1-B-0R1-B - -	0.1	B	BG, BP	200, 500
CDR1-B-0R2-B - -	0.2	B	BG, BP	200, 500
CDR1-B-0R3 - - - -	0.3	B, C	BG, BP	200, 500
CDR1-B-0R4 - - - -	0.4	B, C	BG, BP	200, 500
CDR1-B-0R5 - - - -	0.5	B, C, D	BG, BP	200, 500
CDR1-B-0R6 - - - -	0.6	B, C, D	BG, BP	200, 500
CDR1-B-0R7 - - - -	0.7	B, C, D	BG, BP	200, 500
CDR1-B-0R8 - - - -	0.8	B, C, D	BG, BP	200, 500
CDR1-B-0R9 - - - -	0.9	B, C, D	BG, BP	200, 500
CDR1-B-1R0 - - - -	1	B, C, D	BG, BP	200, 500
CDR1-B-1R1 - - - -	1.1	B, C, D	BG, BP	200, 500
CDR1-B-1R2 - - - -	1.2	B, C, D	BG, BP	200, 500
CDR1-B-1R3 - - - -	1.3	B, C, D	BC, BP	200, 500
CDR1-B-1R4 - - - -	1.4	B, C, D	BG, BP	200, 500
CDR1-B-1R5 - - - -	1.5	B, C, D	BG, BP	200, 500
CDR1-B-1R6 - - - -	1.6	B, C, D	BG, BP	200, 500
CDR1-B-1R7 - - - -	1.7	B, C, D	BG, BP	200, 500
CDR1-B-1R8 - - - -	1.8	B, C, D	BG, BP	200, 500
CDR1-B-1R9 - - - -	1.9	B, C, D	BG, BP	200, 500
CDR1-B-2R0 - - - -	2	B, C, D	BG, BP	200, 500
CDR1-B-2R1 - - - -	2.1	B, C, D	BG, BP	200, 500
CDR1-B-2R2 - - - -	2.2	B, C, D	BG, BP	200, 500
CDR1-B-2R4 - - - -	2.4	B, C, D	BG, BP	200, 500
CDR1-B-2R7 - - - -	2.7	B, C, D	BG, BP	200, 500
CDR1-B-3R0 - - - -	3	B, C, D	BC, BP	200, 500
CDR1-B-3R3 - - - -	3.3	B, C, D	BG, BP	200, 500
CDR1-B-3R6 - - - -	3.6	B, C, D	BG, BP	200, 500
CDR1-B-3R9 - - - -	3.9	B, C, D	BG, BP	200, 500
CDR1-B-4R3 - - - -	4.3	8, C, D	BG, BP	200, 500
CDR1-B-4R7 - - - -	4.7	B, C, D	BG, BP	200, 500
CDR1-B-5R1 - - - -	5.1	B, C, D	BG, BP	200, 500
CDR1-B-5R6 - - - -	5.6	B, C, D	BG, BP	200, 500
CDR1-B-6R2 - - - -	6.2	B, C, D	BG, BP	200, 500
CDR1-B-6R8 - - - -	6.8	B, C, J, K, M	BC, BP	200, 500
CDR1-B-7R5 - - - -	7.5	B, C, J, K, M	BG, BP	200, 500
CDR1-B-8R2 - - - -	8.2	B, C, J, K, M	BG, BP	200, 500
CDR1-B-9R1 - - - -	9.1	B, C, J, K, M	BG, BP	200, 500
CDR1-B-100 - - - -	10	F, G, J, K, M	BG, BP	200, 500
CDR1-B-110 - - - -	11	F, G, J, K, M	BG, BP	200, 500
CDR1-B-120 - - - -	12	F, G, J, K, M	BG, BP	200, 500
CDR1-B-130 - - - -	13	F, G. J, K, M	BG, BP	200, 500
CDR1-B-150 - - - -	15	F, G, J, K, M	BG, BP	200, 500
CDR1-B-160 - - - -	16	F, G, J, K, M	BG, BP	200, 500
CDR1-B-180 - - - -	18	F, G, J, K, M	BG, BP	200, 500
CDR1-B-200 - - - -	20	F, G, J, K, M	BG, BP	200, 500
CDR1-B-220 - - - -	22	F, G, J, K, M	BG, BP	200, 500
CDR1-B-240 - - - -	24	F, G, J, K, M	BG, BP	200, 500
CDR1-B-270 - - - -	27	F, G, J, K, M	BG, BP	200, 500
CDR1-B-300 - - - -	30	F, G, J, K, M	BG, BP	200, 500
CDR1-B-330 - - - -	33	F, G, J, K, M	BG, BP	200, 500
CDR1-B-360 - - - -	36	F, G, J, K, M	BG, BP	200, 500
CDR1-B-390 - - - -	39	F, G, J, K, M	BG, BP	200, 500
CDR1-B-430 - - - -	43	F, G, J, K, M	BG, BP	200, 500
CDR1-B-470 - - - -	47	F, G, J, K, M	BG, BP	200, 500
CDR1-B-510 - - - -	51	F, G, J, K, M	BG, BP	200, 500
CDR1-B-560 - - - -	56	F, G, J, K, M	BG, BP	200, 500
CDR1-B-620 - - - -	62	F, G, J, K, M	BG, BP	200, 500
CDR1-B-680 - - - -	68	F, G, J, K, M	BG, BP	200, 500
CDR1-B-750 - - - -	75	F, G, J, K, M	BG, BP	200, 500
CDR1-B-820 - - - -	82	F, G, J, K, M	BG, BP	200, 500
CDR1-B-910 - - - -	91	F, G, J, K, M	BG, BP	200, 500
CDR1-B-101 - - - -	100	F, G, J, K, M	BG, BP	200, 500

For Information on MIL-PRF-55681
Visit our Website at:
www.presidiocomponents.com



Consult Presidio for Current Qualification Status

PART NUMBER EXAMPLE (How to Order)

CDR13	BP	101	C	F	M		S
Mil Style	Voltage Temperature Limits	Capacitance	Rated Voltage Code	Cap Tolerance Code	Termination Finish		Failure Rate Level
CDR13 **CDR14** **Size 1010**	BG = 90 ± 20 ppm / °C BP = 0 ± 30 ppm / °C	3 Digit EIA Code	C = 200V E = 500V	B = ± .10 pF < 10pF C = ± .25 pF < 10 pF D = ± .50 pF < 10 pF F = ± 1% G = ± 2% J = ± 5% K = ± 10% M = ± 20%	M = Palladium/Silver N = Silver-Nickel-Gold S = Solder Coated, Final with a Minimum of 4% Lead U = Base Metalization, Barrier Metal, Solder Coated (Tin/Lead Alloy with a Minimum of 4% Lead) Z = Base Metalization, Barrier Metal, Tinned (Tin/Lead Alloy with Minimum of 4% Lead)	CDR13 Only CDR14 Only	M = 1.0% P = 0.1% R = 0.01% S = 0.001%

DIMENSIONS — CDR13 AND CDR14 CAPACITORS

Style Per MIL-C-55681	Length (L) Inches (mm)	Width (W) Inches (mm)	Thickness (T) Min Inches (mm)	Thickness (T) Max Inches (mm)	Metalization Band (M.B.) Inches (mm)
CDR13	0.110 ± 0.020 (2.794 ± 0.508)	0.110 ± 0.020 (2.794 ± 0.508)	0.030 (0.762)	0.102 (2.591)	0.015 ± 0.010 (0.381 ± 0.254)
CDR14	0.110 – 0.020 + 0.035 (2.794 – 0.508 + 0.889)	0.110 ± 0.020 (2.794 ± 0.508)	0.030 (0.762)	0.102 (2.591)	0.015 ± 0.010 (0.381 ± 0.254)

See capacitor diagram above.

PRESIDIO COMPONENTS
RF POWER STACKS™

PRESIDIO ADVANTAGE

Ultra Lowest ESL

Typically less than half, as a result of the vertical plate design.

Ultra Low ESR

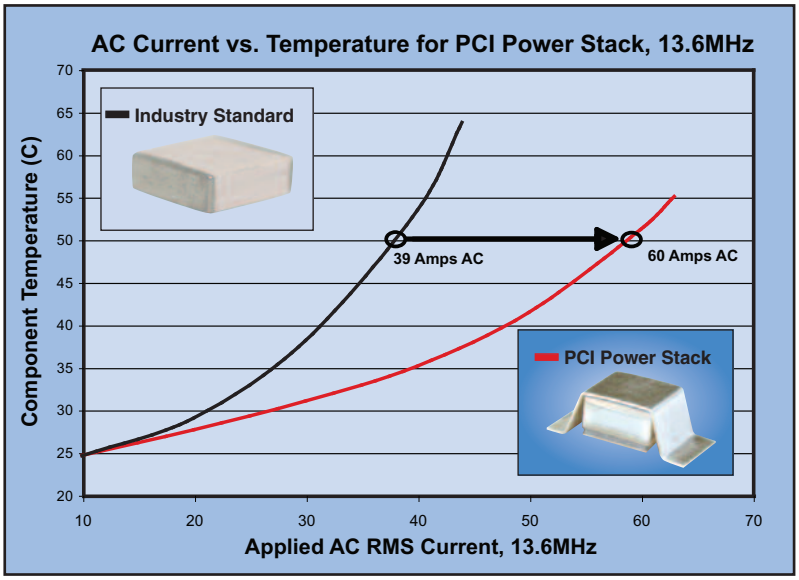
Due to internal vertical plate design, high Q porcelain ceramic and capacitor electrode connection directly to the printed circuit board.

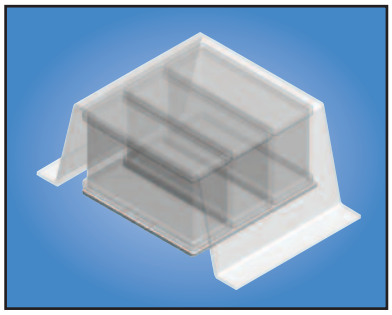
Integrated Heat Sink

Best heat dissipation is achieved by integrating 'heat sink' electrodes with direct connection to the base plate.

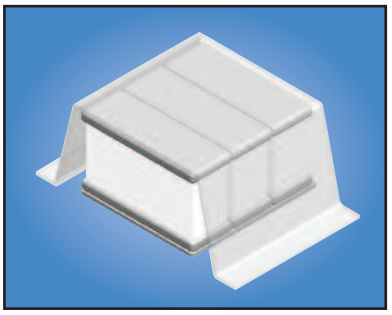
Best Vibration Performance

Robust base plate and dual top lead attachment provide superior vibration tolerance.





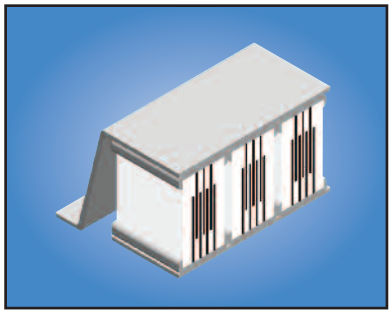
SILVER BASE PLATE



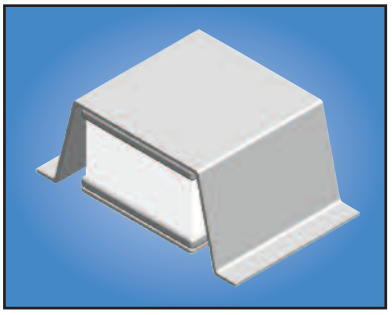
VERTICAL STACKED CAPACITORS

TYPICAL APPLICATIONS

- High RF Power for Commercial, Military and Space
- Non-Magnetic and Antenna Applications
- Semiconductor Manufacturing Equipment



INTEGRATED "HEAT SINK" ELECTRODES



SILVER TOP LEAD

Consult Presidio for additional information and samples.

PATENT PENDING

PRESIDIO COMPONENTS, INC.
7169 Construction Court, San Diego, CA 92121 • Tel: 858-578-9390 • Fax: 858-578-6225
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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

USA	Code	USA	Code
Alabama	G	Nebraska	P
Alaska	P	Nevada, North	B
Arizona	D	Nevada, South	C
Arkansas	P	New Hampshire	L
California, North	B	New Jersey	J
California, South	C	New Mexico	D
Colorado	E	New York, Metro	J
Connecticut	L	New York, Upstate	K
Delaware	I	North Carolina	G
District of Columbia	H	North Dakota	O
Florida	G	Ohio	M
Georgia	G	Oklahoma	P
Hawaii	P	Oregon	A
Idaho	A	Pennsylvania	I
Illinois	N	Rhode Island	L
Indiana	M	South Carolina	G
Iowa	O	South Dakota	O
Kansas	P	Tennessee	G
Kentucky	M	Texas	F
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		

OUTSIDE THE UNITED STATES

Americas	Code
Canada	R
Mexico	R
Caribbean	R
Central America	R
South America	R
Pacific Rim	
Australia	S
China	T
Japan	U
Korea, South	V
Malaysia	W
Singapore	X
Other Pacific Rim Countries	Y

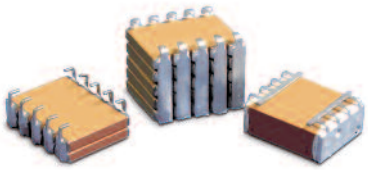
Europe	Code
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Belgium	1
Denmark	5
Finland	5
France	2
Germany	3
Ireland	6
Italy	4
Luxembourg	1
Netherlands	1
Norway	5
Sweden	5
Switzerland	3
United Kingdom	6
Other European Countries	7
Other	
India	Z
Israel	8
Rest of World	9

PART NUMBER EXAMPLE:
0505UP101JAT1CA

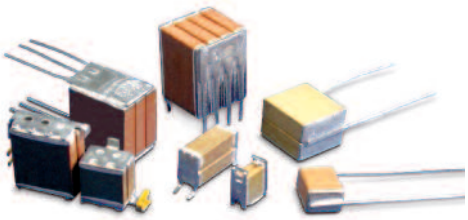
PART DESCRIPTION: Ceramic Capacitor, 0505, Ultra-Porcelain™, 100pF ± 5%, 150 VDC, Tin, Tape and Reel, RoHS, Design-In Code A for Washington State.

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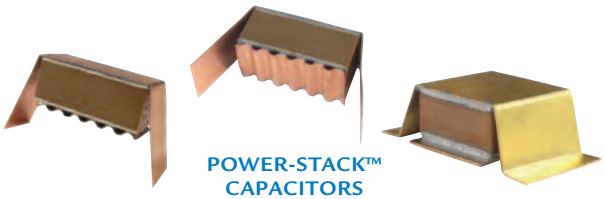


HIGH TEMP
DOWNHOLE OIL

PRESIDIO COMPONENTS, INC. maintains more than 100 million standard commercial and military parts in inventory. If you need a custom product, call our engineering team.

Custom products include non-standard part sizes and voltages such as high voltage, high temperature, high "Q", custom leads, cryogenic ceramics, negative and positive temperature characteristic ceramics, and piezoelectric formulations. European sizes are also available.

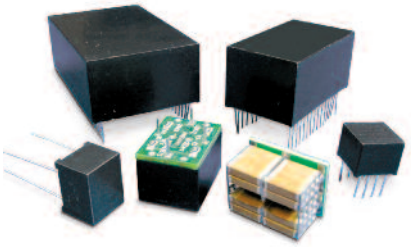
Backed with numerous patents and hundreds of years of combined experience, Presidio's engineering team is ready and able to create the ideal solution for any application.



POWER-STACK™
CAPACITORS



'S' LEADS

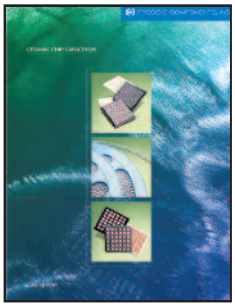


ENCAPSULATED



HIGH FREQUENCY
HIGH POWER

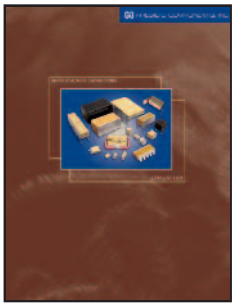
MAIN PRODUCT CATALOGS



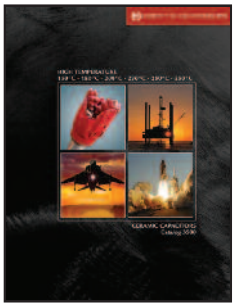
CERAMIC CHIP
CAPACITORS



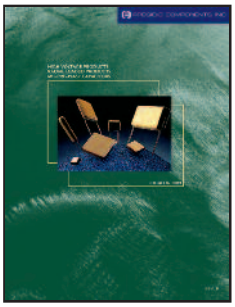
HIGH RELIABILITY
EXTENDED RANGE
CHIPS FOR SPACE



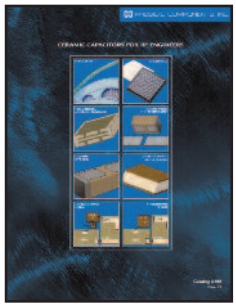
SMPS STACKED
CAPACITORS



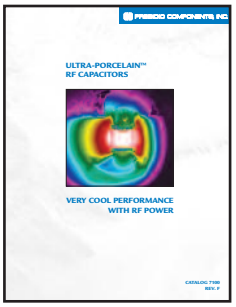
HIGH TEMPERATURE
CERAMIC
CAPACITORS



HIGH VOLTAGE &
RADIAL LEADED PRODUCTS
MIL-PRF-49467 CAPACITORS



CERAMIC CAPACITORS
FOR RF, MICROWAVE &
FIBER OPTIC APPLICATIONS



ULTRA-PORCELAIN
RF CAPACITORS

PRESIDIO COMPONENTS, INC.

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OCTOBER 2017

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