CERAMIC STACKED CAPACITORS

X7R AND NPO
MAXIMUM CAPACITANCE (µF)

Most popular sizes shown in yellow

Many other case sizes available. Please contact factory.

Ex: HRS208X7R245K2J2 (2.4µF, 50V, .220" total height)

75 V See Note 2

PRESIDIO CASE SIZE CODE																				"B" Ht. Max. inch (mm)	No. of Chips per Stack
Case Code	08		17		32		36		16		01		47		42		21		06		
Dielectric	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	
25V (Voltage Code=1)	1.4	.036	1.8	.045	2.0	.050	2.0	.050	2.3	.060	2.5	.065	3.0	.080	3.0	.080	3.9	.10	5.0	.13	.150 (3.81)	1
	2.8	.072	3.6	.090	4.0	.10	4.0	.10	4.6	.12	5.0	.13	6.0	.16	6.0	.16	7.8	.20	10	.26	.200 (5.08)	2
	4.2	.11	5.4	.13	6.0	.15	6.0	.15	6.9	.18	7.5	.19	9.0	.24	9.0	.24	11	.30	15	.39	.275 (6.99)	3
	—	—	7.2	.18	—	—	—	—	9.2	.24	10	.26	12	.32	12	—	15	.40	20	.52	.350 (8.89)	4
	—	—	9.0	.22	—	—	—	—	11	.30	12	.32	15	.40	15	—	19	.50	25	.65	.425 (10.80)	5
	—	—	11	.27	—	—	—	—	14	.36	15	.39	18	.48	18	—	23	.60	30	.78	.500 (12.70)	6
50V (Voltage Code=2)	1.2	.030	1.5	.040	1.7	.040	1.7	.040	1.9	.050	2.1	.055	2.7	.070	2.7	.070	3.3	.080	4.5	.11	.150 (3.81)	1
	2.4	.060	3.0	.080	3.4	.080	3.4	.080	3.8	.10	4.2	.11	5.4	.14	5.4	.14	6.6	.16	9.0	.22	.220 (5.59)	2
	3.6	090	4.5	.12	5.1	.12	5.1	.12	5.7	.15	6.3	.16	8.1	.21	8.1	.21	10	.24	13	.33	.310 (7.87)	3
	—	—	6.0	.16	—	—	—	—	7.6	.20	8.4	.22	10	.28	10	—	13	.32	18	.44	.400 (10.16)	4
	—	—	7.5	.20	—	—	—	—	9.5	.25	10	.27	13	.35	13	—	16	.40	22	.55	.490 (12.45)	5
	—	—	—	—	—	—	—	—	11	.30	12	.33	16	.42	16	—	19	.48	27	.66	.580 (14.73)	6
100V (Voltage Code=3)	.75	.020	1.0	.025	1.1	.030	1.1	.030	1.2	.035	1.4	.040	1.8	.050	1.8	.050	2.2	.060	3.0	.080	.160 (4.06)	1
	1.5	.040	2.0	.050	2.2	.060	2.2	.060	2.4	.070	2.8	.080	3.6	.10	3.6	.10	4.4	.12	6.0	.16	.280 (7.11)	2
	—	—	3.0	.075	—	—	—	—	3.6	.10	4.2	.12	5.4	.15	5.4	—	6.6	.18	9.0	.24	.400 (10.16)	3
	—	—	4.0	.10	—	—	—	—	4.8	.14	5.6	.16	7.2	.20	7.2	—	8.8	.24	12	.32	.520 (13.21)	4
	—	—	—	—	—	—	—	—	6.0	.17	7.0	.20	9.0	.25	9.0	—	11	.30	15	.40	.640 (16.26)	5
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	.760 (19.30)	6
200V (Voltage Code=4)	0.22	.012	0.3	.016	.36	.018	.36	.018	.39	.020	0.42	.022	.60	.027	.60	.030	.70	.036	1.0	.047	.160 (4.06)	1
	0.44	.024	0.6	.032	.72	.036	.72	.036	.78	.040	0.84	.044	1.2	.054	1.2	.060	1.4	.072	2.0	.094	.280 (7.11)	2
	—	—	0.9	.048	—	—	—	—	1.1	.060	1.2	.066	1.8	.071	1.8	—	2.1	.11	3.0	.14	.400 (10.16)	3
	—	—	1.2	.064	—	—	—	—	1.5	.080	1.7	.088	2.4	.11	2.4	—	2.8	.14	4.0	.19	.520 (13.21)	4
	—	—	—	—	—	—	—	—	1.9	.10	2.1	.11	3.0	.13	3.0	—	3.5	.18	5.0	2.3	.640 (16.26)	5
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	.760 (19.30)	6
500V (Voltage Code=6)	0.11	.0060	0.14	.0075	.15	.0080	.15	.0080	0.18	.010	0.19	.011	.25	.013	.25	.013	.30	.016	.42	.022	.160 (4.06)	1
	0.22	.012	0.28	.015	.30	.016	.30	.016	0.36	.020	0.38	.022	.50	.026	.50	.026	.60	.032	.84	.044	.280 (7.11)	2
	—	—	0.42	.022	—	—	—	—	0.54	.030	0.57	.033	.75	.039	.75	—	.90	.048	1.2	.066	.400 (10.16)	3
	—	—	0.56	.030	—	—	—	—	0.72	.040	0.76	.044	1.0	.052	1.0	—	1.2	.064	1.6	.088	.520 (13.21)	4
	—	—	—	—	—	—	—	—	0.90	.050	0.95	.055	1.2	.065	1.2	—	1.5	.080	2.1	.11	.640 (16.26)	5
	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	.760 (19.30)	6
Dimensions inches (mm)	.215 (5.46)		.185 (4.70)		.300 (7.62)		.355 (9.02)		.235 (5.97)		.275 (6.99)		.310 (7.87)		.400 (10.16)		.300 (7.62)		.375 (9.53)		C ± .025 (0.64)
	.215 (5.46)		.275 (6.99)		.180 (4.57)		.150 (3.81)		.275 (6.99)		.275 (6.99)		.270 (6.86)		.220 (5.59)		.330 (8.38)		.375 (9.53)		D (Max) Width
	.240 (6.10)		.210 (5.33)		.325 (8.26)		.380 (9.65)		.260 (6.60)		.300 (7.62)		.335 (8.51)		.425 (10.80)		.325 (8.26)		.400 (10.16)		E (Max) Length
Leads per Side	2		3		2		2		3		3		3		2		3		4		Height dimensions based on commonly ordered parts. Optimized heights available.
Chip Size	2018		1725		2917		3415		2225		2627		3026		3920		2832		3736		

Presidio's most popular sizes are highlighted. Choose these for best price, delivery and availability.

Notes:

1. "B" height dimensions are based on commonly ordered parts. Optimized heights are available.
2. 75V parts are also available. Capacitance values of 75V parts are half-way between 50V and 100V parts. Lower, intermediate and higher voltages available (i.e. 16V, 150V, 300V, 600V, etc.
3. Vertical stacks are sometimes useful for reducing the footprint; for availability, consult factory.
4. Other sizes, capacitances, lead frames, dielectrics (BP, BX, BR, BQ), and voltage ratings are available. Consult factory.

HOW TO ORDER OUR CERAMIC STACKED CAPACITORS

HR	S	5	01	X7R	106	K	2	J	3
Optional Screening Code	**Configuration**	**No. of Chips**	**Case Code**	**Dielectric Type**	**Capacitance Code**	**Capacitance Tolerance ***	**Voltage Code**	**Lead Frame Style**	**No. of Leads**
Leave Blank for Commercial HR SR (See pg. 7)	Stacked Capacitor Assembly	Number of Chips per Stack	See Above	X7R NPO N2T	Capacitance (in picofarads): Two significant figures followed by the number of zeros. Examples: 103=10,000 pF=.01 µF 106=10,000,000 pF=10 µF	F = ± 1% (NPO only) G = ± 2% (NPO only) J = ± 5% (NPO only) K = ± 10% M = ± 20% Z = -20% /+80%	1 = 25V 2 = 50V 3 = 100V 4 = 200V 6 = 500V	J = Leads formed under G = Leads formed out N = Through-hole S = See pages 12 & 13	Number of Leads per Side (See Above)

NOTE: Other sizes, capacitances, lead frames, dielectrics (BP, BX, BR, BQ), and voltage ratings are available. Consult factory.

* Unless otherwise specified. Customer SCD takes precedence.

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CERAMIC STACKED CAPACITORS

X7R AND NPO
MAXIMUM CAPACITANCE (µF)

Many other case sizes available. Please contact factory.

Ex: HRS205NP0324K1J4 (.32µF, 25V, .200" total height)

PRESIDIO CASE SIZE CODE																	"B" Ht. Max. inch (mm)	No. of Chips per Stack
Case Code	02		03		07		37		05		04		48		44		13			
Dielectric	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO	X7R	NPO		
25V (Voltage Code=1)	5.6	.14	6.0	.15	6.5	.17	6.5	.17	**7.0**	**.16**	8.0	.20	8.0	.20	13	.33	**20**	**.50**	.150 (3.81)	1
	11	.28	12	.30	13	.34	13	.34	**14**	**.32**	16	.40	16	.40	26	.66	**40**	**1.0**	.200 (5.08)	2
	17	.42	18	.45	19	.51	19	.51	**21**	**.48**	24	.60	24	.60	39	1.0	**60**	**1.5**	.275 (6.99)	3
	22	.56	24	.60	26	.68	26	.68	**28**	**.64**	32	.80	32	.80	52	1.3	**80**	**2.0**	.350 (8.89)	4
	28	.70	30	.75	32	.85	32	.85	**35**	**.80**	40	1.0	40	1.0	65	1.6	**100**	**2.5**	.425 (10.80)	5
	33	.84	36	.90	39	1.0	39	1.0	**42**	**.96**	48	1.2	48	1.2	78	2.0	**120**	**3.0**	.500 (12.70)	6
50V (Voltage Code=2)	4.7	.12	5.0	.13	5.6	.14	5.6	.14	**5.6**	**.14**	6.8	.17	6.8	.17	10	.27	**18**	**.40**	.150 (3.81)	1
	9.4	.24	10	.26	11	.28	11	.28	**11**	**.28**	13	.34	13	.34	20	.54	**36**	**.80**	.220 (5.59)	2
	14	.36	15	.39	16	.42	16	.42	**17**	**.42**	20	.51	20	.51	30	.71	**54**	**1.2**	.310 (7.87)	3
	19	.48	20	.52	22	.56	22	.56	**22**	**.56**	27	.68	27	.68	40	1.1	**72**	**1.6**	.400 (10.16)	4
	23	.60	25	.65	28	.70	28	.70	**28**	**.70**	34	.85	34	.85	50	1.3	**90**	**2.0**	.490 (12.45)	5
75 V	28	.72	30	.78	33	.84	33	.84	**33**	**.84**	41	1.0	41	1.0	60	1.6	**110**	**2.4**	.580 (14.73)	6
See Note 2 **100V** (Voltage Code=3)	3.2	.085	3.3	.090	3.7	.10	3.7	.10	**4.0**	**.10**	4.5	.12	4.5	.12	7.0	.20	**12**	**.30**	.160 (4.06)	1
	6.4	.17	6.6	.18	7.4	.20	7.4	.20	**8.0**	**.20**	9.0	.24	9.0	.24	14	.40	**24**	**.60**	.280 (7.11)	2
	9.6	.25	10	.27	11	.30	11	.30	**12**	**.30**	13	.36	13	.36	21	.60	**36**	**.90**	.400 (10.16)	3
	12	.34	13	.36	15	.40	15	.40	**16**	**.40**	18	.48	18	.48	28	.80	**48**	**1.2**	.520 (13.21)	4
	16	.42	16	.45	18	.50	18	.50	**20**	**.50**	22	.60	22	.60	35	1.0	**60**	**1.5**	.640 (16.26)	5
	—	—	—	—	—	—	—	—	**—**	**—**	—	—	27	.72	42	1.2	**72**	**1.8**	.760 (19.30)	6
200V (Voltage Code=4)	1.0	.050	1.0	.050	1.2	.060	1.2	.060	**1.2**	**.056**	1.5	.075	1.5	.075	2.2	.12	**3.5**	**.18**	.160 (4.06)	1
	2.0	.10	2.0	.10	2.4	.12	2.4	.12	**2.4**	**.11**	3.0	.15	3.0	.15	4.4	.24	**7.0**	**.36**	.280 (7.11)	2
	3.0	.15	3.0	.15	3.6	.18	3.6	.18	**3.6**	**.17**	4.5	.22	4.5	.22	6.6	.36	**10**	**.54**	.400 (10.16)	3
	4.0	.20	4.0	.20	4.8	.24	4.8	.24	**4.8**	**.22**	6.0	.30	6.0	.30	8.8	.48	**14**	**.72**	.520 (13.21)	4
	5.0	.25	5.0	.25	6.0	.30	6.0	.30	**6.0**	**.28**	7.5	.37	7.5	.37	11	.60	**17**	**.90**	.640 (16.26)	5
	—	—	—	—	—	—	—	—	**—**	**—**	—	—	9.0	.44	13	.72	**21**	**1.1**	.760 (19.30)	6
500V (Voltage Code=6)	.44	.024	.46	.025	.50	.027	.50	.027	**0.55**	**.028**	.60	.035	.60	.035	1.0	.056	**1.6**	**.080**	.160 (4.06)	1
	.88	.048	.92	.050	1.0	.054	1.0	.054	**1.1**	**.056**	1.2	.070	1.2	.070	2.0	.11	**3.2**	**.16**	.280 (7.11)	2
	1.3	.072	1.3	.075	1.5	.071	1.5	.071	**1.6**	**.084**	1.8	.10	1.8	.10	3.0	.16	**4.8**	**.24**	.400 (10.16)	3
	1.7	.096	1.8	.10	2.0	.11	2.0	.11	**2.2**	**.11**	2.4	.14	2.4	.14	4.0	.22	**6.4**	**.32**	.520 (13.21)	4
	2.2	.12	2.3	.12	2.5	.13	2.5	.13	**2.7**	**.14**	3.0	.17	3.0	.17	5.0	.28	**8.0**	**.40**	.640 (16.26)	5
	—	—	—	—	—	—	—	—	**—**	**—**	—	—	3.6	.21	6.0	.33	**9.6**	**.48**	.760 (19.30)	6
Dimensions inches (mm)	.350 (8.89)		.415 (10.54)		.375 (9.53)		.550 (13.97)		**.400 (10.16)**		.475 (12.07)		.400 (10.16)		.375 (9.53)		**.450 (11.43)**		C ± .025 (0.64)	
	.400 (10.16)		.385 (9.78)		.425 (10.80)		.310 (7.87)		**.425 (10.80)**		.420 (10.67)		.500 (12.70)		.825 (20.96)		**1.075 (27.31)**		D (Max) Width	
	.375 (9.53)		.440 (11.18)		.400 (10.16)		.575 (14.61)		**.440 (11.18)**		.500 (12.70)		.425 (10.80)		.400 (10.16)		**.500 (12.70)**		E (Max) Length	
Leads per Side	4		4		4		3		**4**		4		5		8		**10**		Height dimensions based on commonly ordered parts. Optimized heights available.	
Chip Size	3439		4036		3640		5330		**3941**		4540		3949		3680		**4399**			

Presidio's most popular sizes are highlighted. Choose these for best price, delivery and availability.

Notes:
1. "B" height dimensions are based on commonly ordered parts. Optimized heights are available.
2. 75V parts are also available. Capacitance values of 75V parts are half-way between 50V and 100V parts. Lower, intermediate and higher voltages available (i.e. 16V, 150V, 300V, 600V, etc.
3. Vertical stacks are sometimes useful for reducing the footprint; for availability, consult factory.
4. Other sizes, capacitances, lead frames, dielectrics (BP, PX, BR, BQ), and voltage ratings are available. Consult factory.

Ex: HRS513X7R805K6G10 (8µF, 500V, .640" total height)

HOW TO ORDER OUR CERAMIC STACKED CAPACITORS

HR	S	4	05	X7R	226	K	2	J	4
Optional Screening Code	**Configuration**	**No. of Chips**	**Case Code**	**Dielectric Type**	**Capacitance Code**	**Capacitance Tolerance ***	**Voltage Code**	**Lead Frame Style**	**No. of Leads**
Leave Blank for Commercial HR SR (See pg. 7)	Stacked Capacitor Assembly	Number of Chips per Stack	See Above	X7R NPO N2T	Capacitance (in picofarads): Two significant figures followed by the number of zeros. Examples: 103=10,000 pF=.01 µF 226=22,000,000 pF=22 µF	F = ± 1% (NPO only) G = ± 2% (NPO only) J = ± 5% (NPO only) K = ± 10% M = ± 20% Z = -20% /+80%	1 = 25V 2 = 50V 3 = 100V 4 = 200V 6 = 500V	J = Leads formed under G = Leads formed out N = Through-hole S = See pages 12 & 13	Number of Leads per Side (See Above)

NOTE: Other sizes, capacitances, lead frames, dielectrics (BP, BX, BR, BQ), and voltage ratings are available. Consult factory.

* Unless otherwise specified. Customer SCD takes precedence.

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