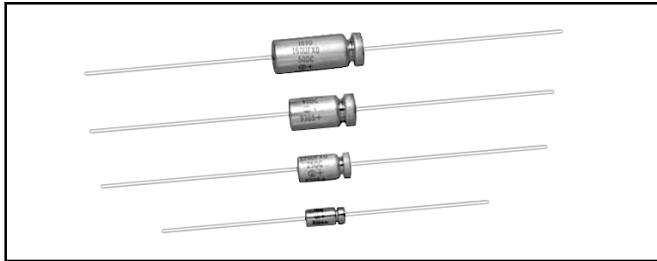


Wet Tantalum Capacitors

Gelled-Electrolyte Sintered Anode TANTALEX® Capacitors For Operation to + 125°C,
Elastomer-Sealed



FEATURES

Vishay Sprague Model 109D tubular elastomer-sealed, gelled-electrolyte sintered anode TANTALEX® capacitors fill the basic requirements for applications where a superior quality, reliable design for industrial, automotive and telecommunications applications is desired.

Type 109D capacitors are commercial equivalents of Military Style CL64 and CL65, designed to meet the performance requirements of Military Specification MIL-C-3965.

PERFORMANCE CHARACTERISTICS

Operating Temperature: - 55°C to + 85°C. (To + 125°C with voltage derating.)

Capacitance Tolerance: At 120 Hz, + 25°C. ± 20% standard. ± 10%, ± 5% available as special.

DC Leakage Current (DCL Max.):

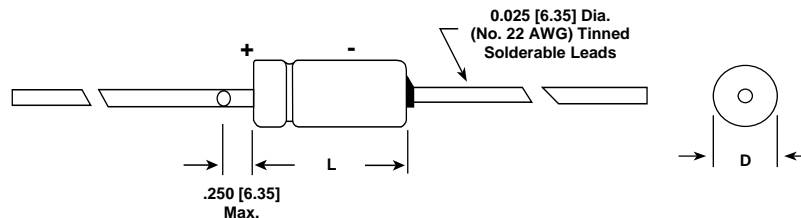
At + 25°C, + 85°C, + 125°C: Leakage current shall not exceed the values listed in the Standard Ratings Tables.

Life Test: Capacitors are capable of withstanding a 2000 hour life test at a temperature of + 85°C or + 125°C at the applicable DC working voltage.

Following the life test:

1. DCL shall not exceed the initial requirements or 1 μA, whichever is greater.
2. The ESR shall meet the initial requirement.
3. Change in capacitance shall not exceed 10% from the initial measurement. For capacitors with voltage ratings of 15 WVDC and below, change in capacitance shall not exceed + 10%, - 25% from the initial measurement.

DIMENSIONS in inches [millimeters]



CASE CODE	BARE TUBE		WITH PLASTIC-FILM INSULATING SLEEVE		LEAD LENGTH
	D	L	D	L (Max.)	
C	0.187 ± 0.016 [4.75 ± .406]	0.453 ± 0.031 [11.51 ± .787]	0.203 ± 0.016 [5.16 ± .406]	0.515 [13.08]	1.500 ± 0.250 [38.10 ± 6.35]
F	0.281 ± 0.016 [7.14 ± .406]	0.640 ± 0.031 [16.26 ± .787]	0.296 ± 0.016 [7.52 ± .406]	0.703 [17.86]	2.250 ± 0.250 [57.15 ± 6.35]
T	0.375 ± 0.016 [9.53 ± .406]	0.765 ± 0.031 [19.43 ± .787]	0.390 ± 0.016 [9.91 ± .406]	0.828 [21.03]	2.250 ± 0.250 [57.15 ± 6.35]
K*	0.375 ± 0.016 [9.53 ± .406]	1.063 ± 0.031 [27.00 ± .787]	0.390 ± 0.016 [9.91 ± .406]	1.125 [28.58]	2.250 ± 0.250 [57.15 ± 6.35]

* Replaces previous W case.

ORDERING INFORMATION

109D MODEL	207 CAPACITANCE	X0 CAPACITANCE TOLERANCE	006 DC VOLTAGE RATING AT +85°C	C CASE CODE	0 TERMINATION
	This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow.	X0 = ± 20% X9 = ± 10% X5 = ± 5% Special Order.	This is expressed in volts. To complete the three-digit block, zeros precede the voltage rating. A decimal point is indicated by an "R" (6R3 = 6.3 volts).	See Ratings and Case Codes Table.	0 = No outer sleeve. Standard. 2 = Outer plastic film insulation.

Packaging: The use of formed plastic trays for packaging these axial lead components is standard. Tape and reel is not recommended due to the unit weight.



STANDARD RATINGS									
CAPACITANCE (μ F)	CASE CODE	PART NUMBER*	Max. ESR	Max. IMP.	Max. DCL (μ A) @		Max. CAPACITANCE CHANGE (%) @		Max. RMS RIPPLE 120 Hz (mA)
			@ + 25°C 120 Hz (Ohms)	@ - 55°C 120 Hz (Ohms)	+ 25°C	+ 85°C + 125°C	- 55°C	+ 85°C + 125°C	
6 WVDC to + 85°C . . . 4 WVDC @ + 125°C									
27	C	109D276X0006C0	6	110	0.5	2	- 50	+ 15	130
30	C	109D306X0006C0	5	100	0.5	2	- 50	+ 15	140
68	C	109D686X0006C0	4	59	0.5	2	- 50	+ 20	160
120	F	109D127X0006F0	2	48	1	3	- 50	+ 20	330
140	F	109D147X0006F0	2	40	1	3.5	- 50	+ 20	330
270	F	109D277X0006F0	3	25	1	7	- 55	+ 25	270
290	T	109D297X0006T0	2	24	2	7	- 70	+ 20	410
330	T	109D337X0006T0	2	22	2	8	- 70	+ 20	410
560	T	109D567X0006T0	3	25	2	14	- 80	+ 25	340
1200	K	109D128X0006K0	1.6	20	3	14	- 80	+ 25	530
8 WVDC to + 85°C . . . 5 WVDC @ + 125°C									
22	C	109D226X0008C0	6	115	0.5	2	- 50	+ 15	130
25	C	109D256X0008C0	5	100	0.5	2	- 50	+ 15	140
56	C	109D566X0008C0	4	60	0.5	2	- 50	+ 20	160
100	F	109D107X0008F0	2	52	1	3	- 50	+ 20	330
120	F	109D127X0008F0	2	48	1	4	- 50	+ 20	330
220	F	109D227X0008F0	3	30	1	7	- 55	+ 25	270
260	T	109D267X0008T0	2	37	2	8.5	- 70	+ 20	410
290	T	109D297X0008T0	2	24	2	9.5	- 70	+ 20	410
430	T	109D437X0008T0	3	25	2	14	- 80	+ 25	340
850	K	109D857X0008K0	1	22	4	16	- 80	+ 25	670
10 WVDC to + 85°C . . . 7 WVDC @ + 125°C									
18	C	109D186X0010C0	6	130	0.5	2	- 40	+ 15	130
20	C	109D206X0010C0	5	120	0.5	2	- 40	+ 15	140
47	C	109D476X0010C0	4	90	0.5	2	- 45	+ 20	160
85	F	109D856X0010F0	3	61	1	3.5	- 45	+ 20	270
100	F	109D107X0010F0	3	60	1	4	- 45	+ 20	270
180	F	109D187X0010F0	3	40	1	7	- 45	+ 25	270
220	T	109D227X0010T0	2	40	2	9	- 60	+ 20	410
250	T	109D257X0010T0	2	35	2	10	- 60	+ 20	410
390	T	109D397X0010T0	3	25	2	16	- 80	+ 25	340
750	K	109D757X0010K0	1	23	4	16	- 80	+ 25	670
15 WVDC to + 85°C . . . 10 WVDC @ + 125°C									
13	C	109D136X0015C0	7	160	0.5	2	- 30	+ 15	120
15	C	109D156X0015C0	6	145	0.5	2	- 30	+ 15	130
33	C	109D336X0015C0	4	100	0.5	2	- 35	+ 20	160
55	F	109D556X0015F0	3	70	1	3.5	- 35	+ 20	270
70	F	109D706X0015F0	3	63	1	4.5	- 35	+ 20	270
120	F	109D127X0015F0	3	50	1	7	- 35	+ 25	270
150	T	109D157X0015T0	2	40	2	9	- 55	+ 20	410
170	T	109D177X0015T0	2	38	2	10	- 55	+ 20	410
270	T	109D277X0015T0	3	30	2	16	- 70	+ 25	340
540	K	109D547X0015K0	1.2	23	6	24	- 80	+ 25	610

* Part Numbers shown are for units with $\pm 20\%$ capacitance tolerance and uninsulated capacitors. For $\pm 10\%$ units, change the digit following the letter "X" from "0" to "9". For units with outer plastic-film insulation, substitute "2" for "0" at the end of the Part Number.



STANDARD RATINGS

CAPACITANCE (μ F)	CASE CODE	PART NUMBER*	Max. ESR @ + 25°C 120 Hz (Ohms)	Max. IMP. @ - 55°C 120 Hz (Ohms)	Max. DCL (μ A) @		Max. CAPACITANCE CHANGE (%) @		Max. RMS RIPPLE 120 Hz (mA)
					+ 25°C	+ 85°C + 125°C	- 55°C	+ 85°C + 125°C	
25 WVDC to + 85°C . . . 15 WVDC @ + 125°C									
9	C	109D905X0025C0	7	210	0.5	2	- 20	+ 15	120
10	C	109D106X0025C0	6	190	0.5	2	- 20	+ 15	130
22	C	109D226X0025C0	4	140	0.5	3	- 25	+ 20	160
45	F	109D456X0025F0	3	78	1	5	- 35	+ 20	270
50	F	109D506X0025F0	3	70	1	5	- 35	+ 20	270
100	F	109D107X0025F0	3	50	1	10	- 35	+ 25	270
100	T	109D107X0025T0	2	45	2	10	- 50	+ 20	410
110	T	109D117X0025T0	2	42	2	11	- 55	+ 20	410
180	T	109D187X0025T0	3	32	2	18	- 60	+ 25	340
350	K	109D357X0025K0	1.3	24	7	28	- 70	+ 25	580
30 WVDC to + 85°C . . . 20 WVDC @ + 125°C									
7	C	109D705X0030C0	8	275	0.5	2	- 20	+ 15	110
8	C	109D805X0030C0	6	235	0.5	2	- 20	+ 15	130
15	C	109D156X0030C0	4	175	0.5	2	- 25	+ 20	160
35	F	109D356X0030F0	4	85	1	4	- 30	+ 20	230
40	F	109D406X0030F0	3	80	1	5	- 30	+ 20	270
68	F	109D686X0030F0	3	60	1	8	- 35	+ 25	270
80	T	109D806X0030T0	2	52	2	10	- 45	+ 20	410
100	T	109D107X0030T0	2	45	2	12	- 45	+ 20	410
150	T	109D157X0030T0	3	35	2	18	- 60	+ 25	340
300	K	109D307X0030K0	1.5	25	8	32	- 60	+ 25	550
50 WVDC to + 85°C . . . 30 WVDC @ + 125°C									
4.5	C	109D455X0050C0	8	380	0.5	2	- 20	+ 10	110
5	C	109D505X0050C0	6	355	0.5	2	- 20	+ 10	130
10	C	109D106X0050C0	4	250	0.5	2	- 30	+ 15	160
22	F	109D226X0050F0	4	95	1	4	- 25	+ 20	230
25	F	109D256X0050F0	3	90	1	5	- 25	+ 20	270
47	F	109D476X0050F0	3	70	1.5	9	- 35	+ 25	270
55	T	109D556X0050T0	2	55	2	11	- 30	+ 20	410
60	T	109D606X0050T0	2	50	2	12	- 30	+ 20	410
82	T	109D826X0050T0	3	45	2	17	- 40	+ 25	340
160	K	109D167X0050K0	2.1	27	8	32	- 50	+ 25	460
60 WVDC to + 85°C . . . 40 WVDC @ + 125°C									
3.6	C	109D365X0060C0	9	485	0.5	2	- 20	+ 10	100
4	C	109D405X0060C0	8	405	0.5	2	- 20	+ 10	110
8.2	C	109D825X0060C0	5	275	0.5	2	- 30	+ 15	140
18	F	109D186X0060F0	5	125	1	4.5	- 25	+ 15	210
20	F	109D206X0060F0	3	105	1	5	- 25	+ 15	270
39	F	109D396X0060F0	4	90	1.5	9	- 35	+ 20	230
45	T	109D456X0060T0	2	57	2	11	- 25	+ 15	410
50	T	109D506X0060T0	2	55	2	12	- 25	+ 15	410
68	T	109D686X0060T0	3	50	2	17	- 40	+ 20	340
140	K	109D147X0060K0	2.4	28	8	32	- 40	+ 20	430

* Part Numbers shown are for units with \pm 20% capacitance tolerance and uninsulated capacitors. For \pm 10% units, change the digit following the letter "X" from "0" to "9". For units with outer plastic-film insulation, substitute "2" for "0" at the end of the Part Number.



STANDARD RATINGS										
CAPACITANCE (μ F)	CASE CODE	PART NUMBER**	Max. ESR @ + 25°C 120 Hz (Ohms)	Max. IMP. @ - 55°C 120 Hz (Ohms)	Max. DCL (μ A) @		Max. CAPACITANCE CHANGE (%) @			Max. RMS RIPPLE 120 Hz (mA)
					+ 25°C	+ 85°C + 125°C	- 55°C	+ 85°C + 125°C	+ 125°C	
75 WVDC to + 85°C . . . 50 WVDC @ + 125°C										
3	C	109D305X0075C0	10	625	1	2	- 20	+ 10		100
3.5	C	109D355X0075C0	8	505	1	2	- 20	+ 10		110
6.8	C	109D685X0075C0	5	300	1	2	- 25	+ 15		140
13	F	109D136X0075F0	6	160	1	4	- 20	+ 15		190
15	F	109D156X0075F0	3	135	1	5	- 20	+ 15		270
33	F	109D336X0075F0	4	90	1.5	10	- 30	+ 20		230
35	T	109D356X0075T0	2	68	2	11	- 20	+ 15		410
40	T	109D406X0075T0	2	60	2	12	- 20	+ 15		410
56	T	109D566X0075T0	4	60	2	17	- 35	+ 20		300
110	K	109D117X0075K0	2.6	29	9	36	- 35	+ 20		400
100 WVDC to + 85°C . . . 70 WVDC @ + 125°C										
2.5	C	109D255X0100C0	12	710	1	2	- 15	+ 10		100
4.7	C	109D475X0100C0	6	500	1	2	- 20	+ 15		130
10	F	109D106X0100F0	6	215	1	4	- 15	+ 10		190
11	F	109D116X0100F0	4	200	1	5	- 15	+ 10		230
22	F	109D226X0100F0	4	100	1.5	9	- 20	+ 15		230
27	T	109D276X0100T0	3	90	2	11	- 15	+ 10		340
30	T	109D306X0100T0	3	85	2	12	- 15	+ 10		340
43	T	109D436X0100T0	4	70	2.5	17	- 25	+ 15		300
125 WVDC to + 85°C . . . 85 WVDC @ + 125°C										
1.7	C	109D175X0125C0	14	1090	1	2	- 15	+ 10		100
3.6	C	109D365X0125C0	8	615	1	2	- 20	+ 15		110
9	F	109D905X0125F0	5	220	2	5	- 15	+ 10		210
14	F	109D146X0125F0	6	160	2	10	- 20	+ 15		190
18	T	109D186X0125T0	3	135	4	12	- 15	+ 10		340
25	T	109D256X0125T0	5	120	4	17	- 25	+ 15		260

* Part Numbers shown are for units with \pm 20% capacitance tolerance and uninsulated capacitors. For \pm 10% units, change the digit following the letter "X" from "0" to "9". For units with outer plastic-film insulation, substitute "2" for "0" at the end of the Part Number.

EXTENDED RATINGS										
CAPACITANCE (μ F)	CASE CODE	PART NUMBER*	Max. ESR @ + 25°C 120 Hz (Ohms)	Max. IMP. @ - 55°C 120 Hz (Ohms)	Max. DCL (μ A) @		Max. CAPACITANCE CHANGE (%) @			Max. RMS RIPPLE 120 Hz (mA)
					+ 25°C	+ 85°C + 125°C	- 55°C	+ 85°C	+ 125°C	
6 WVDC to + 85°C . . . 4 WVDC @ + 125°C										
200	C	109D207X0006C0	3	25	2	9	- 58	+ 13	+ 13	180
820	F	109D827X0006F0	2.5	15	3	14	- 75	+ 16	+ 20	300
1500	T	109D158X0006T0	1.5	10	5	20	- 85	+ 20	+ 25	480
2200	K	109D228X0006K0	1	15	6	24	- 90	+ 30	+ 30	670
8 WVDC to + 85°C . . . 5 WVDC @ + 125°C										
180	C	109D187X0008C0	3	28	2	9	- 54	+ 13	+ 16	180
680	F	109D687X0008F0	2.5	15	3	14	- 75	+ 16	+ 20	300
1400	T	109D148X0008T0	1.5	11	5	20	- 85	+ 20	+ 25	480
1800	K	109D188X0008K0	1	16	8	32	- 85	+ 30	+ 30	670



EXTENDED RATINGS										
CAPACITANCE (μ F)	CASE CODE	PART NUMBER*	Max. ESR @ + 25°C 120 Hz (Ohms)	Max. IMP. @ - 55°C 120 Hz (Ohms)	Max. DCL (μ A) @		Max. CAPACITANCE CHANGE (%) @			Max. RMS RIPPLE 120 Hz (mA)
					+ 25°C	+ 85°C	- 55°C	+ 85°C	+ 125°C	
10 WVDC to + 85°C . . . 7 WVDC @ + 125°C										
120	C	109D127X0010C0	4	35	2	9	- 45	+ 13	+ 16	160
150	C	109D157X0010C0	3	31	2	9	- 50	+ 13	+ 16	180
470	F	109D477X0010F0	2.5	16	3	16	- 65	+ 16	+ 20	300
560	F	109D567X0010F0	2.5	16	3	16	- 70	+ 16	+ 20	300
1000	T	109D108X0010T0	1.5	12	5	20	- 75	+ 20	+ 25	480
1200	T	109D128X0010T0	1.5	12	5	20	- 80	+ 20	+ 25	480
1200	K	109D128X0010K0	1	18	8	32	- 75	+ 30	+ 30	670
1500	K	109D158X0010K0	1	17	8	32	- 80	+ 30	+ 30	670
15 WVDC to + 85°C . . . 10 WVDC @ + 125°C										
82	C	109D826X0015C0	4	45	2	9	- 38	+ 13	+ 16	160
100	C	109D107X0015C0	4	40	2	9	- 40	+ 13	+ 16	160
330	F	109D337X0015F0	2.5	18	3	16	- 60	+ 16	+ 20	300
390	F	109D397X0015F0	2.5	17	3	16	- 60	+ 16	+ 20	300
680	T	109D687X0015T0	1.8	13	6	24	- 65	+ 20	+ 25	440
820	T	109D827X0015T0	1.8	13	6	24	- 70	+ 20	+ 25	440
820	K	109D827X0015K0	1.2	20	10	40	- 70	+ 30	+ 30	610
1000	K	109D108X0015K0	1.2	19	10	40	- 70	+ 30	+ 30	610
25 WVDC to + 85°C . . . 15 WVDC @ + 125°C										
68	C	109D686X0025C0	4	50	2	9	- 35	+ 12	+ 15	160
270	F	109D277X0025F0	2.5	19	3	16	- 55	+ 13	+ 16	300
560	T	109D567X0025T0	1.8	14	7	28	- 60	+ 20	+ 25	440
680	K	109D687X0025K0	1.2	19	8	32	- 72	+ 25	+ 30	610
30 WVDC to + 85°C . . . 20 WVDC @ + 125°C										
39	C	109D396X0030C0	5	70	2	9	- 28	+ 10	+ 12	140
47	C	109D476X0030C0	5	60	2	9	- 30	+ 10	+ 12	140
56	C	109D566X0030C0	5	55	2	9	- 32	+ 12	+ 15	140
150	F	109D157X0030F0	2.5	24	3	16	- 40	+ 12	+ 15	300
180	F	109D187X0030F0	2.5	22	3	16	- 45	+ 13	+ 16	300
220	F	109D227X0030F0	2.5	20	3	16	- 45	+ 13	+ 16	300
330	T	109D337X0030T0	1.8	16	8	32	- 45	+ 20	+ 25	440
390	T	109D397X0030T0	1.8	15	8	32	- 50	+ 20	+ 25	440
470	T	109D477X0030T0	1.8	14	8	32	- 55	+ 20	+ 25	440
470	K	109D477X0030K0	1.5	23	8	32	- 55	+ 30	+ 30	550
560	K	109D567X0030K0	1.3	20	9	36	- 65	+ 25	+ 30	590
50 WVDC to + 85°C . . . 30 WVDC @ + 125°C										
33	C	109D336X0050C0	5	80	2	9	- 24	+ 10	+ 12	140
120	F	109D127X0050F0	2.5	26	4	24	- 35	+ 12	+ 15	300
270	T	109D227X0050T0	1.8	16	8	32	- 40	+ 25	+ 20	440
330	K	109D337X0050K0	1.5	22	9	36	- 46	+ 25	+ 30	550

*Part Numbers shown are for units with $\pm 20\%$ capacitance tolerance and uninsulated capacitors. For $\pm 10\%$ units, change the digit following the letter "X" from "0" to "9". For units with outer plastic-film insulation, substitute "2" for "0" at the end of the Part Number.



EXTENDED RATINGS										
CAPACITANCE (μ F)	CASE CODE	PART NUMBER*	Max. ESR @ + 25°C 120 Hz (Ohms)	Max. IMP. @ - 55°C 120 Hz (Ohms)	Max. DCL (μ A) @		Max. CAPACITANCE CHANGE (%) @			Max. RMS RIPPLE 120 Hz (mA)
					+ 25°C	+ 85°C	- 55°C	+ 85°C	+ 125°C	
60 WVDC to + 85°C . . . 40 WVDC @ + 125°C										
27	C	109D276X0060C0	5	90	3	12	- 20	+ 10	+ 12	140
68	F	109D686X0060F0	3	60	4	24	- 25	+ 12	+ 15	270
100	F	109D107X0060F0	2.5	28	4	24	- 30	+ 12	+ 15	300
140	T	109D147X0060T0	2	32	8	32	- 30	+ 16	+ 20	420
220	T	109D227X0060T0	1.8	17	8	32	- 35	+ 16	+ 20	440
270	K	109D277X0060K0	1.5	23	9	36	- 45	+ 20	+ 25	550
75 WVDC to + 85°C . . . 50 WVDC @ + 125°C										
12	C	109D126X0075C0	5	175	3	12	- 12	+ 8	+ 10	140
15	C	109D156X0075C0	5	150	3	12	- 14	+ 10	+ 12	140
22	C	109D226X0075C0	5	100	3	12	- 16	+ 10	+ 12	140
47	F	109D476X0075F0	3	75	4	24	- 18	+ 10	+ 12	270
56	F	109D566X0075F0	3	70	4	24	- 20	+ 12	+ 15	270
82	F	109D826X0075F0	2.5	30	4	24	- 25	+ 12	+ 15	300
82	T	109D826X0075T0	2	33	9	36	- 20	+ 12	+ 15	420
110	T	109D117X0075T0	2	33	9	36	- 25	+ 16	+ 20	420
180	T	109D187X0075T0	1.8	17	9	36	- 30	+ 16	+ 20	440
180	K	109D187X0075K0	2	28	9	36	- 30	+ 20	+ 20	470
220	K	109D227X0075K0	2.2	24	10	40	- 40	+ 20	+ 25	450
100 WVDC to + 85°C . . . 70 WVDC @ + 125°C										
8.2	C	109D825X0100C0	6	250	3	12	- 12	+ 12	+ 12	130
10	C	109D106X0100C0	6	200	3	12	- 12	+ 12	+ 12	130
33	F	109D336X0100F0	3.5	85	4	24	- 18	+ 15	+ 15	250
39	F	109D396X0100F0	3.5	80	4	24	- 18	+ 15	+ 15	250
56	T	109D566X0100T0	2.2	45	9	36	- 20	+ 15	+ 15	400
68	T	109D686X0100T0	2.2	40	9	36	- 20	+ 15	+ 15	400
86	K	109D866X0100K0	3.2	30	10	40	- 25	+ 15	+ 15	370
125 WVDC to + 85°C . . . 85 WVDC @ + 125°C										
6.8	C	109D685X0125C0	6	300	3	12	- 10	+ 12	+ 12	130
27	F	109D276X0125F0	3.5	90	4	24	- 16	+ 15	+ 15	250
47	T	109D476X0125T0	2.2	50	9	36	- 18	+ 15	+ 15	400
56	K	109D566X0125K0	4.1	32	10	40	- 25	+ 15	+ 15	330
150 WVDC to + 85°C . . . 100 WVDC @ + 125°C										
1.7	C	109D175X0150C0	14	1090	1	2	- 15	+ 10	+ 10	100
3.0	C	109D305X0150C0	10	750	1	4	- 20	+ 15	+ 15	100
5.6	C	109D565X0150C0	6	375	3	12	- 10	+ 12	+ 12	130
6.8	F	109D685X0150F0	6	300	2	5	- 15	+ 10	+ 10	190
11	F	109D116X0150F0	6	200	2	10	- 20	+ 15	+ 15	190
22	F	109D226X0150F0	3.5	95	4	24	- 14	+ 15	+ 15	250
39	T	109D396X0150T0	2.2	60	9	36	- 16	+ 15	+ 15	400

* Part Numbers shown are for units with \pm 20% capacitance tolerance and uninsulated capacitors. For \pm 10% units, change the digit following the letter "X" from "0" to "9". For units with outer plastic-film insulation, substitute "2" for "0" at the end of the Part Number.