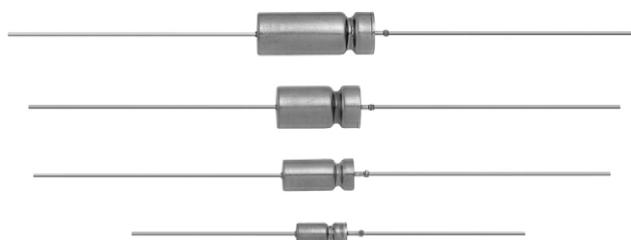




Wet Tantalum Capacitors Tantalum Case With Glass-to-Tantalum Hermetic Seal CECC 30202 Approved



LINKS TO ADDITIONAL RESOURCES



PERFORMANCE CHARACTERISTICS

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

Capacitance Tolerance: at 120 Hz, +25 °C. $\pm 20\%$ standard. $\pm 10\%$, $\pm 5\%$ available as special

DC Leakage Current (DCL Max.):

at +25 °C and above: leakage current shall not exceed the values listed in the Standard Ratings tables

APPROVALS

- CECC-30202-001 style 735D
- CECC-30202-801 style 735DE
- CECC-30202-005 style CT79

FEATURES

- Terminations: axial, standard tin / lead (SnPb), 100 % tin (RoHS-compliant) available
- For -55 °C to +125 °C operation
- All tantalum case
- Glass to tantalum hermetic seal
- Low ESR
- High CV per unit volume
- Extremely low leakage current
- High permissible ripple current
- 3 V reverse voltage capability
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912

Note

* This datasheet provides information about parts that are RoHS-compliant and / or parts that are non RoHS-compliant. For example, parts with lead (Pb) terminations are not RoHS-compliant. Please see the information / tables in this datasheet for details



RoHS*
Available

**HALOGEN
FREE
GREEN
(5-2008)
Available**

APPLICATIONS

Designed specifically for the severe operating environment of aerospace applications, this capacitor was developed under partial sponsorship of the Marshall Space Flight Center, National Aeronautics and Space Administration. To meet aerospace requirements, the capacitors have a high resistance to damage from shock and vibration.

ORDERING INFORMATION

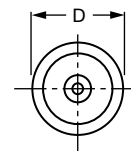
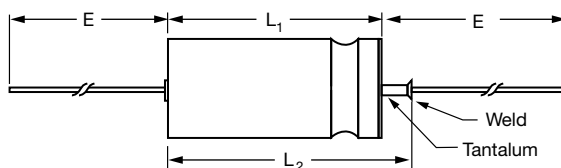
CT79 735D 735DE	226	X0	025	A	2	E3
MODEL	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT +85 °C	CASE CODE	STYLE NUMBER	RoHS-COMPLIANT
	This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow	X0 = $\pm 20\%$ X9 = $\pm 10\%$ X5 = $\pm 5\%$	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 V)	See table of Dimensions	0 = bare case 2 = outer polyester film insulation 3 = high temperature film insulation	E3 = 100 % tin termination (RoHS-compliant design) Blank = SnPb termination (standard design)

Note

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

**DIMENSIONS** in inches [millimeters]

0.0253 ± 0.002 [0.64 ± 0.05] dia.
(no. 22 AWG) tinned nickel leads
solderable and weldable



CASE CODE		D	L ₁	L ₂ (Max.)	E	WEIGHT (g) (Max.)
TYPE 735D	DCLR 79 / 81 EQUIV.					
A	T1	0.188 ± 0.016 [4.78 ± 0.41]	0.453 + 0.031 / - 0.016 [11.51 + 0.79 / - 0.41]	0.734 [18.64]	1.500 ± 0.250 [38.10 ± 6.35]	2.6
B	T2	0.281 ± 0.016 [7.14 ± 0.41]	0.641 + 0.031 / - 0.016 [16.28 + 0.79 / - 0.41]	0.922 [23.42]	2.250 ± 0.250 [57.15 ± 6.35]	6.2
C	T3	0.375 ± 0.016 [9.53 ± 0.41]	0.766 + 0.031 / - 0.016 [19.46 + 0.79 / - 0.41]	1.047 [26.59]	2.250 ± 0.250 [57.15 ± 6.35]	11.6
D	T4	0.375 ± 0.016 [9.53 ± 0.41]	1.062 + 0.031 / - 0.016 [26.97 + 0.79 / - 0.41]	1.343 [34.11]	2.250 ± 0.250 [57.15 ± 6.35]	17.7

Note

- For insulated parts, add 0.007" [0.178] to the diameter. The insulation shall lap over the ends of the capacitor body.

RATINGS AND CASE CODES (Standard)

μF	6.3 V	10 V	16 V	25 V	40 V	63 V	75 V	100 V	125 V
2.7									A
3.3									A
3.9									A
4.7								A	
5.6								A	
6.8							A		
8.2							A		
10						A			
12						A			
15					A	A			B
18					A				B
22				A	A			B	
27				A					
33			A	A			B	B / C	
39				A				B / C	C
47		A	A			B	B	C	C
56			A			B		C	
68	A	A			B		B / C	C / D	D
82		A				B	C	D	D
100		A		B	B	C	C	D	
120	A		B		B	C	D		
150	A	B		B	C	D	C / D		
180		B		B			C		
220	B		B	C	D	C	D		
270			B		C	D			
330		B	C	D	C	D			
390		B		C / D	D				
470	B	C	D	C	D				
560	B / C		D	C					
680		D	C	D					
820			C	D					
1000		C	D						
1200		C	D						
1500	C	D							
1800		D							
2200	D								



RATINGS AND CASE CODES (Standard) to MIL Range CLR79											
μF	6 V	8 V	10 V	15 V	25 V	30 V	50 V	60 V	75 V	100 V	125 V
3.5									A		
3.6											A
4.0								A			
5.0							A				
8.0						A					
8.2								A			
9.0									A		
10					A		A				
14											B
15				A		A			B		
18							A				
20			A					B			
22							A				
25		A				A	B				C
30	A									B / C	
33				A		A					
39								B			
40						B			C		
43					A				B	C	
47				A			B				
50					B			C			
56		A		A					B / C		D
60							C				
68	A					B		C			
70				B							
82							C	B			
86										D	
100			B			C	B				
110									D		
120		A / B		B	C	B					
140	B							D			
150						B / C					
160	A				B		D				
170				C		B					
180					C						
220		B		B				C			
250			C						D		
270	B			B / C			C	D			
290		C		B							
300			B			C / D					
330	C					C		D			
350			B		D	C	D				
390			C			C	D				
430		B / C				C	D				
540				D							
560	B / C					D					
750			D	C							
850		D	C	D	D						
1200	D			D							
1500	C										
2200	D										

**RATINGS AND CASE CODES CT79**

μF	6.3 V	10 V	16 V	25 V	40 V	63 V	80 V	100 V	125 V
3.9									A
4.7								A	
6.8							A		
8.2						A			
12					A				
15									B
22				A				B	
27									C
33			A				B		
39						B			
47		A						C	
56					B		C		D
68	A					C			
82								D	
100				B	C		C		
120			B						
150						D			
180		B		C					
220					D				
270	B		C						
390		C		D					
560	C		D						
820		D							
1200	D								

STANDARD RATINGS

CAPACITANCE (μF)	CASE CODE	PART NUMBER	MAX. DF AT +20 °C (%)	MAX. IMP. AT -55 °C (Ω)	MAX. DCL (μA) AT		MAX. CAP. CHANGE (%) AT			MAX. RMS RIPPLE CURRENT 40 kHz (mA)
					+20 °C	+85 °C +125 °C	-55 °C	+85 °C	+125 °C	
6.3 V _{DC} AT +85 °C; 4 V _{DC} AT +125 °C										
68	A	735D686X06R3A2	15	60	1.0	2.0	-40	+14	+16	960
120	A	735D127X06R3A2	21	81	1.5	3.0	-41	+15	+16	820
150	A	735D157X06R3A2	34	80	2.0	9.0	-42	+16	+16	820
220	B	735D227X06R3B2	40	30	1.0	6.5	-44	+16	+18	1370
470	B	735D477X06R3B2	90	46	2.0	10	-60	+20	+20	1285
560	B	735D567X06R3B2	106	48	2.0	10	-68	+20	+20	1255
560	C	735D567X06R3C2	50	25	2.0	16	-64	+18	+20	1900
1000	D	735D108X06R3D2	72	22	3.0	14	-80	+25	+25	2390
1500	C	735D158X06R3C2	172	36	5.0	20	-90	+25	+25	1615
2200	D	735D228X06R3D2	170	22	6.0	24	-90	+25	+25	2265
10 V _{DC} AT +85 °C; 7 V _{DC} AT +125 °C										
47	A	735D476X0010A2	13	100	1.0	2.0	-36	+14	+16	855
68	A	735D686X0010A2	21	85	1.5	3.0	-40	+15	+16	820
82	A	735D826X0010A2	25	84	2.0	6.0	-40	+16	+16	820
100	A	735D107X0010A2	30	82	2.0	6.0	-40	+16	+16	820
150	B	735D157X0010B2	30	45	1.0	7.0	-32	+14	+16	1275
180	B	735D187X0010B2	30	40	1.0	7.0	-35	+14	+16	1300
330	B	735D337X0010B2	65	52	2.0	10	-54	+17	+18	1195
390	B	735D397X0010B2	74	54	2.0	10	-60	+19	+20	1195
470	C	735D477X0010C2	44	25	2.0	15	-65	+18	+20	1800
680	D	735D687X0010D2	46	20	3.0	16	-80	+25	+25	2490
820	D	735D827X0010D2	57	22	3.0	16	-80	+25	+25	2360
1000	C	735D108X0010C2	92	36	4.0	16	-80	+25	+25	1720
1200	C	735D128X0010C2	137	36	5.0	20	-80	+25	+25	1720
1500	D	735D158X0010D2	114	23	7.0	25	-88	+30	+30	2360
1800	D	735D188X0010D2	138	24	7.0	25	-88	+30	+30	2360



STANDARD RATINGS										
CAPACITANCE (μF)	CASE CODE	PART NUMBER	MAX. DF AT +20 °C (%)	MAX. IMP. AT -55 °C (Ω)	MAX. DCL (μA) AT		MAX. CAP. CHANGE (%) AT			MAX. RMS RIPPLE CURRENT 40 kHz (mA)
					+20 °C	+85 °C +125 °C	-55 °C	+85 °C	+125 °C	
16 V _{DC} AT +85 °C; 10 V _{DC} AT +125 °C										
33	A	735D336X0016A2	10	90	1.0	2.0	-28	+14	+16	820
47	A	735D476X0016A2	20	100	1.5	3.0	-28	+16	+16	760
56	A	735D566X0016A2	22	100	1.5	3.0	-28	+16	+16	760
120	B	735D127X0016B2	25	50	1.0	7.0	-28	+14	+16	1230
220	B	735D227X0016B2	42	62	2.0	10	-35	+16	+16	1215
270	B	735D277X0016B2	55	60	2.0	12	-45	+18	+18	1215
330	C	735D337X0016C2	40	30	2.0	14	-58	+18	+20	1760
470	D	735D477X0016D2	37	24	3.0	18	-75	+25	+25	2100
560	D	735D567X0016D2	40	23	3.0	18	-80	+25	+25	2300
680	C	735D687X0016C2	80	42	5.0	20	-80	+25	+25	1585
820	C	735D827X0016C2	95	42	6.0	24	-80	+25	+25	1585
1000	D	735D108X0016D2	92	25	8.0	32	-82	+25	+25	2300
1200	D	736D128X0016D2	103	25	8.0	32	-84	+25	+30	2300
25 V _{DC} AT +85 °C; 16 V _{DC} AT +125 °C										
22	A	735D226X0025A2	7	140	1.0	2.0	-20	+10	+12	800
27	A	735D276X0025A2	11	140	1.5	3.0	-20	+12	+12	715
33	A	735D336X0025A2	13	130	1.5	3.0	-24	+14	+14	715
39	A	735D396X0025A2	16	120	2.0	9.0	-28	+16	+16	715
100	B	735D107X0025B2	21	50	1.0	9.0	-28	+13	+15	1215
150	B	735D157X0025B2	35	62	2.0	10	-35	+15	+15	1130
180	B	735D187X0025B2	35	60	2.0	10	-48	+14	+15	1130
220	C	735D227X0025C2	35	33	2.0	13	-52	+18	+20	1615
330	D	735D337X0025D2	30	27	3.0	20	-60	+25	+25	1865
390	C	735D397X0025C2	48	48	7.0	28	-70	+25	+25	1400
390	D	735D397X0025D2	35	24	3.0	20	-68	+25	+25	2025
470	C	735D477X0025C2	48	48	7.0	28	-76	+25	+25	1400
560	C	735D567X0025C2	60	48	7.0	28	-80	+25	+25	1400
680	D	735D687X0025D2	60	24	8.0	32	-80	+25	+25	1940
820	D	735D827X0025D2	82	26	8.0	32	-80	+25	+25	1865
40 V _{DC} AT +85 °C; 25 V _{DC} AT +125 °C										
15	A	735D156X0040A2	7	175	1.0	2.0	-20	+10	+12	660
18	A	735D186X0040A2	10	200	1.5	4.0	-20	+12	+12	580
22	A	735D226X0040A2	11	190	1.5	4.0	-24	+12	+12	580
68	B	735D686X0040B2	15	60	1.0	8.0	-24	+13	+15	1285
100	B	735D107X0040B2	25	60	2.0	10	-40	+15	+15	1285
120	B	735D127X0040B2	30	62	2.0	12	-32	+15	+15	1245
150	C	735D157X0040C2	23	35	2.0	12	-48	+14	+15	1525
220	D	735D227X0040D2	23	27	3.0	22	-58	+23	+23	1900
270	C	735D277X0040C2	37	52	7.0	28	-60	+25	+25	1375
330	C	735D337X0040C2	43	52	8.0	32	-65	+25	+25	1375
390	D	735D397X0040D2	43	30	8.0	32	-75	+25	+25	1900
470	D	735D477X0040D2	45	30	9.0	36	-80	+25	+25	1900



STANDARD RATINGS										
CAPACITANCE (μF)	CASE CODE	PART NUMBER	MAX. DF AT +20 °C (%)	MAX. IMP. AT -55 °C (Ω)	MAX. DCL (μA) AT		MAX. CAP. CHANGE (%) AT			MAX. RMS RIPPLE CURRENT 40 kHz (mA)
					+20 °C	+85 °C +125 °C	-55 °C	+85 °C	+125 °C	
63 V _{DC} AT +85 °C; 40 V _{DC} AT +125 °C										
10	A	735D106X0063A2	4	250	1.0	2.0	-20	+8	+9	575
12	A	735D126X0063A2	7	233	2.0	4.0	-20	+8	+9	575
15	A	735D156X0063A2	8	220	2.0	9.0	-22	+9	+9	565
47	B	735D476X0063B2	13	70	1.0	9.0	-24	+13	+15	1150
56	B	735D566X0063B2	18	72	2.0	12	-26	+14	+15	1150
82	B	735D826X0063B2	22	70	2.0	12	-36	+15	+15	1150
100	C	735D107X0063C2	18	42	2.0	11	-37	+14	+15	1420
120	C	735D127X0063C2	20	49	3.0	18	-40	+18	+18	1420
150	D	735D157X0063D2	17	27	3.0	22	-45	+20	+20	1865
220	C	735D227X0063C2	37	55	8.0	32	-50	+25	+25	1345
270	D	735D277X0063D2	26	33	9.0	36	-70	+24	+25	1850
330	D	735D337X0063D2	32	31	10	40	-72	+25	+25	1850
75 V _{DC} AT +85 °C; 50 V _{DC} AT +125 °C										
6.8	A	735D685X0075A2	3	300	1.0	2.0	-20	+8	+9	610
8.2	A	735D825X0075A2	6	280	1.5	3.0	-22	+9	+9	610
33	B	735D336X0075B2	10	90	1.0	9.0	-24	+10	+12	1079
47	B	735D476X0075B2	15	87	2.0	10	-30	+14	+14	1055
68	B	735D686X0075B2	21	86	2.0	12	-36	+15	+15	1055
68	C	735D686X0075C2	13	50	2.0	10	-30	+14	+15	1525
82	C	735D826X0075C2	15	45	2.0	10	-32	+15	+15	1335
100	C	735D107X0075C2	19	60	8.0	32	-36	+17	+18	1335
120	D	735D127X0075D2	12	28	3.0	24	-36	+20	+20	1915
150	C	735D157X0075C2	25	60	9.0	36	-40	+20	+20	1335
150	D	735D157X0075D2	17	30	9.0	36	-48	+21	+22	1915
180	C	735D187X0075C2	28	60	9.0	36	-50	+22	+22	1335
220	D	735D227X0075D2	37	32	10	40	-60	+22	+22	1850
100 V _{DC} AT +85 °C; 70 V _{DC} AT +125 °C										
4.7	A	735D475X0100A2	3	500	1.0	2.0	-16	+7	+8	565
5.6	A	735D565X0100A2	6	475	2.0	5.0	-17	+8	+8	530
22	B	735D226X0100B2	8	100	1.0	9.0	-16	+8	+8	1065
33	B	735D336X0100B2	14	95	3.0	15	-16	+8	+8	1065
33	C	735D336X0100C2	7	93	2.0	10	-16	+8	+8	1200
39	B	735D396X0100B2	10	92	2.0	12	-24	+12	+12	1065
39	C	735D396X0100C2	8	90	2.0	10	-16	+8	+8	1285
47	C	735D476X0100C2	9	70	2.0	10	-23	+10	+10	1390
56	C	735D566X0100C2	11	60	2.0	10	-28	+14	+15	1335
68	C	735D686X0100C2	15	60	10	40	-30	+15	+15	1335
68	D	735D686X0100D2	8	42	3.0	26	-24	+15	+15	1860
82	D	735D826X0100D2	10	39	3.0	24	-24	+18	+18	1860
100	D	735D107X0100D2	11	36	3.0	24	-35	+20	+20	1860
125 V _{DC} AT +85 °C; 85 V _{DC} AT +125 °C										
2.7	A	735D275X0125A2	3	780	1.0	2.0	-16	+7	+8	455
3.3	A	735D335X0125A2	3	600	1.0	2.0	-16	+7	+8	495
3.9	A	735D395X0125A2	3.5	557	2.0	5.0	-16	+8	+8	495
15	B	735D156X0125B2	6	167	1.0	7.0	-16	+7	+8	1050
18	B	735D186X0125B2	8	133	2.0	10	-16	+8	+8	1065
39	C	735D396X0125C2	8	90	2.0	10	-16	+8	+8	1285
47	C	735D476X0125C2	9	70	2.0	10	-23	+10	+10	1285
68	D	735D686X0125D2	8	42	3.0	26	-24	+15	+15	1860
82	D	735D826X0125D2	10	39	3.0	24	-24	+18	+18	1860



STANDARD RATINGS to MIL range CLR79										
CAPACITANCE (μF)	CASE CODE	PART NUMBER	MAX. ESR AT +25 °C 120 Hz (Ω)	MAX. IMP. AT -55 °C (Ω)	MAX. DCL (μA) AT		MAX. CAP. CHANGE (%) AT			MAX. RMS RIPPLE CURRENT 40 kHz (mA)
					+25 °C	+85 °C +125 °C	-55 °C	+85 °C	+125 °C	
6 V _{DC} AT +85 °C; 4 V _{DC} AT +125 °C										
30	A	735D306X0006A2	4.0	100	0.75	1.5	-40	+12	+12	820
68	A	735D686X0006A2	2.9	60	0.75	1.5	-40	+16	+16	960
140	B	735D147X0006B2	2.2	40	1.0	3.0	-40	+16	+16	1200
160	A	735D167X0006A2	4.0	80	1.5	3.0	-42	+16	+16	820
270	B	735D277X0006B2	2.0	25	1.0	2.0	-44	+20	+20	1375
330	C	735D337X0006C2	1.4	20	2.0	6.0	-44	+16	+16	1800
560	B	735D567X0006B2	2.4	48	2.0	10	-68	+20	+20	1255
560	C	735D567X0006C2	1.3	25	2.0	6.0	-64	+20	+20	1900
1200	D	735D128X0006D2	0.9	20	3.0	12	-80	+25	+25	2388
1500	C	735D158X0006C2	1.8	36	3.0	15	-84	+25	+25	1615
2200	D	735D228X0006D2	1.0	22	4.0	15	-86	+25	+25	2265
8 V _{DC} AT +85 °C; 5 V _{DC} AT +125 °C										
25	A	735D256X0008A2	4.0	100	0.75	1.5	-40	+12	+12	820
56	A	735D566X0008A2	3.3	59	0.75	1.5	-40	+16	+16	900
120	A	735D127X0008A2	4.0	80	1.0	2.0	-44	+20	+16	820
120	B	735D127X0008B2	2.6	50	1.0	2.0	-44	+20	+16	1230
220	B	735D227X0008B2	2.4	30	1.0	2.0	-44	+18	+20	1300
290	C	735D297X0008C2	1.8	25	2.0	6.0	-64	+20	+16	1745
430	B	735D437X0008B2	2.6	54	2.0	10	-64	+20	+20	1230
430	C	735D437X0008C2	1.4	25	2.0	6.0	-64	+20	+20	1825
850	D	735D857X0008D2	1.0	22	3.0	12	-80	+25	+25	2456
10 V _{DC} AT +85 °C; 7 V _{DC} AT +125 °C										
20	A	735D206X0010A2	4.0	175	0.75	1.5	-32	+12	+12	820
100	B	735D107X0010B2	2.4	60	1.0	2.0	-35	+16	+16	1200
250	C	735D257X0010C2	1.8	30	2.0	6.0	-40	+16	+16	1720
300	B	735D307X0010B2	2.6	52	2.0	5.0	-54	+18	+18	1195
350	B	735D357X0010B2	2.6	52	2.0	5.0	-60	+18	+18	1195
390	C	735D397X0010C2	1.5	25	2.0	6.0	-64	+20	+20	1800
750	D	735D757X0010D2	0.9	22	3.0	12	-80	+25	+25	2487
850	C	735D857X0010C2	1.8	36	3.0	12	-84	+25	+25	1720
15 V _{DC} AT +85 °C; 10 V _{DC} AT +125 °C										
15	A	735D156X0015A2	4.4	155	0.75	1.5	-24	+12	+12	780
33	A	735D336X0015A2	4.0	90	0.75	1.5	-28	+16	+16	820
47	A	735D476X0015A2	4.7	100	1.0	2.0	-28	+16	+16	760
56	A	735D566X0015A2	4.7	100	1.0	2.0	-28	+16	+16	760
70	B	735D706X0015B2	2.8	75	1.0	2.0	-28	+16	+16	1150
120	B	735D127X0015B2	2.6	50	1.0	2.0	-28	+16	+16	1230
170	C	735D177X0015C2	2.4	35	2.0	6.0	-32	+16	+16	1480
220	B	735D227X0015B2	2.8	62	2.0	5.0	-35	+16	+16	1215
270	B	735D277X0015B2	2.8	60	2.0	5.0	-45	+18	+18	1215
270	C	735D277X0015C2	2.2	30	2.0	6.0	-56	+20	+20	1709
290	B	735D297X0015B2	2.8	65	2.0	5.0	-54	+18	+18	1215
540	D	735D547X0015D2	1.0	23	3.0	12	-80	+25	+25	2300
750	C	735D757X0015C2	2.1	42	3.0	15	-80	+25	+25	1582
850	D	735D857X0015D2	1.0	24	4.0	15	-80	+25	+25	2300
1200	D	735D128X0015D2	1.0	25	4.0	15	-84	+25	+25	2300



STANDARD RATINGS to MIL range CLR79										
CAPACITANCE (μF)	CASE CODE	PART NUMBER	MAX. ESR AT +25 °C 120 Hz (Ω)	MAX. IMP. AT -55 °C (Ω)	MAX. DCL (μA) AT		MAX. CAP. CHANGE (%) AT			MAX. RMS RIPPLE CURRENT 40 kHz (mA)
					+25 °C	+85 °C +125 °C	-55 °C	+85 °C	+125 °C	
25 V _{DC} AT +85 °C; 15 V _{DC} AT +125 °C										
10	A	735D106X0025A2	5.3	220	0.75	1.5	-16	+9	+9	715
43	A	735D436X0025A2	5.3	120	1.5	3.0	-28	+16	+16	715
50	B	735D506X0025B2	3.0	70	1.0	2.0	-28	+15	+15	1130
120	C	735D127X0025C2	2.6	38	2.0	6.0	-32	+15	+15	1420
160	B	735D167X0025B2	3.0	60	2.0	5.0	-35	+15	+15	1130
180	C	735D187X0025C2	2.0	32	2.0	6.0	-48	+15	+15	1531
350	D	735D357X0025D2	1.0	24	3.0	12	-64	+25	+25	2246
850	D	735D857X0025D2	1.3	26	4.0	15	-80	+25	+25	1970
30 V _{DC} AT +85 °C; 20 V _{DC} AT +125 °C										
8.0	A	735D805X0030A2	6.6	275	0.75	1.5	-16	+12	+12	640
15	A	735D156X0030A2	6.2	175	0.75	1.5	-20	+12	+12	660
25	A	735D256X0030A2	6.6	160	1.5	3.0	-24	+12	+12	640
33	A	735D336X0030A2	6.6	160	1.5	3.0	-26	+12	+12	640
40	B	735D406X0030B2	3.7	65	1.0	2.0	-24	+12	+12	1065
68	B	735D686X0030B2	2.8	60	1.0	2.0	-24	+15	+15	1215
100	C	735D107X0030C2	2.6	40	2.0	6.0	-28	+12	+12	1477
120	B	735D127X0030B2	3.0	60	2.0	5.0	-32	+15	+15	1185
150	B	735D157X0030B2	3.0	60	2.0	6.0	-35	+15	+15	1185
150	C	735D157X0030C2	2.3	35	2.0	6.0	-48	+15	+15	1525
170	B	735D177X0030B2	3.0	65	2.0	7.0	-48	+15	+15	1185
300	C	735D307X0030C2	2.2	44	3.0	12	-60	+15	+15	1559
300	D	735D307X0030D2	1.2	31	3.0	12	-60	+25	+25	2100
330	C	735D337X0030C2	2.6	52	3.0	12	-65	+25	+25	1373
350	C	735D357X0030C2	2.6	52	3.0	15	-70	+25	+25	1477
390	C	735D397X0030C2	2.6	52	3.0	15	-75	+25	+25	1477
430	C	735D437X0030C2	2.6	54	3.0	15	-80	+25	+25	1477
560	D	735D567X0030D2	1.4	30	4.0	20	-80	+25	+25	1050
50 V _{DC} AT +85 °C; 30 V _{DC} AT +125 °C										
5.0	A	735D505X0050A2	8.0	400	0.75	2.0	-16	+6	+6	580
10	A	735D106X0050A2	6.4	250	0.75	2.0	-20	+9	+9	640
18	A	735D186X0050A2	8.0	200	1.5	3.0	-24	+12	+12	580
22	A	735D226X0050A2	8.0	190	1.5	4.0	-24	+12	+12	580
25	B	735D256X0050B2	4.6	95	1.0	3.0	-20	+12	+12	1065
47	B	735D476X0050B2	3.7	70	1.0	3.0	-24	+15	+15	1215
60	C	735D606X0050C2	2.9	45	2.0	7.0	-16	+12	+12	1285
82	C	735D826X0050C2	2.3	45	2.0	7.0	-32	+15	+15	1460
100	B	735D107X0050B2	3.2	67	2.0	7.0	-40	+15	+15	1150
160	D	735D167X0050D2	1.3	27	3.0	16	-50	+23	+23	2040
270	C	735D277X0050C2	2.6	52	3.0	15	-60	+25	+25	1373
350	D	735D357X0050D2	1.5	30	4.0	20	-70	+25	+25	1900
390	D	735D397X0050D2	1.5	30	5.0	25	-75	+25	+25	1900
430	D	735D437X0050D2	1.5	31	5.0	25	-80	+25	+25	1900



STANDARD RATINGS to MIL range CLR79										
CAPACITANCE (μF)	CASE CODE	PART NUMBER	MAX. ESR AT +25 °C 120 Hz (Ω)	MAX. IMP. AT -55 °C (Ω)	MAX. DCL (μA) AT		MAX. CAP. CHANGE (%) AT			MAX. RMS RIPPLE CURRENT 40 kHz (mA)
					+25 °C	+85 °C +125 °C	-55 °C	+85 °C	+125 °C	
60 V _{DC} AT +85 °C; 40 V _{DC} AT +125 °C										
4.0	A	735D405X0060A2	9.3	550	0.75	2.0	-16	+6	+6	525
8.2	A	735D825X0060A2	6.6	275	0.75	2.0	-20	+9	+9	625
20	B	735D206X0060B2	4.0	105	1.0	4.0	-16	+12	+12	1026
39	B	735D396X0060B2	3.0	90	1.0	4.0	-24	+12	+12	1185
50	C	735D506X0060C2	2.6	50	2.0	7.0	-16	+12	+12	1341
68	C	735D686X0060C2	2.4	50	2.0	7.0	-30	+15	+15	1393
82	B	735D826X0060B2	3.2	70	2.0	7.0	-36	+15	+15	1150
140	D	735D147X0060D2	1.3	28	3.0	16	-40	+20	+20	1990
220	C	735D227X0060C2	2.6	55	3.0	15	-50	+25	+25	1341
270	D	735D277X0060D2	1.5	33	5.0	22	-70	+25	+25	1850
330	D	735D337X0060D2	1.5	31	5.0	25	-72	+25	+25	1850
75 V _{DC} AT +85 °C; 50 V _{DC} AT +125 °C										
3.5	A	735D355X0075A2	9.5	650	1.0	2.0	-16	+6	+6	525
9.0	A	735D905X0075A2	8.2	280	2.0	5.0	-20	+9	+9	572
15	B	735D156X0075B2	5.0	150	1.0	4.0	-16	+9	+9	1000
40	C	735D406X0075C2	3.0	60	2.0	8.0	-16	+12	+12	1293
43	B	735D436X0075B2	3.8	89	2.0	8.0	-24	+12	+12	1051
56	B	735D566X0075B2	3.8	84	2.0	10	-30	+15	+15	1051
56	C	735D566X0075C2	2.4	60	2.0	8.0	-28	+15	+15	1396
110	D	735D117X0075D2	1.3	29	3.0	20	-35	+20	+20	1990
250	D	735D257X0075D2	1.5	33	5.0	22	-68	+25	+25	1850
100 V _{DC} AT +85 °C; 70 V _{DC} AT +125 °C										
30	B	735D306X0100B2	3.7	99	2.0	12	-16	+8	+8	1065
30	C	735D306X0100C2	3.3	80	2.0	8.0	-16	+8	+8	1200
43	C	735D436X0100C2	2.4	70	2.0	8.0	-20	+8	+8	1389
86	D	735D866X0100D2	1.5	30	3.0	20	-24	+15	+15	1859
125 V _{DC} AT +85 °C; 85 V _{DC} AT +125 °C										
3.6	A	735D365X0125A2	11.1	600	1.0	2.0	-16	+8	+8	495
14	B	735D146X0125B2	5.0	167	1.0	4.0	-16	+8	+8	1050
25	C	735D256X0125C2	2.6	93	2.0	8.0	-16	+8	+8	1335
56	D	735D566X0125D2	1.5	47	3.0	20	-25	+15	+15	1859



STANDARD RATINGS CT79

CAPACITANCE (μF)	CASE CODE	PART NUMBER	MAX. DF AT +25 °C (%)	MAX. IMP. AT -55 °C (Ω)	MAX. DCL (μA) AT		MAX. CAP. CHANGE (%) AT			MAX. RMS RIPPLE CURRENT 40 kHz (mA)
					+25 °C	+85 °C +125 °C	-55 °C	+85 °C	+125 °C	
6.3 V _{DC} AT +85 °C; 4 V _{DC} AT +125 °C										
68	A	CT79686X06R3A2	15	72	1	12	-40	+14	+16	960
270	B	CT79277X06R3B2	41	30	1	7	-44	+17.5	+20	1375
560	C	CT79567X06R3C2	55	30	2	16	-64	+17.5	+20	1900
1200	D	CT79128X06R3D2	94	24	4	16	-80	+25	+25	2265
10 V _{DC} AT +85 °C; 6.3 V _{DC} AT +125 °C										
47	A	CT79476X0010A2	14	120	1	2	-36	+14	+16	855
180	B	CT79187X0010B2	29	48	1	7	-36	+14	+16	1300
390	C	CT79397X0010C2	44	30	2	16	-64	+17.5	+20	1800
820	D	CT79827X0010D2	65	28	4	16	-80	+25	+25	2360
16 V _{DC} AT +85 °C; 10 V _{DC} AT +125 °C										
33	A	CT79336X0016A2	10	108	1	2	-28	+14	+16	820
120	B	CT79127X0016B2	24	60	1	9	-28	+17.5	+20	1230
270	C	CT79277X0016C2	45	36	2	16	-56	+17.5	+20	1500
560	D	CT79567X0016D2	44	28	6	24	-80	+25	+25	2300
25 V _{DC} AT +85 °C; 16 V _{DC} AT +125 °C										
22	A	CT79226X0025A2	7	168	1	2	-20	+10.5	+12	800
100	B	CT79107X0025B2	21	60	1	10	-28	+13	+15	1215
180	C	CT79187X0025C2	29	39	2	18	-48	+13	+15	1460
390	D	CT79397X0025D2	40	29	7	28	-70	+25	+25	1970
40 V _{DC} AT +85 °C; 25 V _{DC} AT +125 °C										
12	A	CT79126X0040A2	6	234	1	2	-24	+8	+10	660
56	B	CT79566X0040B2	14	78	1	9	-28	+13	+15	1100
100	C	CT79107X0040C2	18	48	2	17	-40	+13	+15	1400
220	D	CT79227X0040D2	27	31	8	32	-55	+25	+25	1900
63 V _{DC} AT +85 °C; 40 V _{DC} AT +125 °C										
8.2	A	CT79825X0063A2	4.5	330	1	2	-24	+8	+9	625
39	B	CT79396X0063B2	12	108	1	9	-28	+10.5	+12	1015
68	C	CT79686X0063C2	13	60	2	16	-32	+10.5	+12	1365
150	D	CT79157X0063D2	18	34	8	32	-40	+20	+20	1850
80 V _{DC} AT +85 °C; 50 V _{DC} AT +125 °C										
6.8	A	CT79685X0080A2	5	360	1	2	-20	+8	+9	610
33	B	CT79336X0080B2	10	108	1	10	-24	+10.5	+15	1000
56	C	CT79566X0080C2	11	72	2	17	-28	+10.5	+15	1350
100	D	CT79107X0080D2	12	36	9	36	-35	+20	+20	1825
100 V _{DC} AT +85 °C; 63 V _{DC} AT +125 °C										
4.7	A	CT79475X0100A2	3	600	1	2	-16	+7	+8	565
22	B	CT79226X0100B2	8	132	1	9	-16	+7	+8	935
47	C	CT79476X0100C2	8	84	2	17	-20	+7	+8	1335
82	D	CT79826X0100D2	10	40	9	36	-25	+15	+15	1800
125 V _{DC} AT +85 °C; 80 V _{DC} AT +125 °C										
3.9	A	CT79395X0125A2	3.5	720	1	2	-16	+7	+8	495
15	B	CT79156X0125B2	6	200	1	7	-16	+7	+8	860
27	C	CT79276X0125C2	6	106	2	13	-16	+7	+8	1200
56	D	CT79566X0125D2	7	58	10	40	-25	+15	+15	1800



EXTENDED RATINGS CT79

CAPACITANCE (μF)	CASE CODE	PART NUMBER	MAX. DF AT +25 °C (%)	MAX. IMP. AT -55 °C (Ω)	MAX. DCL (μA) AT		MAX. CAP. CHANGE (%) AT			MAX. RMS RIPPLE CURRENT 40 kHz (mA)
					+25 °C	+85 °C +125 °C	-55 °C	+85 °C	+125 °C	
6.3 V _{DC} AT +85 °C; 4 V _{DC} AT +125 °C										
150	A	CT79157X06R3A2	34	80	2.0	9.0	-42	+16	+16	960
560	B	CT79567X06R3B2	106	48	2.0	10	-68	+20	+20	1550
1500	C	CT79158X06R3C2	172	36	5.0	20	-90	+25	+25	1930
2200	D	CT79228X06R3D2	170	22	6.0	24	-90	+25	+25	2330
10 V _{DC} AT +85 °C; 6.3 V _{DC} AT +125 °C										
100	A	CT79107X0010A2	30	82	2.0	6.0	-40	+16	+16	930
390	B	CT79397X0010B2	74	54	2.0	10	-60	+19	+20	1470
1200	C	CT79128X0010C2	137	36	5.0	20	-80	+25	+25	1850
1800	D	CT79188X0010D2	138	24	7.0	25	-88	+30	+30	2300
16 V _{DC} AT +85 °C; 10 V _{DC} AT +125 °C										
56	A	CT79566X0016A2	22	100	1.5	3.0	-28	+16	+16	890
270	B	CT79277X0016B2	55	60	2.0	12	-45	+18	+28	1430
820	C	CT79827X0016C2	95	42	6.0	24	-80	+25	+25	1800
1200	D	CT79128X0016D2	103	25	8.0	32	-84	+25	+30	2300
25 V _{DC} AT +85 °C; 16 V _{DC} AT +125 °C										
39	A	CT79396X0025A2	16	120	2.0	9.0	-28	+16	+16	820
180	B	CT79187X0025B2	36	60	2.0	10	-48	+14	+15	1400
560	C	CT79567X0025C2	60	48	7.0	28	-80	+25	+25	1750
820	D	CT79827X0025D2	82	26	8.0	32	-80	+25	+25	2100
40 V _{DC} AT +85 °C; 25 V _{DC} AT +125 °C										
22	A	CT79226X0040A2	11	190	1.5	4.0	-24	+12	+12	745
120	B	CT79127X0040B2	30	62	2.0	12	-32	+15	+15	1315
330	C	CT79337X0040C2	43	52	8.0	32	-65	+25	+25	1640
470	D	CT79477X0040D2	45	30	9.0	35	-80	+25	+25	2040
63 V _{DC} AT +85 °C; 40 V _{DC} AT +125 °C										
15	A	CT79156X0063A2	8.0	220	2.0	9.0	-22	+9	+9	650
82	B	CT79826X0063B2	22	70	2.0	12	-36	+15	+15	1220
220	C	CT79227X0063C2	37	55	8.0	32	-50	+25	+25	1520
330	D	CT79337X0063D2	32	31	10.0	40	-72	+25	+25	1970
80 V _{DC} AT +85 °C; 50 V _{DC} AT +125 °C										
8.2	A	CT79825X0080A2	6.0	280	1.5	3.0	-22	+9	+9	610
68	B	CT79686X0080B2	21	86	2.0	12	-36	+15	+15	1200
150	C	CT79157X0080C2	25	60	9.0	36	-40	+20	+20	1490
220	D	CT79227X0080D2	37	32	10	40	-60	+22	+22	1900
100 V _{DC} AT +85 °C; 63 V _{DC} AT +125 °C										
5.6	A	CT79565X0100A2	6.0	475	2.0	5.0	-17	+8	+8	565
39	B	CT79396X0100B2	10	92	2.0	12	-24	+12	+12	1300
68	C	CT79686X0100C2	15	60	10	40	-30	+15	+15	1600
100	D	CT79107X0100D2	11	36	3.0	24	-35	+20	+20	1900
125 V _{DC} AT +85 °C; 80 V _{DC} AT +125 °C										
18	B	CT79186X0125B2	8.0	133	2.0	10	-16	+8	+8	1065
47	C	CT79476X0125C2	9.0	70	2.0	10	-23	+10	+10	1500
82	D	CT79826X0125D2	10.0	39	3.0	24	-24	+18	+18	1900



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Vishay products are not designed for use in life-saving or life-sustaining applications or any application in which the failure of the Vishay product could result in personal injury or death unless specifically qualified in writing by Vishay. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.