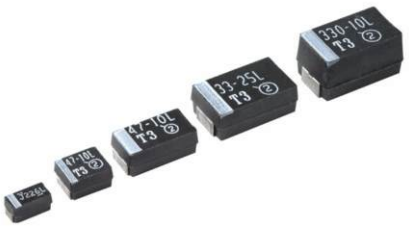
Solid Tantalum Chip Capacitors
TANTAMOUNT®, Commercial, Surface Mount



FEATURES

- Terminations: 100 % Tin, standard SnPb available
- Compliant Terminations
- Molded case available in six case codes
- Compatible with “High Volume” automatic pick and place equipment
- Optical character recognition qualified
- Meets IEC Specification QC300801/US0001 and EIA 535BAAC

Pb-free Available

RoHS* COMPLIANT

PERFORMANCE/ELECTRICAL CHARACTERISTICS

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

Note: Refer to Doc. 40088

Capacitance Range: 0.10 µF to 680 µF

Capacitance Tolerance: ± 20 %, ± 10 % standard
(20 % only for P case code)

100 % Surge Current Tested (D & E Case Codes)

Voltage Rating: 4 WVDC to 50 WVDC

OTHER SPECIFICATIONS

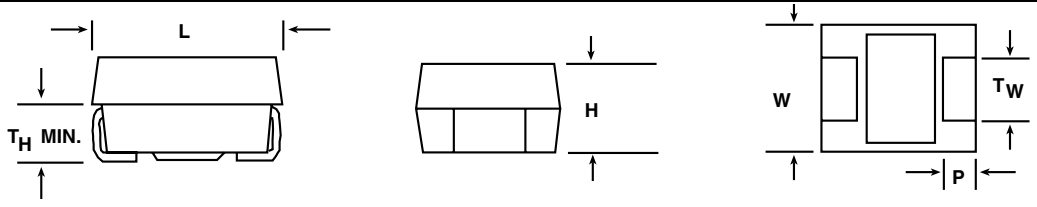
CECC		IECQ	
30801-005	793DX	PQC32/GB003	793DX
30801-009	CTC3	300801/FR001	CTC3
30801-011	CTC4		
30801-801	793DE		

ORDERING INFORMATION

293D	107	X9	010	D	2WE3
TYPE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	CASE CODE	TERMINATION AND PACKAGING
	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.	2TE3: 100 % tin terminations, 7" (178 mm) reel 2WE3: 100 % tin terminations, 13" (330 mm) reel 8T: 90/10 SnPb Solder Plate terminations, 7" (178 mm) reel 8W: 90/10 SnPb Solder Plate terminations, 13" (330 mm) reel ** 2T: Not recommended for new designs ** 2W: Not recommended for new designs

Note: We reserve the right to supply higher voltage ratings, tighter capacitance tolerance and higher grade capacitors in the same case size. Voltage substitutions will be marked with the higher voltage rating.

DIMENSIONS in inches [millimeters]



CASE CODE	EIA SIZE	L	W	H	P	TW	T_H (MIN.)
A	3216-18	0.126 ± 0.008 [3.2 ± 0.20]	0.063 ± 0.008 [1.6 ± 0.20]	0.063 ± 0.008 [1.6 ± 0.20]	0.031 ± 0.012 [0.80 ± 0.30]	0.047 ± 0.004 [1.2 ± 0.10]	0.028 [0.70]
B	3528-21	0.138 ± 0.008 [3.5 ± 0.20]	0.110 ± 0.008 [2.8 ± 0.20]	0.075 ± 0.008 [1.9 ± 0.20]	0.031 ± 0.012 [0.80 ± 0.30]	0.087 ± 0.004 [2.2 ± 0.10]	0.028 [0.70]
C	6032-28	0.236 ± 0.012 [6.0 ± 0.30]	0.126 ± 0.012 [3.2 ± 0.30]	0.098 ± 0.012 [2.5 ± 0.30]	0.051 ± 0.012 [1.3 ± 0.30]	0.087 ± 0.004 [2.2 ± 0.10]	0.039 [1.0]
D	7343-31	0.287 ± 0.012 [7.3 ± 0.30]	0.170 ± 0.012 [4.3 ± 0.30]	0.110 ± 0.012 [2.8 ± 0.30]	0.051 ± 0.012 [1.3 ± 0.30]	0.095 ± 0.004 [2.4 ± 0.10]	0.039 [1.0]
E	7343-43	0.287 ± 0.012 [7.3 ± 0.30]	0.170 ± 0.012 [4.3 ± 0.30	0.158 ± 0.012 [4.0 ± 0.30]	0.051 ± 0.012 [1.3 ± 0.30]	0.095 ± 0.004 [2.4 ± 0.10]	0.039 [1.0]

** Terminations and packaging codes 2T and 2W will be discontinued by January 2008

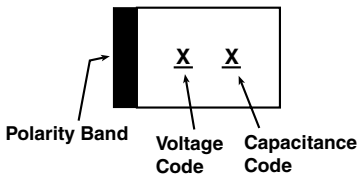
* Pb containing terminations are not RoHS compliant, exemptions may apply

RATINGS AND CASE CODES

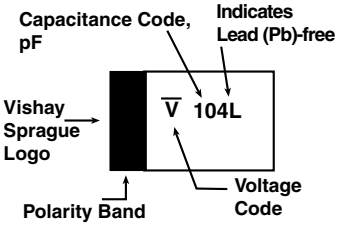
µF	4 V	6.3 V	10 V	16 V	20 V	25 V	35 V	50 V
0.10							A	A
0.15							A	A/B
0.22							A	A/B
0.33							A	A/B
0.47						A	A/B	A/B/C
0.68					A	A	A/B	B/C
1.0				A	A	A/B	A/B	B/C
1.5			A	A	A	A/B	B/C	B/C
2.2		A	A	A/B	A/B	A/B	B/C	C/D
3.3	A	A	A	A/B	A/B	A*/B/C	B/C	C/D
4.7	A	A/B	A/B	A/B	A/B/C	A/B/C	B/C/D	D
6.8	A	A/B	A/B	A/B/C	A/B/C	B/C	C/D	D/E
10	A/B	A/B/C	A/B/C	A/B/C	B/C	B/C/D	C/D	D/E
15	A/B	A/B/C	A/B/C	B/C	B/C/D	C/D	D/E	
22	A/BC	A/B/C	A/B/C	B/C/D	B/C/D	D	D/E	
33	A/B/C	A/B/C	B/C/D	B/C/D	C/D	D/E		
47	A/B/C	A/B/C/D	B/C/D	C/D	D/E	E		
68	B/C/D	B/C/D	B*/C/D	D	D/E			
100	A/B/C/D	B/C/D	C/D	D/E	E			
150	B/C/D	C/D/E	D/E	D*/E				
220	B/C/D/E	C/D/E	D/E					
330	D/E	D/E	D*/E					
470	D/E	E						
680	E							

* Preliminary values, contact factory for availability.

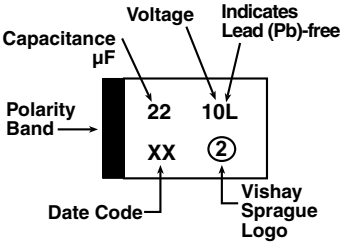
MARKING



"P" Case Size



"A" Case Size



"B, C, D, E" Case Sizes

STANDARD/EXTENDED RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ohms)	MAX. RIPPLE 100 kHz Irms (Amps)
4 WVDC AT + 85 °C, SURGE = 5.2 V . . . 2.7 WVDC AT + 125 °C, SURGE = 3.4 V						
3.3	A	293D335X_004A2_E3	0.5	6	7.6	0.10
4.7	A	293D475X_004A2_E3	0.5	6	6.3	0.11
6.8	A	293D685X_004A2_E3	0.5	6	5.5	0.12
10	A	293D106X_004A2_E3	0.5	6	5.1	0.12
10	B	293D106X_004B2_E3	0.5	6	3.5	0.16
15	A	293D156X_004A2_E3	0.6	6	3.4	0.15
15	B	293D156X_004B2_E3	0.6	6	2.9	0.17
22	A	293D226X_004A2_E3	0.9	6	2.9	0.16
22	B	293D226X_004B2_E3	0.9	6	2.5	0.18
22	C	293D226X_004C2_E3	0.9	6	1.8	0.25
33	A	293D336X_004A2_E3	1.3	6	2.9	0.16
33	B	293D336X_004B2_E3	1.3	6	2.0	0.21
33	C	293D336X_004C2_E3	1.3	6	1.8	0.25
47	A	293D476X_004A2_E3	1.9	14	2.5	0.17
47	B	293D476X_004B2_E3	1.9	6	1.9	0.21
47	C	293D476X_004C2_E3	1.9	6	1.8	0.25
68	B	293D686X_004B2_E3	2.7	6	1.9	0.21
68	C	293D686X_004C2_E3	2.7	6	1.4	0.28
68	D	293D686X_004D2_E3	2.7	6	0.8	0.43
100	A	293D107X_004A2_E3	10.0	30	2.5	0.22
100	B	293D107X_004B2_E3	4.0	8	1.8	0.22
100	C	293D107X_004C2_E3	4.0	6	0.8	0.37
100	D	293D107X_004D2_E3	4.0	6	0.7	0.46
150	B	293D157X_004B2_E3	6.0	14	1.6	0.23
150	C	293D157X_004C2_E3	6.0	12	0.7	0.40
150	D	293D157X_004D2_E3	6.0	8	0.6	0.50
220	B	293D227X_004B2_E3	8.8	18	1.5	0.24
220	C	293D227X_004C2_E3	8.8	8	0.7	0.40
220	D	293D227X_004D2_E3	8.8	8	0.6	0.50
220	E	293D227X_004E2_E3	8.8	8	0.5	0.57
330	D	293D337X_004D2_E3	13.2	8	0.6	0.50
330	E	293D337X_004E2_E3	13.2	8	0.5	0.57
470	D	293D477X_004D2_E3	18.8	10	0.6	0.50
470	E	293D477X_004E2_E3	18.8	10	0.5	0.57
680	E	293D687X_004E2_E3	27.2	12	0.5	0.57
6.3 WVDC AT + 85 °C, SURGE = 8 V . . . 4 WVDC AT + 125 °C, SURGE = 5 V						
2.2	A	293D225X_6R3A2_E3	0.5	6	7.6	0.10
3.3	A	293D335X_6R3A2_E3	0.5	6	6.3	0.11
4.7	A	293D475X_6R3A2_E3	0.5	6	5.5	0.12
6.8	A	293D685X_6R3A2_E3	0.5	6	5.0	0.12
6.8	B	293D685X_6R3B2_E3	0.5	6	3.4	0.16
10	A	293D106X_6R3A2_E3	0.6	6	3.4	0.15
10	B	293D106X_6R3B2_E3	0.6	6	2.9	0.17
15	A	293D156X_6R3A2_E3	0.9	6	2.9	0.16
15	B	293D156X_6R3B2_E3	0.9	6	2.5	0.18
15	C	293D156X_6R3C2_E3	0.9	6	1.8	0.25
22	A	293D226X_6R3A2_E3	1.3	6	2.9	0.16
22	B	293D226X_6R3B2_E3	1.3	6	2.0	0.21
22	C	293D226X_6R3C2_E3	1.3	6	1.8	0.25
33	A	293D336X_6R3A2_E3	2.0	14	2.5	0.17
33	B	293D336X_6R3B2_E3	2.0	6	1.9	0.21
33	C	293D336X_6R3C2_E3	2.0	6	1.5	0.27
47	A	293D476X_6R3A2_E3	2.8	12	1.6	0.22
47	B	293D476X_6R3B2_E3	2.8	6	1.9	0.21
47	C	293D476X_6R3C2_E3	2.8	6	1.4	0.28

* For 10 % tolerance, specify “9”; for 20 % tolerance, change to “0”.

STANDARD/EXTENDED RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ohms)	MAX. RIPPLE 100 kHz Irms (Amps)
6.3 WVDC AT + 85 °C, SURGE = 8 V . . . 4 WVDC AT + 125 °C, SURGE = 5 V						
47	D	293D476X_6R3D2_E3	2.8	6	0.8	0.43
68	B	293D686X_6R3B2_E3	4.1	6	1.8	0.22
68	C	293D686X_6R3C2_E3	4.1	6	0.8	0.37
68	D	293D686X_6R3D2_E3	4.1	6	0.7	0.46
100	B	293D107X_6R3B2_E3	6.0	15	1.7	0.22
100	C	293D107X_6R3C2_E3	6.0	6	0.8	0.37
100	D	293D107X_6R3D2_E3	6.0	6	0.7	0.46
150	C	293D157X_6R3C2_E3	9.0	8	0.7	0.40
150	D	293D157X_6R3D2_E3	9.0	8	0.6	0.50
150	E	293D157X_6R3E2_E3	9.0	8	0.5	0.57
220	C	293D227X_6R3C2_E3	13.9	14	0.7	0.39
220	D	293D227X_6R3D2_E3	13.2	8	0.6	0.50
220	E	293D227X_6R3E2_E3	13.2	8	0.5	0.57
330	D	293D337X_6R3D2_E3	19.8	8	0.6	0.50
330	E	293D337X_6R3E2_E3	19.8	8	0.5	0.57
470	E	293D477X_6R3E2_E3	28.2	10	0.5	0.57
10 WVDC AT + 85 °C, SURGE = 13 V . . . 7 WVDC AT + 125 °C, SURGE = 8 V						
1.5	A	293D155X_010A2_E3	0.5	6	8.0	0.10
2.2	A	293D225X_010A2_E3	0.5	6	6.3	0.11
3.3	A	293D335X_010A2_E3	0.5	6	5.5	0.12
4.7	A	293D475X_010A2_E3	0.5	6	5.0	0.12
4.7	B	293D475X_010B2_E3	0.5	6	3.4	0.16
6.8	A	293D685X_010A2_E3	0.7	6	4.2	0.13
6.8	B	293D685X_010B2_E3	0.7	6	2.9	0.17
10	A	293D106X_010A2_E3	1.0	6	3.4	0.15
10	B	293D106X_010B2_E3	1.0	6	2.5	0.18
10	C	293D106X_010C2_E3	1.0	6	1.8	0.25
15	A	293D156X_010A2_E3	1.5	6	2.9	0.16
15	B	293D156X_010B2_E3	1.5	6	2.0	0.21
15	C	293D156X_010C2_E3	1.5	6	1.8	0.25
22	A	293D226X_010A2_E3	2.2	8	2.5	0.17
22	B	293D226X_010B2_E3	2.2	6	1.9	0.21
22	C	293D226X_010C2_E3	2.2	6	1.5	0.27
33	B	293D336X_010B2_E3	3.3	6	1.9	0.21
33	C	293D336X_010C2_E3	3.3	6	1.4	0.28
33	D	293D336X_010D2_E3	3.3	6	0.8	0.43
47	B	293D476X_010B2_E3	4.7	6	1.8	0.22
47	C	293D476X_010C2_E3	4.7	6	1.1	0.32
47	D	293D476X_010D2_E3	4.7	6	0.7	0.46
68	C	293D686X_010C2_E3	6.8	6	1.0	0.33
68	D	293D686X_010D2_E3	6.8	6	0.7	0.46
100	C	293D107X_010C2_E3	10	8	0.9	0.35
100	D	293D107X_010D2_E3	10	8	0.6	0.50
150	D	293D157X_010D2_E3	15	8	0.6	0.50
150	E	293D157X_010E2_E3	15	8	0.5	0.57
220	D	293D227X_010D2_E3	22	8	0.6	0.50
220	E	293D227X_010E2_E3	22	8	0.5	0.57
330	D	293D337X_010D2_E3	33	10	0.5	0.57
330	E	293D337X_010E2_E3	33	10	0.5	0.57
16 WVDC AT + 85 °C, SURGE = 20 V . . . 10 WVDC AT + 125 °C, SURGE = 12 V						
1.0	A	293D105X_016A2_E3	0.5	4	9.3	0.09
1.5	A	293D155X_016A2_E3	0.5	6	6.7	0.11
2.2	A	293D225X_016A2_E3	0.5	6	5.9	0.11
2.2	B	293D225X_016B2_E3	0.5	6	4.6	0.14
3.3	A	293D335X_016A2_E3	0.5	6	5.0	0.12
3.3	B	293D335X_016B2_E3	0.5	6	3.5	0.16
4.7	A	293D475X_016A2_E3	0.8	6	5.0	0.12
4.7	B	293D475X_016B2_E3	0.8	6	2.9	0.17

* For 10 % tolerance, specify “9”; for 20 % tolerance, change to “0”.

STANDARD/EXTENDED RATINGS

CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ohms)	MAX. RIPPLE 100 kHz Irms (Amps)
16 WVDC AT + 85 °C, SURGE = 20 V . . . 10 WVDC AT + 125 °C, SURGE = 12 V						
6.8	A	293D685X_016A2_E3	1.1	6	4.2	0.13
6.8	B	293D685X_016B2_E3	1.1	6	2.5	0.18
6.8	C	293D685X_016C2_E3	1.1	6	1.9	0.24
10	A	293D106X_016A2_E3	1.6	6	3.0	0.16
10	B	293D106X_016B2_E3	1.6	6	2.0	0.21
10	C	293D106X_016C2_E3	1.6	6	1.8	0.25
15	B	293D156X_016B2_E3	2.4	6	2.0	0.21
15	C	293D156X_016C2_E3	2.4	6	1.5	0.27
22	B	293D226X0016B2_E3	3.5	6	1.9	0.21
22	C	293D226X_016C2_E3	3.5	6	1.4	0.28
22	D	293D226X_016D2_E3	3.5	6	0.8	0.43
33	B	293D336X0016B2_E3	5.3	6	1.8	0.22
33	C	293D336X_016C2_E3	5.3	6	1.1	0.32
33	D	293D336X_016D2_E3	5.3	6	0.7	0.46
47	C	293D476X_016C2_E3	7.5	6	1.0	0.33
47	D	293D476X_016D2_E3	7.5	6	0.7	0.46
68	D	293D686X_016D2_E3	10.9	6	0.6	0.50
100	D	293D107X_016D2_E3	16	8	0.6	0.50
100	E	293D107X_016E2_E3	16	8	0.6	0.52
150	E	293D157X_016E2_E3	24	8	0.5	0.57
20 WVDC AT + 85 °C, SURGE = 26 V . . . 13 WVDC AT + 125 °C, SURGE = 16 V						
0.68	A	293D684X_020A2_E3	0.5	4	10	0.09
1.0	A	293D105X_020A2_E3	0.5	4	8.4	0.09
1.5	A	293D155X_020A2_E3	0.5	6	6.3	0.11
2.2	A	293D225X_020A2_E3	0.5	6	5.9	0.11
2.2	B	293D225X_020B2_E3	0.5	6	3.5	0.16
3.3	A	293D335X_020A2_E3	0.7	6	5.9	0.11
3.3	B	293D335X_020B2_E3	0.7	6	3.0	0.17
4.7	A	293D475X_020A2_E3	0.9	6	5.0	0.12
4.7	B	293D475X_020B2_E3	0.9	6	2.9	0.17
4.7	C	293D475X_020C2_E3	0.9	6	2.3	0.22
6.8	A	293D685X_020A2_E3	1.4	6	4.5	0.13
6.8	B	293D685X_020B2_E3	1.4	6	2.5	0.18
6.8	C	293D685X_020C2_E3	1.4	6	1.9	0.24
10	B	293D106X_020B2_E3	2.0	6	2.5	0.18
10	C	293D106X_020C2_E3	2.0	6	1.7	0.25
15	B	293D156X_020B2_E3	3.0	6	2.3	0.19
15	C	293D156X_020C2_E3	3.0	6	1.5	0.27
15	D	293D156X_020D2_E3	3.0	6	0.9	0.41
22	B	293D226X_020B2_E3	4.4	6	2.1	0.20
22	C	293D226X_020C2_E3	4.4	6	1.1	0.32
22	D	293D226X_020D2_E3	4.4	6	0.7	0.46
33	C	293D336X_020C2_E3	6.6	6	1.0	0.33
33	D	293D336X_020D2_E3	6.6	6	0.7	0.46
47	D	293D476X_020D2_E3	9.4	6	0.7	0.46
47	E	293D476X_020E2_E3	9.4	6	0.6	0.52
68	D	293D686X_020D2_E3	13.6	6	0.7	0.46
68	E	293D686X_020E2_E3	13.6	6	0.6	0.52
100	E	293D107X_020E2_E3	20.0	8	0.5	0.57
25 WVDC AT + 85 °C, SURGE = 32 V . . . 17 WVDC AT + 125 °C, SURGE = 20 V						
0.47	A	293D474X_025A2_E3	0.5	4	12	0.08
0.68	A	293D684X_025A2_E3	0.5	4	8.4	0.09
1.0	A	293D105X_025A2_E3	0.5	4	7.6	0.10
1.0	B	293D105X_025B2_E3	0.5	4	5.0	0.13
1.5	A	293D155X_025A2_E3	0.5	6	6.7	0.11
1.5	B	293D155X_025B2_E3	0.5	6	4.6	0.14
2.2	A	293D225X_025A2_E3	0.6	6	6.3	0.11
2.2	B	293D225X_025B2_E3	0.6	6	3.8	0.15
3.3	B	293D335X_025B2_E3	0.8	6	3.1	0.17
3.3	C	293D335X_025C2_E3	0.8	6	2.3	0.22
4.7	A	293D475X_025A2_E3	1.2	6	5.5	0.12
4.7	B	293D475X_025B2_E3	1.2	6	2.8	0.17
4.7	C	293D475X_025C2_E3	1.2	6	2.0	0.24

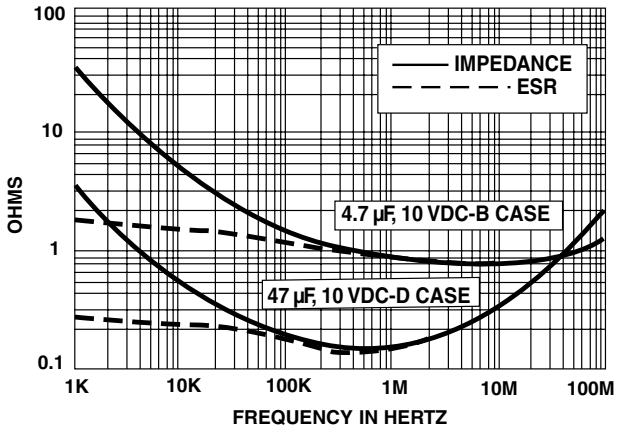
* For 10 % tolerance, specify “9”; for 20 % tolerance, change to “0”.

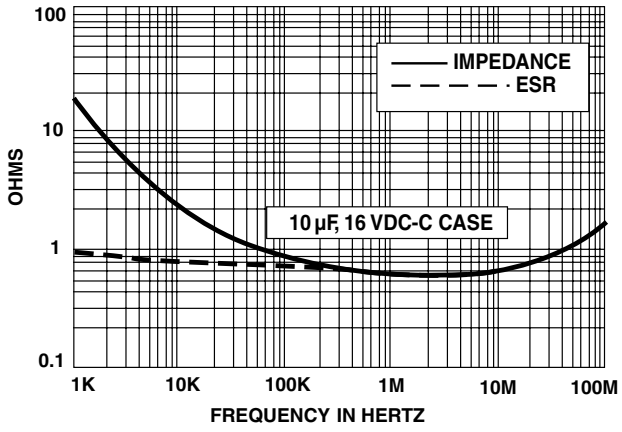
STANDARD/EXTENDED RATINGS

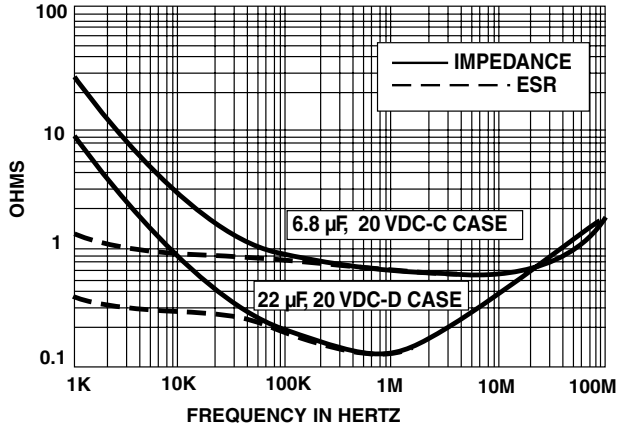
CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DC LEAKAGE AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ohms)	MAX. RIPPLE 100 kHz Irms (Amps)
25 WVDC AT + 85 °C, SURGE = 32 V . . . 17 WVDC AT + 125 °C, SURGE = 20 V						
6.8	B	293D685X_025B2_E3	1.7	6	2.4	0.19
6.8	C	293D685X_025C2_E3	1.7	6	1.7	0.25
10	B	293D106X_025B2_E3	2.5	6	2.3	0.19
10	C	293D106X_025C2_E3	2.5	6	1.5	0.27
10	D	293D106X_025D2_E3	2.5	6	1.0	0.39
15	C	293D156X_025C2_E3	3.8	6	1.2	0.30
15	D	293D156X_025D2_E3	3.8	6	0.8	0.43
22	D	293D226X_025D2_E3	5.5	6	0.7	0.46
33	D	293D336X_025D2_E3	8.3	6	0.7	0.46
33	E	293D336X_025E2_E3	8.3	6	0.6	0.52
47	E	293D476X_025E2_E3	11.8	6	0.6	0.52
35 WVDC AT + 85 °C, SURGE = 46 V . . . 23 WVDC AT + 125 °C, SURGE = 28 V						
0.10	A	293D104X_035A2_E3	0.5	4	20	0.06
0.15	A	293D154X_035A2_E3	0.5	4	18	0.07
0.22	A	293D224X_035A2_E3	0.5	4	15	0.07
0.33	A	293D334X_035A2_E3	0.5	4	13	0.08
0.47	A	293D474X_035A2_E3	0.5	4	10	0.09
0.47	B	293D474X_035B2_E3	0.5	4	8	0.10
0.68	A	293D684X_035A2_E3	0.5	4	7.6	0.10
0.68	B	293D684X_035B2_E3	0.5	4	6.5	0.11
1.0	A	293D105X_035A2_E3	0.5	4	7.5	0.10
1.0	B	293D105X_035B2_E3	0.5	4	5.0	0.13
1.5	B	293D155X_035B2_E3	0.5	6	4.2	0.14
1.5	C	293D155X_035C2_E3	0.5	6	3.8	0.17
2.2	B	293D225X_035B2_E3	0.8	6	3.8	0.15
2.2	C	293D225X_035C2_E3	0.8	6	2.9	0.20
3.3	B	293D335X_035B2_E3	1.2	6	3.5	0.16
3.3	C	293D335X_035C2_E3	1.2	6	2.1	0.23
4.7	B	293D475X_035B2_E3	1.7	6	3.1	0.17
4.7	C	293D475X_035C2_E3	1.6	6	1.9	0.24
4.7	D	293D475X_035D2_E3	1.6	6	1.3	0.34
6.8	C	293D685X_035C2_E3	2.4	6	1.8	0.25
6.8	D	293D685X_035D2_E3	2.4	6	1.1	0.37
10	C	293D106X_035C2_E3	3.5	6	1.6	0.26
10	D	293D106X_035D2_E3	3.5	6	0.8	0.43
15	D	293D156X_035D2_E3	5.3	6	0.7	0.46
15	E	293D156X_035E2_E3	5.3	6	0.7	0.49
22	D	293D226X_035D2_E3	7.7	6	0.6	0.52
22	E	293D226X_035E2_E3	7.7	6	0.6	0.52
50 WVDC AT + 85 °C, SURGE = 65 V . . . 33 WVDC AT + 125 °C, SURGE = 40 V						
0.10	A	293D104X_050A2_E3	0.5	4	19	0.06
0.15	A	293D154X_050A2_E3	0.5	4	17	0.07
0.15	B	293D154X_050B2_E3	0.5	4	14	0.08
0.22	A	293D224X_050A2_E3	0.5	4	15	0.07
0.22	B	293D224X_050B2_E3	0.5	4	12	0.08
0.33	A	293D334X_050A2_E3	0.5	4	14	0.07
0.33	B	293D334X_050B2_E3	0.5	4	10	0.09
0.47	A	293D474X_050A2_E3	0.5	4	12	0.08
0.47	B	293D474X_050B2_E3	0.5	4	8.4	0.10
0.47	C	293D474X_050C2_E3	0.5	4	6.7	0.13
0.68	B	293D684X_050B2_E3	0.5	4	7.6	0.11
0.68	C	293D684X_050C2_E3	0.5	4	5.9	0.14
1.0	B	293D105X_050B2_E3	0.5	4	6.7	0.11
1.0	C	293D105X_050C2_E3	0.5	4	4.6	0.16
1.5	B	293D155X_050B2_E3	0.8	6	6.0	0.12
1.5	C	293D155X_050C2_E3	0.8	6	3.4	0.18
2.2	C	293D225X_050C2_E3	1.1	6	2.9	0.20
2.2	D	293D225X_050D2_E3	1.1	6	2.1	0.27
3.3	C	293D335X_050C2_E3	1.7	6	2.5	0.21
3.3	D	293D335X_050D2_E3	1.7	6	1.7	0.30
4.7	D	293D475X_050D2_E3	2.4	6	1.2	0.37
6.8	D	293D685X_050D2_E3	3.4	6	0.9	0.41
6.8	E	293D685X_050E2_E3	3.4	6	0.9	0.43
10	D	293D106X_050D2_E3	5.0	6	0.8	0.43
10	E	293D106X_050E2_E3	5.0	6	0.8	0.45

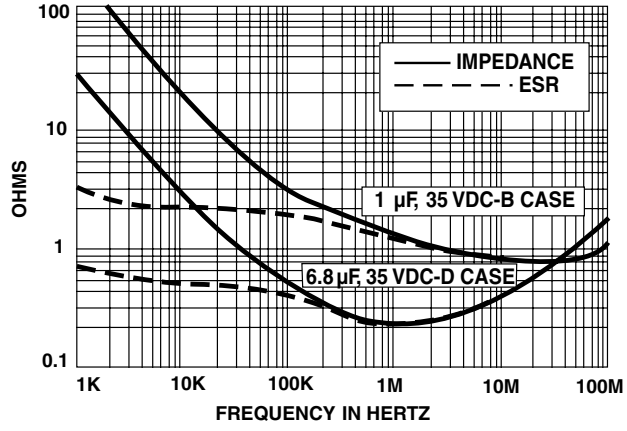
* For 10 % tolerance, specify “9”; for 20 % tolerance, change to “0”.

TYPICAL CURVES AT + 25 °C, IMPEDANCE AND ESR VS. FREQUENCY









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