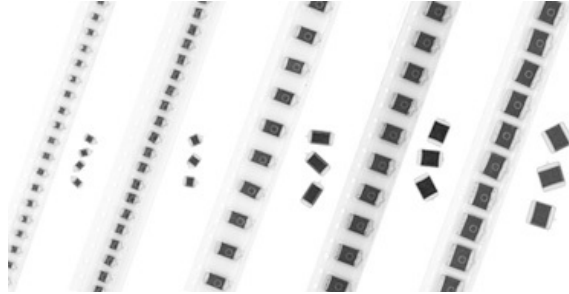


## Solid Tantalum Chip Capacitors

### TANTAMOUNT<sup>®</sup>, Low Profile, Conformal Coated, Maximum CV


**FEATURES**

- New robust 6.3 V ratings for battery operated wireless applications
- 1.0 mm to 2.5 mm height
- Terminations: Lead (Pb)-free (2) standard
- Low Impedance
- 8 mm, 12 mm tape and reel packaging available per EIA 481-1 and reeling per IEC 286-3. 7" [178 mm] standard. 13" [330 mm] available.
- Case code compatibility with EIA 535BAAC and CECC30801 molded chips
- Compliant to RoHS directive 2002/95/EC


**RoHS\***  
COMPLIANT

**PERFORMANCE CHARACTERISTICS**

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

**Note**

- Refer to Doc. 40088

**Capacitance Range:** 1 µF to 2200 µF

**Capacitance Tolerance:** ± 10 %, ± 20 % standard

**Voltage Rating:** 4 WVDC to 50 WVDC

<b>ORDERING INFORMATION</b>							
592D	106	X0	010	B	2	T	15H
TYPE	CAPACITANCE	CAPACITANCE TOLERANCE	DC VOLTAGE RATING AT + 85 °C	CASE CODE	TERMINATION	REEL SIZE AND PACKAGING	SUFFIX
	This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow.	<b>X0 = ± 20 %</b> <b>X9 = ± 10 %</b>	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 ratings and case codes table	<b>2 = 100 % Tin</b> 4 = Gold plated 8 = Solder plated 60/40 Special order	<b>T = Tape and reel</b> <b>7" [178 mm] reel</b> W = 13" [330 mm] reel	Maximum height (mm) see dimensions

**Notes**

- Preferred Tolerance and reel sizes are in bold
- We reserve the right to supply higher voltage ratings and tighter capacitance tolerance capacitors in the same case size.
- Voltage substitutions will be marked with the higher voltage rating

<b>DIMENSIONS</b> in inches [millimeters]								
CASE CODE	SUFFIX	H	L (MAX.)	W	A	B	D (REF.)	J (MAX.)
A	12H	0.047 [1.2] Max.	0.146 [3.7]	0.072 ± 0.012 [1.8 ± 0.3]	0.031 ± 0.012 [0.80 ± 0.3]	0.087 ± 0.016 [2.2 ± 0.4]	0.115 [2.9]	0.004 [0.1]
A	15H	0.047 ± 0.012 [1.2 ± 0.3]						
B	15H	0.047 ± 0.012 [1.2 ± 0.3]	0.158 [4.0]	0.110 ± 0.012 [2.8 ± 0.3]	0.031 ± 0.012 [0.80 ± 0.3]	0.097 ± 0.016 [2.5 ± 0.4]	0.139 [3.5]	0.004 [0.1]
B	20H	0.079 [2.0] Max.						
B	13H	0.057 [1.3] Max.						

**Notes**

- The anode termination (D less B) will be a minimum of 0.012" [0.3 mm]

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

DIMENSIONS in inches [millimeters]								
CASE CODE	SUFFIX	H	L (MAX.)	W	A	B	D (REF.)	J (MAX.)
C	14H	0.055 [1.4] Max.	0.281 [7.1]	0.126 ± 0.012 [3.2 ± 0.3]	0.051 ± 0.012 [1.3 ± 0.3]	0.180 ± 0.024 [4.4 ± 0.6]	0.238 [6.0]	0.004 [0.1]
C	15H	0.047 ± 0.012 [1.2 ± 0.3]						
C	16H	0.063 [1.6] Max.						
C	20H	0.079 [2.0] Max.						
D	15H	0.047 ± 0.012 [1.2 ± 0.3]	0.298 [7.5]	0.170 ± 0.012 [4.3 ± 0.3]	0.051 ± 0.012 [1.3 ± 0.3]	0.180 ± 0.024 [4.6 ± 0.6]	0.254 [6.4]	0.004 [0.1]
D	18H	0.071 [1.8] Max.						
D	20H	0.079 [2.0] Max.						
M	20H	0.079 [2.0] Max.		0.247 ± 0.012 [6.3 ± 0.3]			0.264 [6.7]	
R	15H	0.047 ± 0.012 [1.2 ± 0.3]	0.285 [7.2]	0.235 ± 0.012/- 0.024 [6.0 ± 0.3/- 0.6]	0.051 ± 0.012 [1.3 ± 0.3]	0.180 ± 0.024 [4.6 ± 0.6]	0.246 [6.2]	0.004 [0.1]
R	20H	0.079 [2.0] Max.						
S	12H	0.047 [1.2] Max.	0.126 ± 0.012 [3.2 ± 0.3]	0.063 ± 0.012 [1.6 ± 0.3]	0.031 ± 0.012 [0.8 ± 0.3]	0.079 ± 0.012 [2.0 ± 0.3]	0.087 [2.2]	0.004 [0.1]
S	13H	0.047 ± 0.012 [1.2 ± 0.3]						
X	16H	0.063 [1.6] Max.	0.575 [14.5]	0.290 ± 0.010/- 0.020 [7.37 ± 0.25/- 0.5]	0.051 ± 0.016 [1.3 ± 0.4]	0.470 ± 0.024 [11.9 ± 0.6]	0.524 [13.2]	0.004 [0.1]
X	18H	0.071 [1.8] Max.						
X	20H	0.079 [2.0] Max.						
X	21H	0.083 [2.1] Max.						
X	25H	0.098 [2.5] Max.						

**Note**

- The anode termination (D less B) will be a minimum of 0.012" [0.3 mm]

RATINGS AND CASE CODES								
µF	4 V	6.3 V	10 V	16 V	20 V	25 V	35 V	50 V
1.0							A/B	
1.5							B	
2.2						A/B	B <sup>(1)</sup> /C	
3.3						B/C	C/D	
4.7					A/B	C	B/C/D/R	
6.8		A		A/B	B/C	C/D	D/R	
10		A	B	B/C	B/D	B/D/R	R	R
15		B		B/D	C/R	R		
22	A/B		A/C	B/C/D	B/C <sup>(1)</sup> /D/R			
33	B	B/C/S	C/D	B/C/D/R	D <sup>(1)</sup> /R			
47	B <sup>(1)</sup> /C	C/D	B/D/R	B/C/R				
68	B/C/D	C/D/B/R	B/C/C <sup>(1)</sup> /D/R/	C/D		R		
100	A/B/C/D/R	D/R	D/C	C/D				
120		C						
150	B/C/D/R	D/C	D <sup>(1)</sup>	D				
220	C/D/R	C/D/R	D	R				
330	C/D/R	C/D/R	D					
470	C/D/R	C/D/R						
680	D/R	R	X					
1000	R	R/X						
1500	X	M/R/X						
2200	X	X						

**Note**

- <sup>(1)</sup> Contact factory for availability



Solid Tantalum Chip Capacitors TANTAMOUNT®  
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Vishay Sprague

<b>STANDARD RATINGS</b>						
CAPACITANCE ( $\mu$ F)	CASE CODE	PART NUMBER	MAX. DCL AT + 25 °C ( $\mu$ A)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz ( $\Omega$ )	MAX. RIPPLE 100 kHz I <sub>rms</sub> (A)
<b>4 WVDC AT + 85 °C, 2.7 WVDC AT + 125 °C</b>						
22	A	592D226X_004A2_15H	0.9	6	2.40	0.16
22	B	592D226X_004B2_15H	0.9	6	1.60	0.22
33	B	592D336X_004B2_15H	1.3	6	1.60	0.22
47 <sup>(1)</sup>	B <sup>(1)</sup>	592D476X_004B2_15H <sup>(1)</sup>	1.9 <sup>(1)</sup>	6 <sup>(1)</sup>	1.5 <sup>(1)</sup>	0.23 <sup>(1)</sup>
47	C	592D476X_004C2_15H	1.9	6	0.40	0.50
68	B	592D686X_004B2_15H	2.7	6	1.40	0.24
68	C	592D686X_004C2_15H	2.7	6	0.35	0.53
68	D	592D686X_004D2_15H	2.7	6	0.27	0.68
100	A	592D107X_004A2_12H	4.0	24	1.00	0.24
100 <sup>(1)</sup>	A <sup>(1)</sup>	592D107X_004A2_15H <sup>(1)</sup>	4.0 <sup>(1)</sup>	8 <sup>(1)</sup>	0.80 <sup>(1)</sup>	0.27 <sup>(1)</sup>
100	B	592D107X_004B2_20H	4.0	8	0.20	0.87
100	C	592D107X_004C2_15H	4.0	8	0.45	0.42
100	D	592D107X_004D2_15H	4.0	8	0.35	0.53
100	R	592D107X_004R2_15H	4.0	8	0.26	0.69
100	B	592D107X_004B2_20H	4.0	8	0.45	0.42
150	B	592D157X_004B2_20H	6.0	8	0.20	0.87
150	C	592D157X_004C2_15H	6.0	8	0.45	0.42
150	D	592D157X_004D2_15H	6.0	8	0.36	0.52
150	R	592D157X_004R2_15H	6.0	8	0.25	0.71
150	B	592D157X_004B2_20H	6.0	8	0.45	0.42
220	C	592D227X_004C2_20H	8.3	8	0.20	0.87
220	D	592D227X_004D2_20H	8.3	8	0.20	0.78
220	R	592D227X_004R2_15H	8.3	8	0.19	0.76
330	C	592D337X_004C2_15H	13.2	8	0.12	1.08
330	D	592D337X_004D2_20H	13.2	8	0.12	1.12
330	D	592D337X_004D2_15H	13.2	8	0.18	0.91
330	R	592D337X_004R2_15H	13.2	8	0.15	0.86
470	D	592D477X_004D2_15H	18.8	8	0.14	0.94
470	D	592D477X_004D2_14H	18.8	8	0.14	0.95
470	C	592D477X_004C2_20H	18.8	8	0.10	1.05
470	D	592D477X_004D2_20H	18.8	8	0.10	1.18
470	R	592D477X_004R2_20H	18.8	10	0.10	1.32
680	D	592D687X_004D2_20H	27.2	12	0.10	1.32
680	R	592D687X_004R2_20H	27.2	12	0.10	1.18
1000	R	592D108X_004R2_20H	40	14	0.20	0.94
1500	X	592D158X_004X2_20H	60	20	0.04	2.10
2200	X	592D228X_004X2_25H	88	25	0.04	2.30
2200	X	592D228X_004X2_20H	88	25	0.055	2.30
<b>6.3 WVDC AT + 85 °C, 4 WVDC AT + 125 °C</b>						
6.8	A	592D685X_6R3A2_15H	0.56	5	5.50	0.10
10	A	592D106X_6R3A2_15H	0.48	5	2.70	0.15
15	A	592D156X_6R3A2_15H	0.9	6	2.50	0.15
15	B	592D156X_6R3B2_15H	0.9	6	1.70	0.22
22	B	592D226X_6R3B2_15H	1.4	6	1.50	0.23
22	A	592D226X_6R3A2_10H	1.4	12	4.00	0.39
22	A	592D226X_6R3A2_13H	1.4	6	1.50	0.20
22	B	592D226X_6R3B2_15H	1.4	6	1.50	0.20

**Note**

<sup>(1)</sup> Preliminary values contact factory for availability. For 10 % tolerance, specify "9"; for 20 % tolerance, change to "0".



STANDARD RATINGS						
CAPACITANCE ( $\mu\text{F}$ )	CASE CODE	PART NUMBER	MAX. DCL AT + 25 °C ( $\mu\text{A}$ )	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz ( $\Omega$ )	MAX. RIPPLE 100 kHz I <sub>rms</sub> (A)
6.3 WVDC AT + 85 °C, 4 WVDC AT + 125 °C						
33	A	592D336X_6R3A2_15H	2.1	6	1.70	0.32
33	B	592D336X_6R3B2_15H	2.1	6	1.40	0.24
33	C	592D336X_6R3C2_15H	2.1	6	0.40	0.50
33	S	592D336X_6R3S2_12H	2.1	10	2.00	0.17
33	S	592D336X_6R3S2_13H	2.1	8	1.30	0.24
47	A	592D476X_6R3A2_13H	2.7	14	2.00	0.17
47	A	592D476X_6R3A2_15H	2.7	14	2.00	0.17
47	B	592D476X_6R3B2_15H	3.0	8	1.40	0.24
47	B	592D476X_6R3B2_12H	3.0	8	1.40	0.24
47	C	592D476X_6R3C2_15H	3.0	6	0.40	0.50
47	D	592D476X_6R3D2_15H	3.0	6	0.30	0.65
68	B	592D686X_6R3B2_20H	4.3	6	0.50	0.40
68	B	592D686X_6R3B2_13H	4.3	8	0.60	0.36
68	C	592D686X_6R3C2_14H	3.87	6	0.38	0.46
68	C	592D686X_6R3C2_15H	4.3	6	0.38	0.51
68	D	592D686X_6R3D2_15H	4.3	6	0.27	0.68
68	R	592D686X_6R3R2_15H	4.3	6	0.20	0.87
100	B	592D107X_6R3B2_15H	4.3	6	1.00	0.28
100	B	592D107X_6R3B2_20H	6.3	8	0.45	0.42
100	C	592D107X_6R3C2_15H	6.3	8	0.38	0.51
100	C	592D107X_6W3C2_15H	6.3	8	0.38	0.51
100	D	592D107X_6R3D2_15H	6.3	8	0.26	0.69
100	R	592D107X_6R3R2_15H	6.3	8	0.20	0.87
100	R	592D107X_6W3R2_15H	6.3	8	0.20	0.87
120	C	592D127X_6R3C2_20H	6.50	8	0.20	0.74
150	C	592D157X_6R3C2_20H	9.5	8	0.19	0.76
150	D	592D157X_6R3D2_15H	9.5	8	0.25	0.71
150	R	592D157X_6W3R2_15H	9.5	8	0.20	0.87
150	R	592D157X_6R3R2_15H	9.5	8	0.20	0.87
220	C	592D227X_6R3C2_18H	13.9	8	0.15	0.86
220	C	592D227X_6R3C2_20H	13.9	8	0.15	0.86
220	C	592D227X_6W3C2_20H	13.9	8	0.15	0.86
220	D	592D227X_6R3D2_15H	13.9	8	0.22	0.75
220	D	592D227X_6R3D2_20H	13.9	8	0.12	1.08
220	R	592D227X_6R3R2_15H	13.9	8	0.18	0.91
330	C	592D337X_6R3C2_20H	20.8	8	0.10	1.05
330	C	592D337X_6R3C2_16H	20.8	10	0.15	0.82
330	D	592D337X_6R3D2_16H	20.8	8	0.12	1.02
330	D	592D337X_6R3D2_20H	20.8	8	0.10	1.18
330	D	592D337X_6W3D2_20H	20.8	8	0.10	1.18
330	D	592D337X_6R3D2_19H	20.8	8	0.10	1.18
330	R	592D337X_6R3R2_15H	20.8	8	0.18	0.91
330	R	592D337X_6R3R2_20H	20.8	8	0.10	1.32
470	C	592D477X_6R3C2_20H	29.6	14	0.10	1.05
470	C	592D477X_6R3C2_16H	29.6	14	0.20	0.71
470	D	592D477X_6R3D2_20H	29.6	10	0.10	1.18
470	R	592D477X_6R3R2_20H	29.6	10	0.10	1.32
470	R	592D477X_6W3R2_20H	29.6	10	0.10	1.32
470	R	592D477X_6R3R2_16H	29.6	10	0.12	1.32

**Note**

(1) Preliminary values contact factory for availability. For 10 % tolerance, specify "9"; for 20 % tolerance, change to "0".



Solid Tantalum Chip Capacitors TANTAMOUNT®  
Low Profile, Conformal Coated, Maximum CV

Vishay Sprague

STANDARD RATINGS						
CAPACITANCE (µF)	CASE CODE	PART NUMBER	MAX. DCL AT + 25 °C (µA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz Irms (A)
<b>6.3 WVDC AT + 85 °C, 4 WVDC AT + 125 °C</b>						
680	R	592D687X_6R3R2_20H	42.8	10	0.10	1.87
680	R	592D687X_6R3R2_16H	42.8	10	0.10	1.87
1000	R	592D108X_6R3R2_20H	63	20	0.20	0.94
1000	X	592D108X_6R3X2_20H	63	16	0.04	2.10
1500	M	592D158X_6R3M2_20H	95	33	0.09	1.39
1500	R	592D158X06R3R2_20H	95	33	0.12	1.21
1500	X	592D158X_6R3X2_16H	95	25	0.045	1.97
1500	X	592D158X_6R3X2_25H	95	20	0.035	2.30
1500	X	592D158X_6W3X2_25H	95	20	0.035	2.30
1500	X	592D158X_6R3X2_20H	95	25	0.045	1.97
2200	X	592D228X_6R3X2_16H	139	45	0.070	1.58
2200	X	592D228X_6R3X2_20H	139	35	0.055	1.80
2200	X	592D228X_6R3X2_21H	139	35	0.055	1.80
2200	X	592D228X_6R3X2_22H	139	35	0.055	1.80
<b>10 WVDC AT + 85 °C, 7 WVDC AT + 125 °C</b>						
10	A	592D106X_010A2_15H	1.0	6	2.60	0.15
10	B	592D106X_010B2_15H	1.0	6	1.70	0.22
22	A	592D226X_010A2_13H	2.2	6	1.50	0.20
22	B	592D226X_010B2_15H	2.2	6	1.50	0.23
22	B	592D226X_010B2_13H	2.2	6	1.50	0.23
22	C	592D226X_010C2_15H	2.2	6	0.40	0.50
33	C	592D336X_010C2_15H	3.3	6	0.40	0.50
33	D	592D336X_010D2_15H	3.3	6	0.30	0.65
47	B	592D476X_010B2_20H	4.7	6	0.50	0.68
47	D	592D476X_010D2_15H	4.7	6	0.27	0.87
47	R	592D476X_010R2_15H	4.7	6	0.20	0.40
68	B	592D686X_010B2_20H	6.8	6	0.45	0.84
68	C	592D686X_010C2_15H	6.8	6	0.24	0.68
68 <sup>(1)</sup>	C <sup>(1)</sup>	592D686X_010C2_20H <sup>(1)</sup>	6.8 <sup>(1)</sup>	6 <sup>(1)</sup>	0.25 <sup>(1)</sup>	0.66 <sup>(1)</sup>
68	D	592D686X_010D2_15H	6.8	6	0.27	0.87
68	R	592D686X_010R2_15H	6.8	6	0.20	0.42
100	B	592D107X_010B2T20H	10	14	0.40	0.45
100	C	592D107X_010C2_20H	10	8	0.19	1.11
100	D	592D107X_010D2_15H	10	8	0.10	0.76
100	R	592D107X_010R2_15H	10	6	0.22	0.83
150	C	592D157X_010C2_15H	15	8	0.17	0.80
150	C	592D157X_010C2_20H	15	8	0.17	0.80
150	D	592D157X_010D2_15H	15	8	0.25	0.71
150	D	592D157X_010D2_20H	15	8	0.14	1.00
220	D	592D227X_010D2_20H	22	8	0.12	1.08
220	D	592D227X_010D2_19H	22	8	0.12	1.08
220	R	592D227X_010R2_20H	22	8	0.10	1.32
330	D	592D337X_010D2_20H	33	8	0.10	1.18
330	R	592D337X_010R2_20H	33	8	0.10	1.32
680	X	592D687X_010X2_20H	100	15	0.07	1.58

**Note**

(1) Preliminary values contact factory for availability. For 10 % tolerance, specify "9"; for 20 % tolerance, change to "0".

<b>16 WVDC AT + 85 °C, 10 WVDC AT + 125 °C</b>
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<b>STANDARD RATINGS</b>						
CAPACITANCE ( $\mu$ F)	CASE CODE	PART NUMBER	MAX. DCL AT + 25 °C ( $\mu$ A)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz ( $\Omega$ )	MAX. RIPPLE 100 kHz Irms (A)
4.7	A	592D475X_016A2_15H	0.8	6	3.50	0.13
6.8	A	592D685X_016A2_15H	1.1	6	3.30	0.13
6.8	B	592D685X_016B2_15H	1.1	6	1.80	0.21
10	B	592D106X_016B2_15H	1.6	6	1.60	0.22
10	C	592D106X_016C2_15H	1.6	6	1.00	0.32
15	B	592D156X_016B2_15H	2.4	6	1.40	0.24
15	D	592D156X_016D2_15H	2.4	6	0.50	0.50
22	B	592D226X_016B2_20H	3.5	6	0.60	0.36
22	C	592D226X_016C2_15H	3.5	6	0.30	0.46
22	D	592D226X_016D2_15H	3.5	6	0.40	0.60
33	B	592D336X_016B2_20H	5.3	6	0.60	0.36
33	C	592D336X_016C2_15H	5.3	6	0.25	0.66
33	D	592D336X_016D2_15H	5.3	6	0.30	0.62
33	R	592D336X_016R2_15H	5.3	6	0.27	0.75
47	B	592D476X_016B2_20H	7.5	6	0.72	0.33
47	C	592D476X_016C2_16H	7.5	6	0.25	0.66
47	C	592D476X_016C2_20H	7.5	6	0.25	0.66
47	R	592D476X_016R2_15H	7.5	6	0.25	0.77
68	C	592D686X_016C2_15H	10.9	6	0.50	1.20
68	C	592D686X_016C2_20H	10.9	6	0.25	0.66
68	D	592D686X_016D2_20H	10.9	6	0.17	0.91
100	C	592D107X_016C2_20H	16	8	0.15	0.85
100	D	592D107X_016D2_15H	16	8	0.15	0.97
100	C	592D107X_016C2_20H	16	8	0.15	0.97
100	D	592D107X_016D2_20H	16	8	0.15	0.97
150	D	592D157X_016D2_20H	24	8	0.10	1.18
150	R	592D157X_016R2_20H	24	8	0.10	1.32
220	R	592D227X_016R2_20H	35.2	9	0.12	1.30
<b>20 WVDC AT + 85 °C, 13 WVDC AT + 125 °C</b>						
4.7	A	592D475X_020A2_15H	0.9	6	3.80	0.13
4.7	B	592D475X_020B2_15H	0.9	6	3.20	0.16
6.8	B	592D685X_020B2_15H	1.4	6	3.10	0.16
6.8	C	592D685X_020C2_15H	1.4	6	1.10	0.30
10	B	592D106X_020B2_15H	2.0	6	3.00	0.16
10	D	592D106X_020D2_15H	2.0	6	0.50	0.48
15	C	592D156X_020C2_15H	3.0	6	0.60	0.42
15	R	592D156X_020R2_15H	3.0	6	0.40	0.65
22	B	592D226X_020B2_20H	4.4	6	0.60	0.37
22 <sup>(1)</sup>	C <sup>(1)</sup>	592D226X_020C2_20H <sup>(1)</sup>	4.4 <sup>(1)</sup>	6 <sup>(1)</sup>	0.30 <sup>(1)</sup>	0.61 <sup>(1)</sup>
22	D	592D226X_020D2_15H	4.4	6	0.40	0.56
22	R	592D226X_020R2_15H	4.4	6	0.28	0.73
33 <sup>(1)</sup>	D <sup>(1)</sup>	592D336X_020D2_20H <sup>(1)</sup>	6.6 <sup>(1)</sup>	6 <sup>(1)</sup>	0.26 <sup>(1)</sup>	0.73 <sup>(1)</sup>
33	R	592D336X_020R2_15H	6.6	6	0.28	0.73
<b>25 WVDC AT + 85 °C, 17 WVDC AT + 125 °C</b>						
2.2	A	592D225X_025A2_15H	0.6	6	8.00	0.09
2.2	B	592D225X_025B2_15H	0.6	6	6.00	0.12
3.3	B	592D335X_025B2_15H	0.8	6	5.60	0.12
3.3	C	592D335X_025C2_15H	0.8	6	2.00	0.22

**Note**

<sup>(1)</sup> Preliminary values contact factory for availability. For 10 % tolerance, specify "9"; for 20 % tolerance, change to "0".

**25 WVDC AT + 85 °C, 17 WVDC AT + 125 °C**



Solid Tantalum Chip Capacitors TANTAMOUNT®  
Low Profile, Conformal Coated, Maximum CV

Vishay Sprague

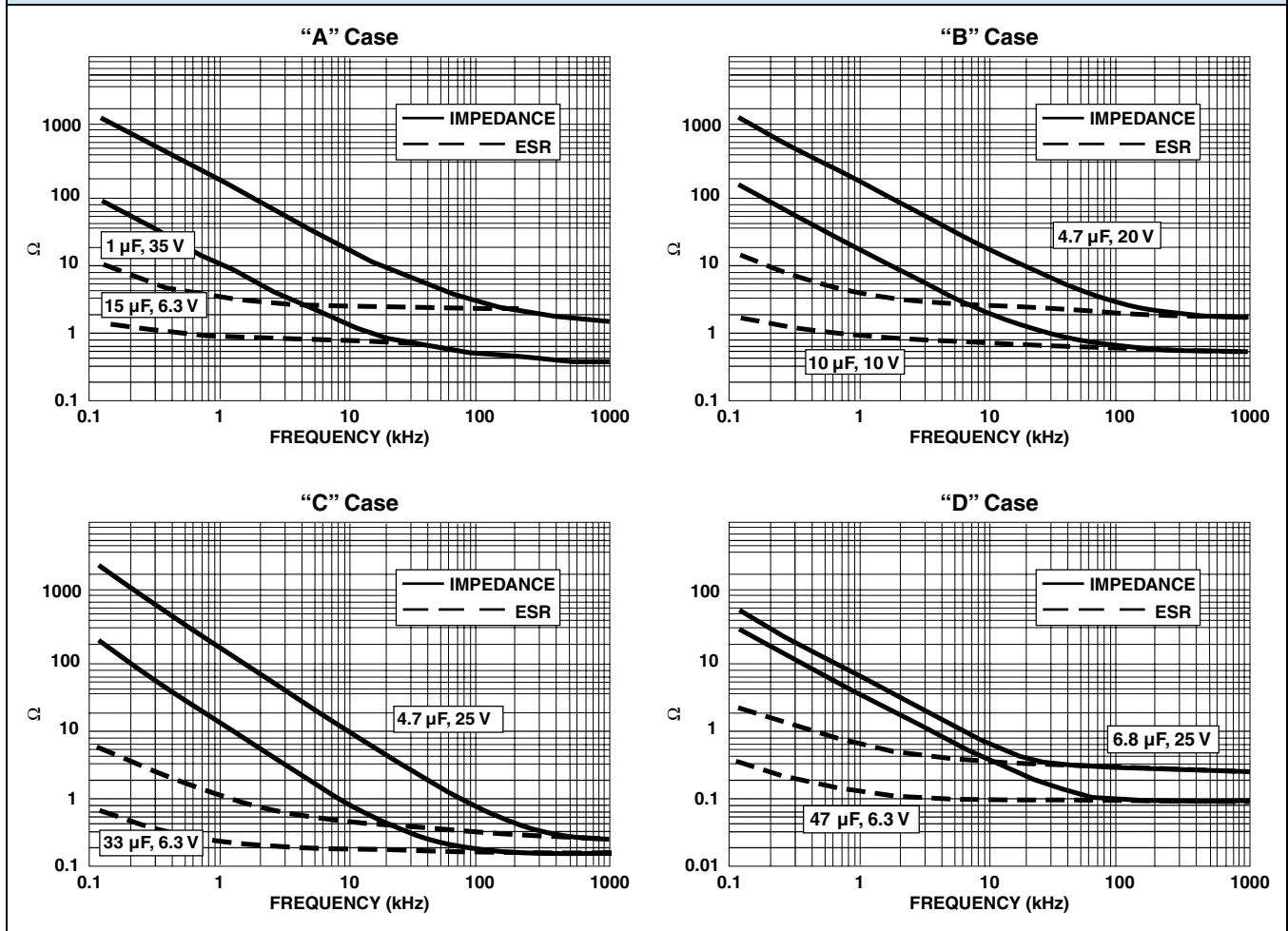
STANDARD RATINGS						
CAPACITANCE (μF)	CASE CODE	PART NUMBER	MAX. DCL AT + 25 °C (μA)	MAX. DF AT + 25 °C 120 Hz (%)	MAX. ESR AT + 25 °C 100 kHz (Ω)	MAX. RIPPLE 100 kHz Irms (A)
4.7	C	592D475X_025C2_15H	1.2	6	1.60	0.25
6.8	C	592D685X_025C2_15H	1.7	6	1.30	0.26
6.8	D	592D685X_025D2_15H	1.7	6	1.30	0.31
10	B	592D106X_025B2_15H	2.5	6	2.00	0.29
10	D	592D106X_025D2_15H	2.5	6	1.20	0.32
10	R	592D106X_025R2_15H	2.5	6	0.48	0.56
15	R	592D156X_025R2_15H	3.8	6	0.40	0.61
68	R	592D686X_025R2_20H	17	8	0.23	0.812
35 WVDC AT + 85 °C, 23 WVDC AT + 125 °C						
1.0	A	592D105X_035A2_15H	0.5	4	10.0	0.08
1.0	B	592D105X_035B2_15H	0.5	4	6.50	0.11
1.5	B	592D155X_035B2_15H	0.5	4	4.2	0.14
2.2 <sup>(1)</sup>	B <sup>(1)</sup>	592D225X_035B2_15H <sup>(1)</sup>	0.8 <sup>(1)</sup>	6 <sup>(1)</sup>	6.00 <sup>(1)</sup>	0.12 <sup>(1)</sup>
2.2	C	592D225X_035C2_15H	0.8	6	3.50	0.17
3.3	C	592D335X_035C2_15H	1.2	6	3.20	0.18
3.3	D	592D335X_035D2_15H	1.2	6	2.10	0.24
4.7	B	592D475X_035B2_15H	1.6	6	1.60	0.23
4.7	C	592D475X_035C2_15H	1.6	6	2.60	0.20
4.7	C	592D475X_035C2_15H	1.6	6	2.80	0.18
4.7	D	592D475X_035D2_15H	1.6	6	1.80	0.24
4.7	R	592D475X_035R2_15H	1.6	6	1.30	0.34
6.8	D	592D685X_035D2_15H	2.4	6	1.30	0.31
6.8	R	592D685X_035R2_15H	2.4	6	1.20	0.35
10	R	592D106X_035R2_15H	3.5	6	1.20	0.35
50 WVDC AT + 85 °C, 33 WVDC AT + 125 °C						
10	R	592D106X_050R2_20H	5.0	6	0.70	0.50

**Note**

<sup>(1)</sup> Preliminary values contact factory for availability. For 10 % tolerance, specify "9"; for 20 % tolerance, change to "0".

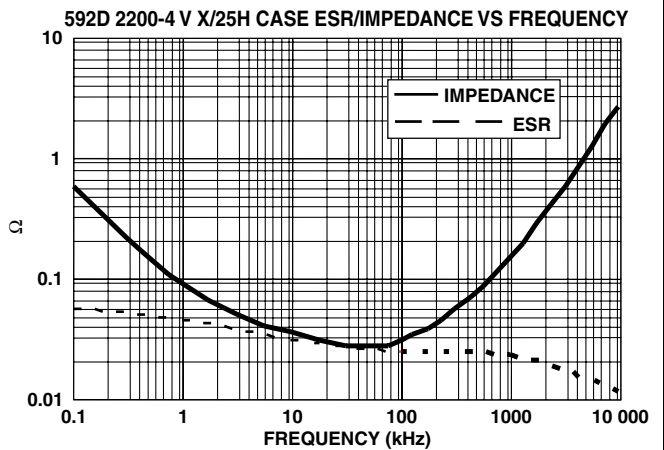
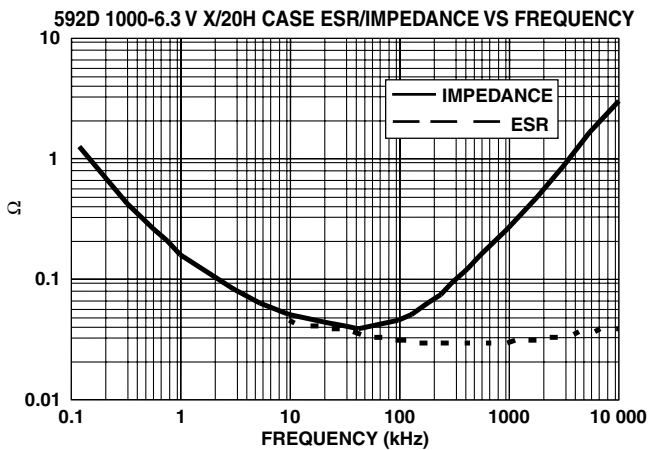
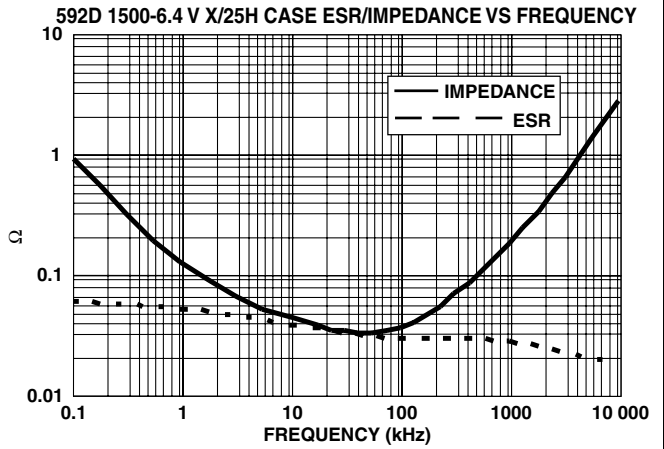
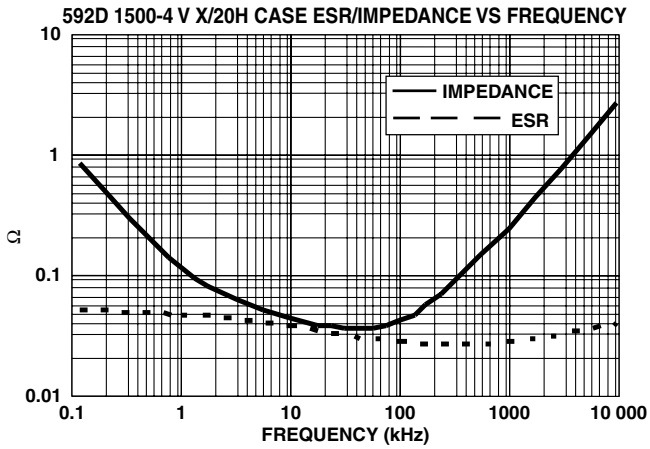
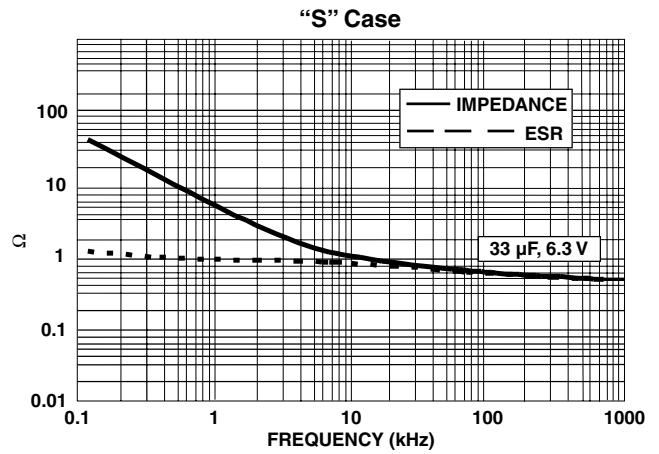
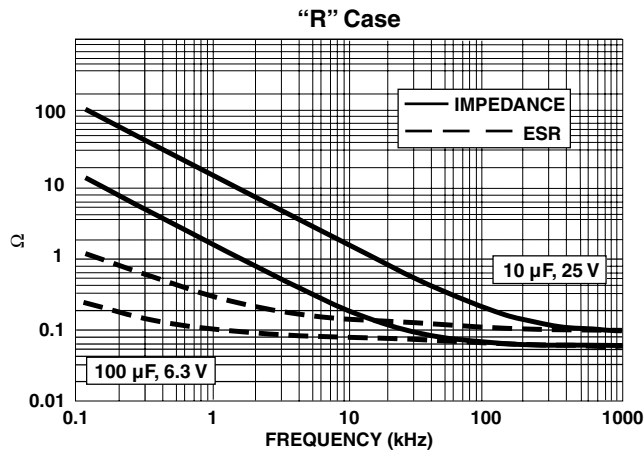
CASE CODE/PART NUMBER X-REF	
OLD	NEW
A2_	A2_15H
B2_	B2_15H
C2_	C2_15H
D2_	D2_15H
R2_	R2_15H
S2_	S2_13H
T2_	B2_20H
U2_	C2_20H
V2_	D2_20H
W2_	R2_20H
X2_	X2_20H
Y2_	X2_25H

**TYPICAL CURVES OF ESR - AS A FUNCTION OF FREQUENCY**





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





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