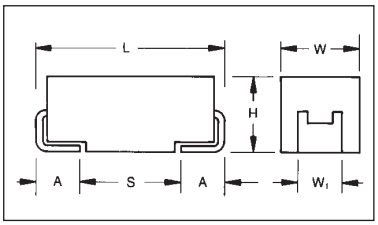
TPS Series

Low ESR

TPS surface mount products have inherently low ESR (equivalent series resistance) and are capable of higher ripple current handling, producing lower ripple voltages, less power and heat dissipation than standard product for the most efficient use of circuit power. TPS has been designed, manufactured, and preconditioned for optimum performance in typical power supply applications. By combining the latest improvements intantalum powder technology, improved manufacturing processes, and application specific preconditioning tests, AVX is able to provide a technologically superior alternative to the standard range.



For part marking see page 111

CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	Dimension Low Profile	L±0.20 (0.008)	W+0.20 (0.008) -0.10 (0.004)	H+0.20 (0.008) -0.10 (0.004)	W_1±0.20 (0.008)	A+0.30 (0.012) -0.20 (0.008)	S Min.
A	3216-18	–	3.20 (0.126)	1.60 (0.063)	1.60 (0.063)	1.20 (0.047)	0.80 (0.031)	1.10 (0.043)
B	3528-21	–	3.50 (0.138)	2.80 (0.110)	1.90 (0.075)	2.20 (0.087)	0.80 (0.031)	1.40 (0.055)
C	6032-28	–	6.00 (0.236)	3.20 (0.126)	2.6 (0.102)	2.20 (0.087)	1.30 (0.051)	2.90 (0.114)
D	7343-31	–	7.30 (0.287)	4.30 (0.169)	2.90 (0.114)	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
E	7343-43	–	7.30 (0.287)	4.30 (0.169)	4.10 (0.162)	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
R*	2012-12	R Case (1.20)	2.05 (0.081)	1.30 (0.051)	1.20 (0.047) max.	1.20 (0.047)	0.50 (0.020)	0.85 (0.033)
S**	3216-12	A Case (1.20)	3.20 (0.126)	1.60 (0.063)	1.20 (0.047) max.	1.20 (0.047)	0.80 (0.031)	1.10 (0.043)
T**	3528-12	B Case (1.20)	3.50 (0.138)	2.80 (0.110)	1.20 (0.047) max.	2.20 (0.087)	0.80 (0.031)	1.40 (0.055)
V	7361-38	–	7.30 (0.287)	6.10 (0.240)	3.45 ±0.30 (0.136 ±0.012)	3.10 (0.120)	1.40 (0.055)	4.40 (0.173)
W**	6032-15	C Case (1.50	6.00 (0.236)	3.20 (0.126)	1.50 (0.059) max.	2.20 (0.087)	1.30 (0.051)	2.90 (0.114)
X**	7343-15	D Case (1.50)	7.30 (0.287)	4.30 (0.169)	1.50 (0.059) max.	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
Y**	7343-20	D Case (2.00)	7.30 (0.287)	4.30 (0.169)	2.00 (0.079) max.	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)

W_1 dimension applies to the termination width for A dimensional area only.

*** 0805 Footprint Compatible ** Low Profile Versions of A & B & C & D Case**

HOW TO ORDER

TPS	C	107	M	010	R	0100
Type	**Case Size** See table above	**Capacitor Code** pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)	**Tolerance** K = ±10% M = ±20%	**Rated DC Voltage** 002 = 2.5Vdc 004 = 4Vdc 006 = 6.3Vdc 010 = 10Vdc 016 = 16Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc	**Packaging** R = 7" T/R S = 13" T/R A = Gold Plating 7" Reel B = Gold Plating 13" Reel Y = Lead Free 7" Reel P = Lead Free 13" Reel	**Maximum ESR in Milliohms** See note below

NOTE: The EIA & CECC standards for low ESR Solid Tantalum Capacitors allow an ESR movement to 1.25 times catalog limit post mounting.

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C									
Capacitance Range:	0.15µF to 1500µF									
Capacitance Tolerance:	±10%; ±20%									
Rated Voltage (V_R)	≦ +85°C:	2.5	4	6.3	10	16	20	25	35	50
Category Voltage (V_C)	≦ +125°C:	1.7	2.7	4	7	10	13	17	23	33
Surge Voltage (V_S)	≦ +85°C:	3.3	5.2	8	13	20	26	32	46	65
Surge Voltage (V_S)	≦ +125°C:	2.2	3.4	5	8	13	16	20	28	40
Temperature Range:	-55°C to +125°C									
Environmental Classification:	55/125/56 (IEC 68-2)									
Reliability:	1% per 1000 hours at 85°C, V_R with 0.1Ω/V series impedance, 60% confidence level									

CAPACITANCE AND RATED VOLTAGE, V_R (VOLTAGE CODE) RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC (V_R) to 85°C								
µF	Code	2.5V	4V (G)	6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	35V (V)	50V (T)
0.15	154									A(9000)
0.22	224								A(6000)	A(7000)
0.33	334								A(6000)	
0.47	474							A(7000)	A(6000) B(4000)	
0.68	684							A(6000)	A(6000)	
1	105				R(9000)		A(3000), R(6000) S(6000), T(2000)		A(3000) B(2000)	C(2500)
1.5	155							A(3000) B(1800)	B(2500)	C(1500,2000)
2.2	225			R(7000)	A(1800)	A(1800,3500) T(2000)	A(3000)	B(900,1200,2500)	A(1500), B(750, 1500,2000), C(1000)	D(1200)
3.3	335				T(1500)	A(3500)	A(2500) B(1300)	A(1500) B(750,1500,2000)	B(1000) C(700)	D(800)
4.7	475			S(4000)	A(1400) R(3000,5000)	A(2000) B(800,1500)	A(1800) B(750,1000)	B(700,900,1500)	B(700,1500) C(600)	D(300,500,700)
6.8	685			A(1800)	A(1800) T(1800)	A(1500) B(600,1200)	B(600,1000) C(700)	B(700) C(500,600,700)	C(350) D(150,400,500)	D(500,600)
10	106		R(3000)	A(1500) R(1000,1500,3000)	A(900,1800) P(2000) T(1000,2000)	B(500,800), C(500) T(800,1000) W(500,600)	B(500,1000) C(500,700)	C(300,500)	D(125,300) E(200)	E(400,500)
15	156			A(700,1500)	A(1000) B(450,600)	B(500,800)	B(500) C(400,450)	C(220,300) D(100,300)	C(350,450) D(100,300)	E(250)
22	226			A(500,900) B(375,600) S(900)	B(400,500,700) C(300) T(800)	B(400,600) C(150,250,300,375) W(500)	B(400,600) C(100,150,400) D(200,300)	C(275,400) D(100,200,300)	D(125,200, 300,400) E(125,200,300)	
33	336			A(600) B(250,350,450,600) T(800)	B(250,425,500,650) C(150,375,500) W(350)	B(350,500) C(100,150,225,300) D(200), W(140,175, 250,400,500) Y(300,400)	C(300) D(100,200)	D(100,200,300) E(100,175, 200,300)	D(200,300) E(100,250,300)	
47	476		A(500)	B(250,350,500) C(300)	B(250,350,500,650) C(350) D(100) W(125,150,250)	C(110,350) D(80,100, 150,200) Y(250), X(180)	D(75,100,200) E(70,125,150, 200,250)	D(125,150,250) E(80,100,125)	E(200,250)	
68	686			B(250,350,500) C(150,200) W(110,125,250)	C(80,100,200,300) D(100,150), Y(100,200) W(100,150)	C(125,200) D(70,100,150) Y(200,250), X(150)	D(70,150, 200,300) E(125,150,200)	E(125,200) V(80,95,150,200)		
100	107	B(200)	B(250, 350,500) W(100)	B(250,400) C(75,150) Y(100) W(100)	C(75,100,150,200) D(50,65,80,125,150) E(125) Y(100,150,200) X(85,150,200) W(150)	D(60,100, 125,150) E(55,100, 125,150) Y(100,150,200)	D(85,100,150) E(100,150,200) V(60,85,100,200)	V(100)		
150	157	B(150)	B(250) C(70,80)	C(50,90,150,200,250) D(50,125), Y(40)	D(50,85,100), E(100) X(100), Y(100,150,200)	D(60,85,100,125,150) E(100), V(45,75)	V(80)			
220	227	B(200, 600) D(45)	D(40,50,100)	C(70,100,125,250) D(50,100,125) E(100) Y(100,150)	D(50,100,150) E(50,60,70,100, 125,150) Y(150,200)	E(100,150) V(50,75, 100,150)				
330	337		C(100) D(35,45,100) X(100)	D(45,50,70,100) E(50,100,125,150) V(100), Y(150)	D(50,65,100,150) E(40,50,60,100) V(40,60,100)					
470	477	D(35) Y(100)	D(45,100) E(35,45,100)	D(45,60,100,200) E(45,50,60,100,200) V(40,55,100)	E(45,50,60,100,200) V(40,60,100)					
680	687	Y(100)	D(45,60,100) E(40,60,100)	E(45,60,100) V(35,40,50)						
1000	108	E(30,40)	E(60) V(25,35,40,50)	V(40,50)						
1500	158	V(30,40)	V(50,75)							

For C, D and E case ratings in TPS Series, ESR ratings are printed on capacitor side in the following format:
T x x x -where x x x is ESR limit in milliohms i.e. T100 represents max. ESR of 100 milliohms.

ESR limits quoted in brackets (milliohms)

NOTE: The EIA & CECC standards for low ESR Solid Tantalum Capacitors allow an ESR movement to 1.25 times catalog limit post mounting.

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	100kHz Ripple Current Ratings (A)			100kHz Ripple Voltage Ratings (V)		
							25ºC	85ºC	125ºC	25ºC	85ºC	125ºC
TPSB107*002#0200	B	100	2.5	5	6	200	0.652	0.587	0.261	0.130	0.117	0.052
TPSB157*002#0150	B	150	2.5	3	10	150	0.753	0.677	0.301	0.113	0.102	0.045
TPSB227*002#0200	B	220	2.5	4.4	16	200	0.652	0.587	0.261	0.130	0.117	0.052
TPSB227*002#0600	B	220	2.5	4.4	16	600	0.376	0.339	0.151	0.226	0.203	0.090
TPSD227*002#0045	D	220	2.5	4.4	8	45	1.826	1.643	0.730	0.082	0.074	0.033
TPSD477*002#0035	D	470	2.5	11.6	8	35	2.070	1.863	0.828	0.072	0.065	0.029
TPSY477*002#0100	Y	470	2.5	11	12	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSY687*002#0100	Y	680	2.5	17	12	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSE108*002#0030	E	1000	2.5	20	14	30	2.345	2.111	0.938	0.070	0.063	0.028
TPSE108*002#0040	E	1000	2.5	20	14	40	2.031	1.828	0.812	0.081	0.073	0.032
TPSV158*002#0030	V	1500	2.5	30	20	30	2.887	2.598	1.155	0.087	0.078	0.035
TPSV158*002#0040	V	1500	2.5	30	20	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSR106*004#3000	R	10	4	0.5	6	3000	0.135	0.122	0.049	0.405	0.364	0.162
TPSA476*004#0500	A	47	4	1.9	8	500	0.387	0.348	0.155	0.194	0.175	0.078
TPSB107*004#0250	B	100	4	4	8	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSB107*004#0350	B	100	4	4	8	350	0.493	0.444	0.197	0.172	0.155	0.069
TPSB107*004#0500	B	100	4	4	8	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSW107*004#0100	W	100	4	4	6	100	0.949	0.854	0.379	0.095	0.085	0.038
TPSB157*004#0250	B	150	4	6	10	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSC157*004#0070	C	150	4	6	6	70	1.254	1.128	0.501	0.088	0.079	0.035
TPSC157*004#0080	C	150	4	6	6	80	1.173	1.055	0.469	0.094	0.084	0.038
TPSD227*004#0040	D	220	4	8.8	8	40	1.936	1.743	0.775	0.077	0.070	0.031
TPSD227*004#0050	D	220	4	8.8	8	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSD227*004#0100	D	220	4	8.8	8	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSC337*004#0100	C	330	4	13.2	8	100	1.049	0.944	0.420	0.105	0.094	0.042
TPSD337*004#0035	D	330	4	13.2	8	35	2.070	1.863	0.828	0.072	0.065	0.029
TPSD337*004#0045	D	330	4	13.2	8	45	1.826	1.643	0.730	0.082	0.074	0.033
TPSD337*004#0100	D	330	4	13.2	8	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSX337*004#0100	X	330	4	13.2	8	100	1.000	0.900	0.400	0.100	0.090	0.040
TPSD477*004#0045	D	470	4	18.8	12	45	1.826	1.643	0.730	0.082	0.074	0.033
TPSD477*004#0100	D	470	4	18.8	12	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD687*004#0045	D	680	4	27.2	14	45	1.826	1.643	0.730	0.082	0.074	0.033
TPSD687*004#0060	D	680	4	27.2	14	60	1.581	1.423	0.632	0.095	0.085	0.038
TPSD687*004#0100	D	680	4	27.2	14	100	1.284	1.156	0.513	0.128	0.115	0.051
TPSE687*004#0060	E	680	4	27.2	14	60	1.658	1.492	0.663	0.099	0.090	0.040
TPSE687*004#0100	E	680	4	27.2	14	100	1.284	1.156	0.513	0.128	0.116	0.051
TPSV108*004#0040	V	1000	4	40	16	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSV108*004#0050	V	1000	4	40	16	50	2.236	2.012	0.894	0.112	0.101	0.045
TPSV158*004#0050	V	1500	4	60	30	50	2.236	2.012	0.894	0.112	0.101	0.045
TPSV158*004#0075	V	1500	4	60	30	75	1.826	1.643	0.730	0.137	0.123	0.055
TPSR225*006#7000	R	2.2	6.3	0.5	6	7000	0.088	0.079	0.035	0.620	0.558	0.248
TPSS475*006#4000	S	4.7	6.3	0.5	6	4000	0.127	0.115	0.051	0.508	0.457	0.203
TPSA685*006#1800	A	6.8	6.3	0.5	6	1800	0.204	0.184	0.082	0.367	0.331	0.147
TPSR106*006#3000	R	10	6.3	0.6	8	3000	0.135	0.122	0.049	0.405	0.364	0.162
TPSR106*006#1500	R	10	6.3	0.6	8	1500	0.191	0.172	0.076	0.287	0.258	0.115
TPSR106*006#1000	R	10	6.3	0.6	8	1000	0.235	0.211	0.094	0.335	0.211	0.094
TPSA106*006#1500	A	10	6.3	0.6	6	1500	0.224	0.200	0.089	0.335	0.300	0.134
TPSA156*006#0700	A	15	6.3	0.9	6	700	0.327	0.295	0.131	0.229	0.206	0.092
TPSA156*006#1500	A	15	6.3	0.9	8	1500	0.224	0.200	0.089	0.235	0.300	0.134
TPSA226*006#0500	A	22	6.3	1.4	6	500	0.387	0.349	0.155	0.194	0.174	0.077
TPSA226*006#0900	A	22	6.3	1.4	6	900	0.289	0.260	0.115	0.260	0.234	0.104
TPSB226*006#0375	B	22	6.3	1.4	6	375	0.476	0.428	0.190	0.179	0.161	0.071
TPSB226*006#0600	B	22	6.3	1.4	6	600	0.376	0.339	0.151	0.226	0.202	0.090
TPSS226*006#0900	S	22	6.3	1.4	8	900	0.269	0.242	0.107	0.242	0.218	0.097
TPSA336*006#0600	A	33	6.3	2.1	8	600	0.353	0.318	0.141	0.212	0.190	0.084
TPSB336*006#0250	B	33	6.3	2.1	6	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSB336*006#0350	B	33	6.3	2.1	6	350	0.493	0.444	0.197	0.172	0.155	0.069
TPSB336*006#0450	B	33	6.3	2.1	6	450	0.435	0.391	0.174	0.196	0.176	0.078
TPSB336*006#0600	B	33	6.3	2.1	6	600	0.376	0.337	0.151	0.226	0.202	0.090
TBST336*006#0800	T	33	6.3	2.1	10	800	0.316	0.285	0.126	0.253	0.228	0.101
TPSB476*006#0500	B	47	6.3	3	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB476*006#0350	B	47	6.3	3	6	350	0.493	0.444	0.197	0.173	0.156	0.069
TPSB476*006#0250	B	47	6.3	3	6	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSC476*006#0300	C	47	6.3	3	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSB686*006#0250	B	68	6.3	4.3	8	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSB686*006#0350	B	68	6.3	4.3	8	350	0.493	0.444	0.197	0.172	0.155	0.069
TPSB686*006#0500	B	68	6.3	4.3	8	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSW686*006#0250	W	68	6.3	4.3	6	250	0.600	0.540	0.240	0.150	0.135	0.060
TPSW686*006#0125	W	68	6.3	4.3	6	125	0.849	0.764	0.339	0.106	0.095	0.042

All technical data relates to an ambient temperature of +25°C.
Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.
* Insert K for ±10% and M for ±20% Capacitance Tolerance

 # Standard Plating – Insert R for 7" reel and S for 13" reel
 # Gold Plating – Insert A for 7" reel and B for 13" reel

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	100kHz Ripple Current Ratings (A)			100kHz Ripple Voltage Ratings (V)		
							25ºC	85ºC	125ºC	25ºC	85ºC	125ºC
TPSW686*006#0110	W	68	6.3	4.3	6	110	0.905	0.814	0.362	0.099	0.090	0.040
TPSC686*006#0200	C	68	6.3	4.3	6	200	0.742	0.667	0.297	0.148	0.133	0.059
TPSC686*006#0150	C	68	6.3	4.3	6	150	0.856	0.766	0.343	0.128	0.115	0.051
TPSB107*006#0250	B	100	6.3	6.3	10	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSB107*006#0400	B	100	6.3	6.3	10	400	0.461	0.415	0.184	0.184	0.166	0.074
TPSC107*006#0150	C	100	6.3	6.3	6	150	0.856	0.766	0.343	0.128	0.115	0.051
TPSC107*006#0075	C	100	6.3	6.3	6	75	1.211	1.090	0.484	0.091	0.082	0.036
TPSY107*006#0100	Y	100	6.3	6.3	6	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSW107*006#0100	W	100	6.3	6.3	6	100	0.949	0.854	0.379	0.095	0.085	0.038
TPSC157*006#0050	C	150	6.3	9.5	6	50	1.483	1.335	0.593	0.074	0.067	0.030
TPSC157*006#0090	C	150	6.3	9.5	6	90	1.106	0.995	0.442	0.099	0.090	0.040
TPSC157*006#0250	C	150	6.3	9.5	6	250	0.663	0.597	0.265	0.166	0.149	0.066
TPSC157*006#0200	C	150	6.3	9.5	6	200	0.742	0.667	0.297	0.148	0.133	0.059
TPSC157*006#0150	C	150	6.3	9.5	6	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSD157*006#0125	D	150	6.3	9.5	6	125	1.095	0.980	0.438	0.137	0.122	0.055
TPSD157*006#0050	D	150	6.3	9.5	6	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSY157*006#0040	Y	150	6.3	9.5	6	40	1.768	1.591	0.707	0.071	0.064	0.028
TPSC227*006#0070	C	220	6.3	13.9	8	70	1.254	1.128	0.501	0.088	0.079	0.035
TPSC227*006#0250	C	220	6.3	13.9	8	250	0.663	0.597	0.265	0.166	0.149	0.066
TPSC227*006#0125	C	220	6.3	13.9	8	125	0.938	0.844	0.375	0.117	0.106	0.047
TPSC227*006#0100	C	220	6.3	13.9	8	100	1.049	0.944	0.419	0.105	0.094	0.042
TPSD227*006#0125	D	220	6.3	13.9	8	125	1.095	0.986	0.438	0.137	0.123	0.055
TPSD227*006#0050	D	220	6.3	13.9	8	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSD227*006#0100	D	220	6.3	13.2	8	100	1.125	1.102	0.490	0.122	0.110	0.049
TPSE227*006#0100	E	220	6.3	13.2	8	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSY227*006#0100	Y	220	6.3	13.9	10	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSY227*006#0150	Y	220	6.3	13.9	10	150	0.913	0.822	0.365	0.137	0.123	0.055
TPSD337*006#0100	D	330	6.3	20.8	8	100	1.125	1.102	0.490	0.122	0.110	0.049
TPSD337*006#0050	D	330	6.3	20.8	8	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSD337*006#0070	D	330	6.3	20.8	8	70	1.464	1.317	0.586	0.102	0.092	0.041
TPSD337*006#0045	D	330	6.3	20.8	8	45	1.826	1.643	0.730	0.082	0.074	0.033
TPSE337*006#0150	E	330	6.3	20.8	8	150	1.049	0.938	0.420	0.157	0.141	0.063
TPSE337*006#0125	E	330	6.3	20.8	8	125	1.149	1.028	0.460	0.144	0.128	0.057
TPSE337*006#0100	E	330	6.3	20.8	8	100	1.285	1.149	0.514	0.128	0.115	0.051
TPSE337*006#0050	E	330	6.3	20.8	8	50	1.817	1.635	0.727	0.091	0.082	0.036
TPSV337*006#0100	V	330	6.3	20.8	8	100	1.581	1.423	0.632	0.158	0.142	0.063
TPSY337*006#0150	Y	330	6.3	20.8	12	150	0.913	0.822	0.365	0.137	0.123	0.055
TPSD477*006#0045	D	470	6.3	29.6	12	45	1.826	1.643	0.730	0.082	0.074	0.033
TPSD477*006#0060	D	470	6.3	29.6	12	60	1.581	1.423	0.632	0.095	0.085	0.038
TPSD477*006#0200	D	470	6.3	29.6	12	200	0.866	0.779	0.346	0.173	0.156	0.069
TPSD477*006#0100	D	470	6.3	29.6	12	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSE477*006#0200	E	470	6.3	29.6	10	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSE477*006#0100	E	470	6.3	29.6	10	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSE477*006#0060	E	470	6.3	29.6	10	60	1.658	1.492	0.663	0.099	0.090	0.040
TPSE477*006#0050	E	470	6.3	29.6	10	50	1.817	1.635	0.727	0.091	0.082	0.036
TPSE477*006#0045	E	470	6.3	29.6	10	45	1.915	1.723	0.766	0.086	0.078	0.034
TPSV477*006#0100	V	470	6.3	29.6	10	100	1.581	1.414	0.632	0.158	0.141	0.063
TPSV477*006#0055	V	470	6.3	29.6	10	55	2.132	1.907	0.853	0.117	0.105	0.047
TPSV477*006#0040	V	470	6.3	29.6	10	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSE687*006#0100	E	680	6.3	42.8	10	100	1.284	1.156	0.514	0.128	0.115	0.051
TPSE687*006#0060	E	680	6.3	42.8	10	60	1.658	1.492	0.663	0.099	0.089	0.040
TPSE687*006#0045	E	680	6.3	42.8	10	45	1.915	1.723	0.766	0.086	0.078	0.034
TPSV687*006#0050	V	680	6.3	42.8	10	50	2.236	2.012	0.894	0.112	0.101	0.045
TPSV687*006#0040	V	680	6.3	42.8	10	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSV687*006#0035	V	680	6.3	42.8	14	35	2.673	2.405	1.069	0.094	0.084	0.037
TPSV108*006#0040	V	1000	6.3	60	16	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSV108*006#0050	V	1000	6.3	60	16	50	2.236	2.012	0.894	0.112	0.101	0.045
TPSR105*010#9000	R	1	10	0.5	4	9000	0.078	0.070	0.031	0.702	0.632	0.281
TPSA225*010#1800	A	2.2	10	0.5	6	1800	0.204	0.184	0.082	0.367	0.331	0.147
TPST335*010#1500	T	3.3	10	0.5	6	1500	0.231	0.208	0.092	0.346	0.312	0.139
TPSR475*010#5000	R	4.7	10	0.5	6	5000	0.105	0.094	0.042	0.525	0.472	0.210
TPSR475*010#3000	R	4.7	10	0.5	6	3000	0.135	0.122	0.054	0.406	0.366	0.162
TPSA475*010#1400	A	4.7	10	0.5	6	1400	0.231	0.208	0.093	0.324	0.292	0.130
TPSA685*010#1800	A	6.8	10	0.7	6	1800	0.204	0.184	0.082	0.367	0.331	0.147
TPST685*010#1800	T	6.8	10	0.7	6	1800	0.211	0.189	0.084	0.380	0.342	0.152
TPSA106*010#1800	A	10	10	1	6	1800	0.204	0.183	0.082	0.367	0.329	0.147
TPSA106*010#0900	A	10	10	1	6	900	0.289	0.260	0.115	0.260	0.234	0.104
TPSP106*010#2000	P	10	10	1	8	2000	0.173	0.156	0.069	0.346	0.312	0.139
TPST106*010#2000	T	10	10	1	6	2000	0.200	0.180	0.080	0.400	0.360	0.160

All technical data relates to an ambient temperature of +25°C.
Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.
* Insert K for ±10% and M for ±20% Capacitance Tolerance

 # Standard Plating – Insert R for 7" reel and S for 13" reel
 # Gold Plating – Insert A for 7" reel and B for 13" reel

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	100kHz Ripple Current Ratings (A)			100kHz Ripple Voltage Ratings (V)		
							25ºC	85ºC	125ºC	25ºC	85ºC	125ºC
TPST106*010#1000	T	10	10	1	6	1000	0.283	0.254	0.113	0.283	0.254	0.113
TPSA156*010#1000	A	15	10	1.5	6	1000	0.274	0.246	0.110	0.274	0.246	0.110
TPSB156*010#0450	B	15	10	1.5	6	450	0.435	0.391	0.174	0.196	0.176	0.078
TPSB156*010#0600	B	15	10	1.5	6	600	0.376	0.339	0.151	0.226	0.203	0.090
TPSB226*010#0700	B	22	10	2.2	6	700	0.348	0.312	0.139	0.244	0.218	0.098
TPSB226*010#0500	B	22	10	2.2	6	500	0.412	0.371	0.165	0.205	0.185	0.082
TPSB226*010#0400	B	22	10	2.2	6	400	0.461	0.415	0.184	0.184	0.166	0.074
TBSC226*010#0300	C	22	10	2.2	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPST226*010#0800	T	22	10	2.2	8	800	0.316	0.284	0.126	0.253	0.227	0.101
TPSB336*010#0650	B	33	10	3.3	6	650	0.362	0.325	0.145	0.235	0.212	0.094
TPSB336*010#0500	B	33	10	3.3	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB336*010#0425	B	33	10	3.3	6	425	0.447	0.402	0.179	0.190	0.171	0.076
TPSB336*010#0250	B	33	10	3.3	6	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSC336*010#0500	C	33	10	3.3	6	500	0.469	0.420	0.188	0.235	0.210	0.094
TPSC336*010#0375	C	33	10	3.3	6	375	0.542	0.484	0.217	0.203	0.182	0.081
TPSC336*010#0150	C	33	10	3.3	6	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSW336*010#0350	W	33	10	3.3	6	350	0.507	0.456	0.203	0.177	0.160	0.071
TPSB476*010#0250	B	47	10	4.7	8	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSB476*010#0650	B	47	10	4.7	8	650	0.362	0.325	0.145	0.235	0.212	0.094
TPSB476*010#0500	B	47	10	4.7	8	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB476*010#0350	B	47	10	4.7	8	350	0.493	0.444	0.197	0.172	0.155	0.069
TPSC476*010#0350	C	47	10	4.7	6	350	0.561	0.501	0.224	0.196	0.175	0.078
TPSD476*010#0100	D	47	10	4.7	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSW476*010#0250	W	47	10	4.7	6	250	0.600	0.540	0.240	0.150	0.135	0.060
TPSW476*010#0150	W	47	10	4.7	6	150	0.775	0.697	0.310	0.116	0.105	0.046
TPSW476*010#0125	W	47	10	4.7	6	125	0.849	0.764	0.339	0.106	0.095	0.042
TPSY686*010#0200	Y	68	10	6.8	6	200	0.791	0.712	0.316	0.158	0.142	0.063
TPSY686*010#0100	Y	68	10	6.8	6	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSD686*010#0150	D	68	10	6.8	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSD686*010#0100	D	68	10	6.8	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSC686*010#0300	C	68	10	6.8	6	300	0.605	0.544	0.242	0.181	0.163	0.073
TPSC686*010#0200	C	68	10	6.8	6	200	0.741	0.667	0.296	0.148	0.133	0.059
TPSC686*010#0080	C	68	10	6.8	6	80	1.173	1.055	0.469	0.094	0.084	0.038
TPSC686*010#0100	C	68	10	6.8	6	100	1.049	0.944	0.420	0.105	0.094	0.042
TPSW686*010#0100	W	68	10	6.8	6	100	0.949	0.854	0.379	0.095	0.085	0.038
TPSW686*010#0150	W	68	10	6.8	6	150	0.775	0.697	0.310	0.116	0.105	0.046
TPSY107*010#0200	Y	100	10	10	6	200	0.791	0.712	0.316	0.158	0.142	0.063
TPSY107*010#0150	Y	100	10	10	6	150	0.913	0.822	0.365	0.137	0.123	0.055
TPSY107*010#0100	Y	100	10	10	6	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSC107*010#0200	C	100	10	10	8	200	0.742	0.667	0.297	0.148	0.133	0.059
TPSC107*010#0150	C	100	10	10	8	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSC107*010#0100	C	100	10	10	8	100	1.049	0.944	0.420	0.105	0.094	0.042
TPSC107*010#0075	C	100	10	10	8	75	1.211	1.090	0.484	0.091	0.082	0.036
TPSD107*010#0150	D	100	10	10	6	150	1.000	0.894	0.400	0.150	0.134	0.060
TPSD107*010#0125	D	100	10	10	6	125	1.095	0.980	0.438	0.137	0.122	0.055
TPSD107*010#0100	D	100	10	10	6	100	1.225	1.095	0.490	0.122	0.110	0.049
TPSD107*010#0080	D	100	10	10	6	80	1.369	1.225	0.548	0.110	0.098	0.044
TPSD107*010#0065	D	100	10	10	6	65	1.519	1.367	0.607	0.098	0.089	0.039
TPSD107*010#0050	D	100	10	10	6	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSE107*010#0125	E	100	10	10	6	125	1.149	1.028	0.460	0.144	0.128	0.057
TPSX107*010#0200	X	100	10	10	8	200	0.707	0.636	0.283	0.141	0.127	0.056
TPSX107*010#0150	X	100	10	10	8	150	0.816	0.735	0.327	0.122	0.110	0.049
TPSX107*010#0085	X	100	10	10	8	85	1.085	0.976	0.434	0.092	0.083	0.037
TPSW107*010#0150	W	100	10	10	6	150	0.775	0.697	0.310	0.116	0.105	0.046
TPSY157*010#0200	Y	150	10	15	6	200	0.791	0.712	0.316	0.158	0.142	0.063
TPSY157*010#0150	Y	150	10	15	6	150	0.913	0.822	0.365	0.137	0.123	0.055
TPSY157*010#0100	Y	150	10	15	6	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSD157*010#0100	D	150	10	15	8	100	1.225	1.095	0.490	0.122	0.110	0.049
TPSD157*010#0085	D	150	10	15	8	85	1.328	1.195	0.531	0.113	0.102	0.045
TPSD157*010#0050	D	150	10	15	8	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSE157*010#0100	E	150	10	15	8	100	1.285	1.149	0.514	0.128	0.115	0.051
TPSX157*010#0100	X	150	10	15	6	100	1.000	0.900	0.400	0.100	0.090	0.040
TPSY227*010#0200	Y	220	10	22	10	200	0.790	0.711	0.316	0.158	0.142	0.063
TPSY227*010#0150	Y	220	10	22	10	150	0.913	0.822	0.365	0.137	0.123	0.055
TPSD227*010#0150	D	220	10	22	8	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSD227*010#0100	D	220	10	22	8	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD227*010#0050	D	220	10	22	8	50	1.732	1.559	0.692	0.087	0.078	0.035
TPSE227*010#0150	E	220	10	22	8	150	1.049	0.938	0.420	0.157	0.141	0.063

All technical data relates to an ambient temperature of +25°C.
Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.
* Insert K for ±10% and M for ±20% Capacitance Tolerance

 # Standard Plating – Insert R for 7" reel and S for 13" reel
 # Gold Plating – Insert A for 7" reel and B for 13" reel

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	100kHz Ripple Current Ratings (A)			100kHz Ripple Voltage Ratings (V)		
							25°C	85°C	125°C	25°C	85°C	125°C
TPSE227*010#0125	E	220	10	22	8	125	1.149	1.028	0.460	0.144	0.128	0.057
TPSE227*010#0100	E	220	10	22	8	100	1.285	1.149	0.514	0.128	0.115	0.051
TPSE227*010#0070	E	220	10	22	8	70	1.535	1.382	0.614	0.107	0.097	0.043
TPSE227*010#0060	E	220	10	22	8	60	1.658	1.483	0.663	0.099	0.089	0.040
TPSE227*010#0050	E	220	10	22	8	50	1.817	1.635	0.727	0.091	0.082	0.036
TPSD337*010#0150	D	330	10	33	10	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSD337*010#0100	D	330	10	33	10	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD337*010#0050	D	330	10	33	8	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSD337*010#0065	D	330	10	33	8	65	1.519	1.367	0.608	0.099	0.089	0.039
TPSE337*010#0100	E	330	10	33	10	100	1.285	1.149	0.514	0.128	0.115	0.051
TPSE337*010#0060	E	330	10	33	10	60	1.658	1.483	0.663	0.099	0.089	0.040
TPSE337*010#0050	E	330	10	33	10	50	1.817	1.635	0.727	0.091	0.082	0.036
TPSE337*010#0040	E	330	10	33	8	40	2.031	1.828	0.812	0.081	0.073	0.032
TPSV337*010#0100	V	330	10	33	10	100	1.581	1.414	0.632	0.158	0.141	0.063
TPSV337*010#0060	V	330	10	33	10	60	2.041	1.826	0.816	0.122	0.110	0.049
TPSV337*010#0040	V	330	10	33	10	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSV477*010#0040	V	470	10	47	10	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSE477*010#0200	E	470	10	47	10	200	0.908	0.812	0.363	0.181	0.162	0.072
TPSE477*010#0100	E	470	10	47	10	100	1.285	1.149	0.514	0.128	0.115	0.051
TPSE477*010#0060	E	470	10	47	10	60	1.658	1.492	0.663	0.099	0.090	0.040
TPSE477*010#0050	E	470	10	47	10	50	1.817	1.625	0.727	0.091	0.081	0.036
TPSE477*010#0045	E	470	10	47	10	45	1.915	1.723	0.766	0.086	0.078	0.034
TPSV477*010#0100	V	470	10	47	10	100	1.581	1.423	0.632	0.158	0.142	0.063
TPSV477*010#0060	V	470	10	47	10	60	2.041	1.825	0.816	0.122	0.110	0.049
TPSV477*010#0040	V	470	10	47	10	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSA225*016#3500	A	2.2	16	0.5	6	3500	0.146	0.131	0.059	0.512	0.458	0.205
TPSA225*016#1800	A	2.2	16	0.5	6	1800	0.204	0.184	0.081	0.367	0.330	0.146
TPST225*016#2000	T	2.2	16	0.5	6	2000	0.200	0.180	0.080	0.400	0.360	0.160
TPSA335*016#3500	A	3.3	16	0.5	6	3500	0.146	0.131	0.059	0.512	0.458	0.205
TPSA475*016#2000	A	4.7	16	0.8	6	2000	0.194	0.174	0.077	0.387	0.349	0.155
TPSB475*016#1500	B	4.7	16	0.8	6	1500	0.238	0.214	0.095	0.357	0.321	0.143
TPSB475*016#0800	B	4.7	16	0.8	6	800	0.326	0.293	0.130	0.261	0.235	0.104
TPSA685*016#1500	A	6.8	16	1.1	6	1500	0.224	0.201	0.089	0.335	0.302	0.134
TPSB685*016#0600	B	6.8	16	1.1	6	600	0.376	0.339	0.151	0.226	0.203	0.090
TPSB685*016#1200	B	6.8	16	1.1	6	1200	0.266	0.240	0.106	0.319	0.287	0.128
TPSB106*016#0500	B	10	16	1.6	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB106*016#0800	B	10	16	1.6	6	800	0.326	0.293	0.130	0.261	0.235	0.104
TPSC106*016#0500	C	10	16	1.6	6	500	0.469	0.422	0.188	0.235	0.212	0.094
TPSW106*016#0500	W	10	16	1.6	6	500	0.424	0.382	0.170	0.212	0.191	0.085
TPSW106*016#0600	W	10	16	1.6	6	600	0.387	0.349	0.155	0.232	0.209	0.093
TPST106*016#1000	T	10	16	1.6	8	1000	0.283	0.255	0.113	0.283	0.255	0.113
TPST106*016#0800	T	10	16	1.6	8	800	0.316	0.284	0.126	0.253	0.228	0.101
TPSB156*016#0500	B	15	16	2.4	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB156*016#0800	B	15	16	2.4	6	800	0.326	0.292	0.130	0.261	0.233	0.104
TPSB226*016#0400	B	22	16	3.5	6	400	0.461	0.415	0.184	0.184	0.166	0.074
TPSB226*016#0600	B	22	16	3.5	6	600	0.376	0.338	0.150	0.225	0.203	0.090
TPSC226*016#0375	C	22	16	3.5	6	375	0.542	0.484	0.217	0.203	0.182	0.081
TPSC226*016#0300	C	22	16	3.5	6	300	0.605	0.545	0.242	0.181	0.163	0.073
TPSC226*016#0250	C	22	16	3.5	6	250	0.663	0.597	0.265	0.166	0.149	0.066
TPSC226*016#0150	C	22	16	3.5	6	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSW226*016#0500	W	22	16	3.5	6	500	0.424	0.382	0.170	0.212	0.191	0.085
TPSB336*016#0350	B	33	16	5.3	8	350	0.493	0.444	0.197	0.172	0.155	0.069
TPSB336*016#0500	B	33	16	5.3	8	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSC336*016#0100	C	33	16	5.3	6	100	1.049	0.944	0.420	0.105	0.094	0.042
TPSC336*016#0150	C	33	16	5.3	6	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSC336*016#0300	C	33	16	5.3	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSC336*016#0225	C	33	16	5.3	6	225	0.699	0.629	0.279	0.157	0.141	0.063
TPSW336*016#0500	W	33	16	5.3	6	500	0.424	0.381	0.169	0.212	0.191	0.085
TPSW336*016#0400	W	33	16	5.3	6	400	0.474	0.427	0.189	0.189	0.170	0.076
TPSW336*016#0250	W	33	16	5.3	6	250	0.600	0.540	0.240	0.150	0.135	0.060
TPSW336*016#0175	W	33	16	5.3	6	175	0.717	0.645	0.287	0.125	0.113	0.050
TPSW336*016#0140	W	33	16	5.3	6	140	0.802	0.722	0.321	0.112	0.101	0.045
TPSY336*016#0400	Y	33	16	5.3	6	400	0.559	0.503	0.224	0.224	0.202	0.090
TPSY336*016#0300	Y	33	16	5.3	6	300	0.645	0.580	0.258	0.194	0.174	0.078
TPSC476*016#0110	C	47	16	7.5	6	110	1.000	0.900	0.400	0.110	0.099	0.044
TPSC476*016#0350	C	47	16	7.5	6	350	0.561	0.501	0.224	0.196	0.175	0.078
TPSY476*016#0250	Y	47	16	7.5	6	250	0.707	0.636	0.283	0.176	0.159	0.071
TPSD476*016#0200	D	47	16	7.5	6	200	0.866	0.775	0.346	0.173	0.155	0.069

All technical data relates to an ambient temperature of +25°C.
Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.
* Insert K for ±10% and M for ±20% Capacitance Tolerance

 # Standard Plating – Insert R for 7" reel and S for 13" reel
 # Gold Plating – Insert A for 7" reel and B for 13" reel

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	100kHz Ripple Current Ratings (A)			100kHz Ripple Voltage Ratings (V)		
							25ºC	85ºC	125ºC	25ºC	85ºC	125ºC
TPSD476*016#0150	D	47	16	7.5	6	150	1.000	0.894	0.400	0.150	0.134	0.060
TPSD476*016#0100	D	47	16	7.5	6	100	1.225	1.103	0.490	0.123	0.110	0.049
TPSD476*016#0080	D	47	16	7.5	6	80	1.369	1.232	0.548	0.110	0.099	0.044
TPSX476*016#0180	X	47	16	7.5	6	180	0.745	0.671	0.298	0.134	0.121	0.054
TPSY686*016#0250	Y	68	16	10.9	6	250	0.707	0.636	0.283	0.177	0.159	0.071
TPSY686*016#0200	Y	68	16	10.9	6	200	0.791	0.712	0.316	0.158	0.142	0.063
TPSC686*016#0125	C	68	16	10.9	6	125	0.938	0.844	0.375	0.117	0.106	0.047
TPSC686*016#0200	C	68	16	10.9	6	200	0.741	0.667	0.297	0.148	0.133	0.059
TPSD686*016#0150	D	68	16	10.9	6	150	1.000	0.894	0.400	0.150	0.134	0.060
TPSD686*016#0100	D	68	16	10.9	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD686*016#0070	D	68	16	10.8	6	70	1.464	1.317	0.586	0.102	0.092	0.041
TPSX686*016#0150	X	68	16	10.9	8	150	0.816	0.735	0.327	0.122	0.110	0.049
TPSY107*016#0200	Y	100	16	16	8	200	0.791	0.712	0.316	0.158	0.142	0.063
TPSY107*016#0150	Y	100	16	16	8	150	0.912	0.812	0.365	0.135	0.121	0.055
TPSY107*016#0100	Y	100	16	24	6	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSD107*016#0150	D	100	16	16	6	150	1.000	0.894	0.400	0.150	0.134	0.060
TPSD107*016#0125	D	100	16	16	6	125	1.095	0.980	0.438	0.137	0.122	0.055
TPSD107*016#0100	D	100	16	16	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD107*016#0060	D	100	16	16	6	60	1.581	1.423	0.632	0.095	0.085	0.038
TPSE107*016#0150	E	100	16	16	6	150	1.049	0.938	0.420	0.157	0.141	0.063
TPSE107*016#0125	E	100	16	16	6	125	1.149	1.028	0.460	0.144	0.128	0.057
TPSE107*016#0100	E	100	16	16	6	100	1.285	1.149	0.514	0.128	0.115	0.051
TPSE107*016#0055	E	100	16	16	6	55	1.732	1.559	0.693	0.095	0.086	0.038
TPSD157*016#0150	D	150	16	24	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSD157*016#0125	D	150	16	24	6	125	1.095	0.986	0.438	0.137	0.123	0.055
TPSD157*016#0100	D	150	16	24	6	100	1.225	1.103	0.490	0.123	0.110	0.049
TPSD157*016#0060	D	150	16	24	6	60	1.581	1.423	0.632	0.095	0.085	0.038
TPSD157*016#0085	D	150	16	24	6	85	1.328	1.196	0.531	0.113	0.102	0.045
TPSE157*016#0100	E	150	16	24	6	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSV157*016#0075	V	150	16	24	8	75	1.826	1.643	0.730	0.137	0.123	0.055
TPSV157*016#0045	V	150	16	24	8	45	2.357	2.121	0.943	0.106	0.095	0.042
TPSE227*016#0150	E	220	16	35.2	10	150	1.049	0.944	0.420	0.157	0.142	0.063
TPSE227*016#0100	E	220	16	35.2	10	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSV227*016#0150	V	220	16	35.2	8	150	1.291	1.162	0.516	0.194	0.175	0.078
TPSV227*016#0100	V	220	16	35.2	8	100	1.581	1.414	0.632	0.158	0.141	0.063
TPSV227*016#0075	V	220	16	35.2	8	75	1.825	1.643	0.730	0.137	0.123	0.054
TPSV227*016#0050	V	220	16	35.2	8	50	2.236	2.012	0.894	0.112	0.101	0.045
TPSA105*020#3000	A	1	20	0.5	4	3000	0.158	0.142	0.063	0.474	0.427	0.190
TPSS105*020#6000	S	1	20	0.5	4	6000	0.104	0.093	0.042	0.624	0.561	0.249
TPSR105*020#6000	R	1	20	0.5	4	6000	0.096	0.086	0.038	0.574	0.517	0.230
TPST105*020#2000	T	1	20	0.5	4	2000	0.115	0.104	0.046	0.693	0.624	0.277
TPSA225*020#3000	A	2.2	20	0.5	6	3000	0.158	0.142	0.063	0.474	0.427	0.190
TPSA335*020#2500	A	3.3	20	0.7	6	2500	0.173	0.156	0.069	0.433	0.390	0.173
TPSB335*020#1300	B	3.3	20	0.7	6	1300	0.256	0.230	0.102	0.333	0.299	0.133
TPSA475*020#1800	A	4.7	20	0.9	6	1800	0.204	0.183	0.082	0.367	0.329	0.147
TPSB475*020#0750	B	4.7	20	0.9	6	750	0.337	0.303	0.135	0.252	0.227	0.101
TPSB475*020#1000	B	4.7	20	0.9	6	1000	0.292	0.262	0.117	0.292	0.262	0.117
TPSB685*020#0600	B	6.8	20	1.4	6	600	0.376	0.339	0.151	0.226	0.203	0.090
TPSB685*020#1000	B	6.8	20	1.4	6	1000	0.292	0.262	0.117	0.292	0.262	0.117
TPSC685*020#0700	C	6.8	20	1.4	6	700	0.396	0.357	0.159	0.277	0.250	0.111
TPSB106*020#0500	B	10	20	2	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB106*020#1000	B	10	20	2	6	1000	0.292	0.261	0.117	0.292	0.261	0.117
TPSC106*020#0700	C	10	20	2	6	700	0.396	0.357	0.159	0.277	0.250	0.111
TPSC106*020#0500	C	10	20	2	6	500	0.469	0.422	0.188	0.235	0.211	0.094
TPSB156*020#0500	B	15	20	3	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSC156*020#0450	C	15	20	3	6	450	0.494	0.442	0.198	0.222	0.199	0.089
TPSC156*020#0400	C	15	20	3	6	400	0.524	0.472	0.210	0.210	0.189	0.084
TPSB226*020#0400	B	22	20	4.4	6	400	0.461	0.415	0.184	0.184	0.166	0.074
TPSB226*020#0600	B	22	20	4.4	6	600	0.376	0.339	0.151	0.226	0.203	0.090
TPSC226*020#0100	C	22	20	4.4	6	100	1.049	0.944	0.420	0.105	0.094	0.042
TPSC226*020#0400	C	22	20	4.4	6	400	0.524	0.472	0.210	0.210	0.189	0.084
TPSC226*020#0150	C	22	20	4.4	6	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSD226*020#0300	D	22	20	4.4	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSD226*020#0200	D	22	20	4.4	6	200	0.866	0.779	0.346	0.173	0.156	0.069
TPSD336*020#0200	D	33	20	6.6	6	200	0.866	0.775	0.346	0.173	0.155	0.069
TPSD336*020#0100	D	33	20	6.6	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSC336*020#0300	C	33	20	6.6	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSD476*020#0200	D	47	20	9.4	6	200	0.866	0.779	0.346	0.173	0.156	0.069

All technical data relates to an ambient temperature of +25°C.
Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.
* Insert K for ±10% and M for ±20% Capacitance Tolerance

 # Standard Plating – Insert R for 7" reel and S for 13" reel
 # Gold Plating – Insert A for 7" reel and B for 13" reel

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	100kHz Ripple Current Ratings (A)			100kHz Ripple Voltage Ratings (V)		
							25ºC	85ºC	125ºC	25ºC	85ºC	125ºC
TPSD476*020#0100	D	47	20	9.4	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD476*020#0075	D	47	20	9.4	6	75	1.414	1.273	0.566	0.106	0.095	0.042
TPSE476*020#0250	E	47	20	9.4	6	250	0.812	0.731	0.325	0.203	0.183	0.081
TPSE476*020#0200	E	47	20	9.4	6	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSE476*020#0150	E	47	20	9.4	6	150	1.049	0.938	0.420	0.157	0.141	0.063
TPSE476*020#0125	E	47	20	9.4	6	125	1.149	1.034	0.460	0.144	0.129	0.057
TPSE476*020#0070	E	47	20	9.4	6	70	1.535	1.382	0.614	0.107	0.097	0.043
TPSD686*020#0200	D	68	20	13.6	6	200	0.866	0.779	0.346	0.173	0.156	0.069
TPSD686*020#0150	D	68	20	13.6	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSV686*020#0070	D	68	20	13.6	6	70	1.464	1.317	0.586	0.102	0.092	0.041
TPSE686*020#0200	E	68	20	13.6	6	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSE686*020#0150	E	68	20	13.6	6	150	1.049	0.938	0.420	0.157	0.141	0.063
TPSE686*020#0125	E	68	20	13.6	6	125	1.149	1.028	0.460	0.144	0.128	0.057
TPSE107*020#0200	E	100	20	20	6	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSE107*020#0150	E	100	20	20	6	150	1.049	0.944	0.420	0.157	0.142	0.063
TPSE107*020#0100	E	100	20	20	6	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSV107*020#0200	V	100	20	20	8	200	1.118	1.006	0.447	0.224	0.202	0.090
TPSV107*020#0100	V	100	20	20	8	100	1.581	1.414	0.632	0.158	0.141	0.063
TPSV107*020#0085	V	100	20	20	8	85	1.715	1.543	0.686	0.145	0.131	0.058
TPSV107*020#0060	V	100	20	20	8	60	2.041	1.837	0.816	0.122	0.110	0.049
TPSV157*020#0080	V	150	20	30	8	80	1.768	1.591	0.707	0.141	0.127	0.057
TPSA474*025#7000	A	0.47	25	0.5	4	7000	0.103	0.093	0.041	0.721	0.649	0.288
TPSA684*025#6000	A	0.68	25	0.5	4	6000	0.112	0.101	0.045	0.671	0.604	0.268
TPSA155*025#3000	A	1.5	25	0.5	6	3000	0.158	0.141	0.063	0.474	0.424	0.190
TPSB155*025#1800	B	1.5	25	0.5	6	1800	0.217	0.196	0.087	0.391	0.351	0.156
TPSB225*025#2500	B	2.2	25	0.6	6	2500	0.184	0.166	0.074	0.461	0.415	0.184
TPSB225*025#1200	B	2.2	25	0.6	6	1200	0.266	0.240	0.106	0.319	0.287	0.128
TPSB225*025#0900	B	2.2	25	0.6	6	900	0.307	0.277	0.123	0.277	0.249	0.111
TPSA335*025#1500	A	3.3	25	0.8	6	1500	0.224	0.201	0.089	0.335	0.302	0.134
TPSB335*025#0750	B	3.3	25	0.8	6	750	0.337	0.303	0.135	0.252	0.227	0.101
TPSB335*025#1500	B	3.3	25	0.8	6	1500	0.238	0.214	0.095	0.357	0.321	0.143
TPSB335*025#2000	B	3.3	25	0.8	6	2000	0.206	0.186	0.082	0.412	0.371	0.165
TPSB475*025#1500	B	4.7	25	1.2	6	1500	0.238	0.213	0.095	0.357	0.319	0.143
TPSB475*025#0900	B	4.7	25	1.2	6	900	0.307	0.277	0.123	0.277	0.249	0.111
TPSB475*025#0700	B	4.7	25	1.2	6	700	0.348	0.314	0.139	0.244	0.220	0.098
TPSB685*025#0700	B	6.8	25	1.7	6	700	0.348	0.314	0.139	0.244	0.220	0.098
TPSC685*025#0700	C	6.8	25	1.7	6	700	0.396	0.357	0.159	0.277	0.250	0.111
TPSC685*025#0600	C	6.8	25	1.7	6	600	0.428	0.385	0.171	0.257	0.231	0.103
TPSC685*025#0500	C	6.8	25	1.7	6	500	0.469	0.422	0.188	0.235	0.211	0.094
TPSC106*025#0500	C	10	25	2.5	6	500	0.469	0.420	0.188	0.235	0.210	0.094
TPSC106*025#0300	C	10	25	2.5	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSC156*025#0220	C	15	25	3.8	6	220	0.707	0.636	0.283	0.156	0.140	0.062
TPSC156*025#0300	C	15	25	3.8	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSD156*025#0300	D	15	25	3.8	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSD156*025#0100	D	15	25	3.8	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSC226*025#0275	C	22	25	5.5	6	275	0.632	0.569	0.253	0.174	0.157	0.070
TPSD226*025#0300	D	22	25	5.5	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSD226*025#0200	D	22	25	5.5	6	200	0.866	0.775	0.346	0.173	0.155	0.069
TPSD226*025#0100	D	22	25	5.5	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSC226*025#0400	C	22	25	5.5	6	400	0.524	0.472	0.210	0.210	0.189	0.084
TPSD336*025#0300	D	33	25	8.3	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSD336*025#0200	D	33	25	8.3	6	200	0.866	0.775	0.346	0.173	0.155	0.069
TPSD336*025#0100	D	33	25	8.3	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSE336*025#0300	E	33	25	8.3	6	300	0.742	0.663	0.297	0.222	0.199	0.089
TPSE336*025#0200	E	33	25	8.3	6	200	0.908	0.812	0.363	0.182	0.162	0.073
TPSE336*025#0175	E	33	25	8.3	6	175	0.971	0.868	0.388	0.170	0.152	0.068
TPSE336*025#0100	E	33	25	8.3	6	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSD476*025#0250	D	47	25	11.8	6	250	0.775	0.697	0.310	0.194	0.174	0.077
TPSD476*025#0150	D	47	25	11.8	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSD476*025#0125	D	47	25	11.8	6	125	1.095	0.986	0.438	0.137	0.123	0.055
TPSE476*025#0080	E	47	25	8.3	6	80	1.436	1.293	0.574	0.115	0.103	0.046
TPSE476*025#0125	E	47	25	8.3	6	125	1.149	1.034	0.460	0.144	0.129	0.057
TPSE476*025#0100	E	47	25	8.3	6	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSE686*025#0200	E	68	25	17	6	200	0.908	0.817	0.363	0.181	0.163	0.073
TPSE686*025#0125	E	68	25	17	6	125	1.149	1.034	0.459	0.143	0.129	0.057
TPSV686*025#0200	V	68	25	17	6	200	1.118	1.006	0.447	0.223	0.201	0.089
TPSV686*025#0150	V	68	25	17	6	150	1.291	1.162	0.516	0.194	0.174	0.077
TPSV686*025#0095	V	68	25	17	6	95	1.622	1.460	0.649	0.154	0.139	0.062

All technical data relates to an ambient temperature of +25°C.
Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.
* Insert K for ±10% and M for ±20% Capacitance Tolerance

 # Standard Plating – Insert R for 7" reel and S for 13" reel
 # Gold Plating – Insert A for 7" reel and B for 13" reel

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	100kHz Ripple Current Ratings (A)			100kHz Ripple Voltage Ratings (V)		
							25ºC	85ºC	125ºC	25ºC	85ºC	125ºC
TPSV686*025#0080	V	68	25	17	6	80	1.768	1.591	0.707	0.141	0.127	0.057
TPSV107*025#0100	V	100	25	25	8	100	1.581	1.423	0.632	0.158	0.142	0.063
TPSA224*035#6000	A	0.22	35	0.5	4	6000	0.112	0.101	0.045	0.672	0.605	0.269
TPSA334*035#6000	A	0.33	35	0.5	4	6000	0.112	0.101	0.045	0.672	0.605	0.269
TPSB474*035#4000	B	0.47	35	0.5	4	4000	0.146	0.131	0.058	0.584	0.526	0.234
TPSA474*035#6000	A	0.47	35	0.5	4	6000	0.112	0.101	0.045	0.671	0.604	0.268
TPSA684*035#6000	A	0.68	35	0.5	4	6000	0.112	0.101	0.045	0.672	0.605	0.269
TPSA105*035#3000	A	1	35	0.5	4	3000	0.158	0.142	0.063	0.474	0.427	0.190
TPSB105*035#2000	B	1	35	0.5	4	2000	0.206	0.186	0.082	0.412	0.371	0.165
TPSB155*035#2500	B	1.5	35	0.5	6	2500	0.184	0.166	0.074	0.461	0.415	0.184
TPSA225*035#1500	A	2.2	35	0.8	6	1500	0.224	0.201	0.089	0.335	0.302	0.134
TPSB225*035#0750	B	2.2	35	0.8	6	750	0.337	0.303	0.135	0.252	0.227	0.101
TPSB225*035#1500	B	2.2	35	0.8	6	1500	0.238	0.214	0.095	0.357	0.321	0.143
TPSB225*035#2000	B	2.2	35	0.8	6	2000	0.206	0.186	0.082	0.412	0.371	0.165
TPSC225*035#1000	C	2.2	35	0.8	6	1000	0.332	0.298	0.133	0.332	0.298	0.133
TPSB335*035#1000	B	3.3	35	1.2	6	1000	0.292	0.262	0.117	0.292	0.262	0.117
TPSC335*035#0700	C	3.3	35	1.2	6	700	0.396	0.357	0.159	0.277	0.250	0.111
TPSB475*035#0700	B	4.7	35	1.2	6	700	0.348	0.314	0.139	0.244	0.220	0.98
TPSB475*035#1500	B	4.7	35	1.2	6	1500	0.238	0.214	0.095	0.357	0.321	0.143
TPSC475*035#0600	C	4.7	35	1.6	6	600	0.428	0.383	0.171	0.257	0.230	0.103
TPSC685*035#0350	C	6.8	35	2.4	6	350	0.561	0.505	0.224	0.196	0.177	0.078
TPSD685*035#0150	D	6.8	35	2.4	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSD685*035#0500	D	6.8	35	2.4	6	500	0.548	0.493	0.219	0.274	0.246	0.110
TPSD685*035#0400	D	6.8	35	2.4	6	400	0.612	0.551	0.245	0.245	0.220	0.098
TPSD106*035#0300	D	10	35	3.5	6	300	0.707	0.632	0.283	0.212	0.190	0.085
TPSD106*035#0125	D	10	35	3.5	6	125	1.095	0.986	0.438	0.137	0.123	0.055
TPSE106*035#0200	E	10	35	3.5	6	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSC156*035#0350	C	15	35	5.3	6	350	0.561	0.505	0.224	0.196	0.177	0.078
TPSC156*035#0450	C	15	35	5.3	6	450	0.494	0.445	0.198	0.222	0.200	0.089
TPSD156*035#0300	D	15	35	5.3	6	300	0.707	0.632	0.283	0.212	0.190	0.085
TPSD156*035#0100	D	15	35	5.3	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD226*035#0400	D	22	35	7.7	6	400	0.612	0.548	0.245	0.245	0.219	0.098
TPSD226*035#0300	D	22	35	7.7	6	300	0.707	0.632	0.283	0.212	0.190	0.085
TPSD226*035#0200	D	22	35	7.7	6	200	0.866	0.775	0.346	0.173	0.155	0.069
TPSD226*035#0125	D	22	35	7.7	6	125	1.095	0.986	0.438	0.137	0.123	0.055
TPSE226*035#0300	E	22	35	7.7	6	300	0.742	0.663	0.297	0.222	0.199	0.089
TPSE226*035#0200	E	22	35	7.7	6	200	0.908	0.812	0.363	0.182	0.162	0.073
TPSE226*035#0125	E	22	35	7.7	6	125	1.149	1.034	0.460	0.144	0.129	0.057
TPSD336*035#0300	D	33	35	11.6	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSD336*035#0200	D	33	35	11.6	6	200	0.866	0.775	0.346	0.173	0.155	0.069
TPSE336*035#0300	E	33	35	11.6	6	300	0.742	0.667	0.297	0.222	0.200	0.089
TPSE336*035#0250	E	33	35	11.6	6	250	0.812	0.731	0.325	0.203	0.183	0.081
TPSE336*035#0100	E	33	35	11.6	6	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSE476*035#0250	E	47	35	16.5	6	250	0.812	0.731	0.325	0.203	0.183	0.081
TPSE476*035#0200	E	47	35	16.5	6	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSA154*050#9000	A	0.15	50	0.5	4	9000	0.091	0.082	0.036	0.819	0.737	0.328
TPSA224*050#7000	A	0.22	50	0.5	4	7000	0.103	0.093	0.041	0.721	0.649	0.288
TPSC105*050#2500	C	1	50	0.5	4	2500	0.210	0.189	0.084	0.524	0.472	0.210
TPSC155*050#2000	C	1.5	50	0.8	6	2000	0.234	0.211	0.094	0.468	0.421	0.187
TPSC155*050#1500	C	1.5	50	0.8	6	1500	0.271	0.243	0.108	0.406	0.366	0.163
TPSD225*050#1200	D	2.2	50	1.1	6	1200	0.354	0.318	0.141	0.424	0.382	0.170
TPSD335*050#0800	D	3.3	50	1.7	6	800	0.433	0.390	0.173	0.346	0.311	0.138
TPSD475*050#0700	D	4.7	50	2.4	6	700	0.463	0.417	0.185	0.324	0.292	0.130
TPSD475*050#0500	D	4.7	50	2.4	6	500	0.548	0.493	0.219	0.274	0.246	0.110
TPSD475*050#0300	D	4.7	50	2.4	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSD685*050#0600	D	6.8	50	3.4	6	600	0.500	0.450	0.200	0.300	0.270	0.120
TPSD685*050#0500	D	6.8	50	3.4	6	500	0.548	0.493	0.219	0.274	0.246	0.110
TPSE106*050#0400	E	10	50	5	6	400	0.642	0.578	0.257	0.257	0.231	0.103
TPSE106*050#0500	E	10	50	5	6	500	0.574	0.516	0.230	0.287	0.258	0.115
TPSE156*050#0250	E	15	50	5	6	250	0.812	0.731	0.325	0.203	0.183	0.081

All technical data relates to an ambient temperature of +25°C.
Capacitance and DF are measured at 120Hz, 0.5V RMS with a maximum DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.
* Insert K for ±10% and M for ±20% Capacitance Tolerance

 # Standard Plating – Insert R for 7" reel and S for 13" reel
 # Gold Plating – Insert A for 7" reel and B for 13" reel