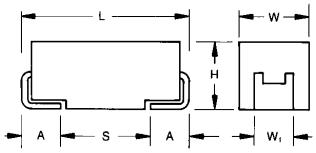
THE DATASHEET OF

TPSD686M010R0400

TPS Series

Low ESR



FEATURES

- Low ESR series of robust MnO_2 solid electrolyte capacitors
- CV range: 0.15-1500µF / 2.5-50V
- 14 case sizes available
- Power supply applications

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

RoHS COMPLIANT

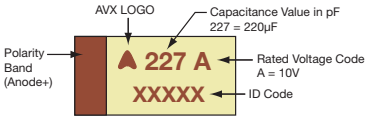
SnPb termination option is not RoHS compliant.

APPLICATIONS

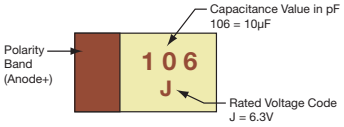
- General medium power DC/DC convertors

MARKING

A, B, C, D, E, F, S, T, V, W, X, Y CASE



P, R CASE



CASE DIMENSIONS: millimeters (inches)

Code	EIA Code	EIA Metric	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	1206	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	1210	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	2312	6032-28	6.00 (0.236)	3.20 (0.126)	2.60 (0.102)	2.20 (0.087)	1.30 (0.051)	2.90 (0.114)
D	2917	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	2917	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)
F	2312	6032-20	6.00 (0.236)	3.20 (0.126)	2.00 (0.079) max.	2.20 (0.087)	1.30 (0.051)	2.90 (0.114)
P	0805	2012-15	2.05 (0.081)	1.35 (0.053)	1.50 (0.059) max.	1.00±0.10 (0.039±0.004)	0.50 (0.020)	0.85 (0.033)
R	0805	2012-12	2.05 (0.081)	1.30 (0.051)	1.20 (0.047) max.	1.00 ±0.10 (0.039±0.004)	0.50 (0.020)	0.85 (0.033)
S	1206	3216-12	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	1210	3528-12	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	2924	7361-38	7.30 (0.287)	6.10 (0.240)	3.55 (0.140)	3.10 (0.120)	1.30 (0.051)	4.40 (0.173)
W	2312	6032-15	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	2917	7343-15	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	2917	7343-20	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)

W1 dimension applies to the termination width for A dimensional area only.

HOW TO ORDER

TPS	C	107	M	010	R	0100	—
Type	**Case Size** See table above	**Capacitance 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 = Pure Tin 7" Reel S = Pure Tin 13" Reel A = Gold Plating 7" Reel B = Gold Plating 13" Reel H = Tin Lead 7" Reel (Contact Manufacturer) K = Tin Lead 13" Reel (Contact Manufacturer) H, K = Non RoHS	**ESR in mΩ**	**Additional characters may be added for special requirements** V = Dry pack Option (selected ratings only)

TECHNICAL SPECIFICATIONS

Technical Data:	All technical data relate to an ambient temperature of +25°C									
Capacitance Range:	0.15 µF to 1500 µF									
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									
Termination Finished:	Sn Plating (standard), Gold and SnPb Plating upon request									
	For AEC-Q200 availability, please contact AVX									

TPS Series

Low ESR

CAPACITANCE AND RATED VOLTAGE RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC (V_R) to 85°C								
µF	Code	2.5V (e)	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)	A(7000)
0.47	474							A(7000)	A(6000) B(4000)	A(6500), B(6000) C(2300)
0.68	684							A(6000)	A(6000)	B(4000)
1.0	105				R(9000)	A(6200)	A(3000), R(6000) S(6000), T(2000)	A(4000) R(2500,4000)	A(3000) B(2000)	B(3000) C(2500)
1.5	155						A(3000)	A(3000) B(1800)	A(3000) B(2500)	C(1500,2000)
2.2	225			R(7000)	A(1800)	A(1800,3500) T(2000)	A(3000), B(1700)	A(2500) B(900,1200,2500)	B(750,1500, 2000), C(1000)	C(1500) D(1200)
3.3	335			A(2100)	T(1500)	A(3500), B(2500)	A(2500) B(1300)	A(1000,1500) B(750,1500,2000)	B(1000) C(700)	C(1000) D(800)
4.7	475			S(4000)	A(1400), B(1400) R(3000,5000)	A(2000) B(800,1500)	A(1800) B(750,1000)	B(700,900,1500) C(700)	B(700,1500) C(600), D(700)	C(800) D(250,300,500,700) X(500)
6.8	685			A(1800)	A(1800), B(1300) T(1800)	A(1500) B(600,1200)	A(1000) B(600,1000) C(700)	B(700) C(500,600,700)	C(350) D(150,400,500)	D(200, 300, 500,600)
10	106		R(3000)	A(1500), B(1500) R(1000,1500,3000) T(1000)	A(900,1800), B(1000) P(2000)(M), S(900) T(1000,2000)	A(1000), B(500,800) C(500), T(800,1000) W(500,600)	B(500,1000) C(500,700) W(250, 500)	B(1800) C(300,500) D(500)	C(600) D(125,300) E(100,150,200), Y(250)	D(500) E(250,300, 400,500)
15	156			A(700,1500)	A(1000) B(450,600), C(700) T(1200)	B(500,800) C(300,700)	B(500) C(400,450)	C(220,300) D(100,300)	C(350,450) D(100,300) Y(250)	E(250) V(250)
22	226			A(300,500,900) B(375,600) C(500), S(900)	A(900) B(400,500,700) C(300), T(800)	B(400,600) C(150,250,300,375) D(700), W(500)	B(400,600) C(100,150,400) D(200,300)	C(275,400) D(100,200,300) F(300)	D(125,200,300,400) E(125,200,300) Y(200)	
33	336			A(600) B(250,350,450,600) T(800)	A(700) 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)	C(400) D(100,200,300) E(100,175, 200,300) Y(200)	D(200,300) E(100,250,300) V(200)	
47	476		A(500)	A(800) B(250,350,500) C(300), T(1200)	B(250,350,500,650) C(200,350) D(100,300) W(125,150,250)	C(110,350) D(80,100,150,200) W(200) X(180), Y(250)	D(75,100,200) E(70,125,150, 200,250) X(200)	D(125,150,250 E(80,100,125) (Y250)	D(300) E(200,250) V(150,200)	
68	686			B(250,350,500) C(150,200) W(110,125,250)	B(600) C(80,100,200,300) D(100,150), W(100,150) Y(100,200)	C(125,200) D(70,100,150) F(200), X(150) Y(150,200,250)	D(70,150, 200,300) E(125,150,200) Y(200)	D(150,200,300) E(125,200) V(80,95,150,200)	V(150,200)	
100	107	B(200)	B(200,250, 350,500) T(400)(M) W(100)	B(250,400) C(75,150), D(300) W(100,150) Y(100)	B(400) C(75,100,150,200) D(50,65,80,100,125, 150), E(125) W(150) X(85,150,200) Y(100,150,200)	C(200) D(60,100,125,150) E(55,100,125,150) F(150,200)(M) Y(100,150,200)	D(85,100,150) E(100,150,200) V(60,85,100,200)	E(150), V(100)		
150	157	B(150)	B(250) C(70,80)	C(50,90,150,200,250) D(50,125), Y(40,50)	C(150), D(50,85,100), E(100), F(200), X(100)(M) Y(100,150,200)	D(60,85,100,125,150) E(50,100), V(45,75) Y(200)(M)	V(80)	V(150)(M)		
220	227	B(150, 200,600) D(45)	D(40,50,100) Y(40,50,75)	C(70,100,125,250) D(50,100,125) E(100), F(200) Y(100,150)	D(40,50,100,150) E(50,60,70,100, 125,150) Y(100,150,200)	D(200)(M) E(50,100,150) V(50,75,100,150)				
330	337	Y(40)	C(100) D(35,45,100) F(200) X(100)	C(80,100) D(45,50,70,100) E(50,100,125,150) V(100), Y(75,100,150)	D(50,65,100,150) E(40,50,60,100) V(40,60,100)	E(200)(M)				
470	477	D(35) F(200) Y(100)	D(45,100) E(35,45,100)	D(45,60,100,200) E(45,50,60,100,200) V(40,55,100), Y(150)	E(45,50,60,100,200) V(40,60,100)					
680	687	D(35,50) E(35,50) Y(100)	D(45,60,100) E(40,60,100)	E(45,60,100) V(35,40,50)	E(150)(M) V(100)(M)					
1000	108	E(30,40) Y(100)(M)	E(40,60) V(25,35,40,50)	E(100)(M), V(40,50)(M)						
1500	158	D(100) E(50) V(30,40)(M)	E(50,75) V(50,75)(M)							

Note for designers - for the highlighted ratings, higher voltage options are now available in the same case size and are recommended for new designs.

Released ratings(M tolerance only) (ESR ratings in mOhms in parentheses)

NOTE: Voltage ratings are minimum values. AVX reserves the right to supply higher voltage ratings in the same case size, to the same reliability standards.

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL Max. (µA)	DF Max. (%)	ESR Max. @ 100kHz (mΩ)	100kHz RMS Current (A)			MSL
										25°C	85°C	125°C	
2.5 Volt @ 85°C													
TPSB107*002#0200	B	100	2.5	85	1.7	125	2.5	8	200	0.652	0.587	0.261	1
TPSB157*002#0150	B	150	2.5	85	1.7	125	3	10	150	0.753	0.677	0.301	1
TPSB227*002#0150	B	220	2.5	85	1.7	125	4.4	16	150	0.753	0.677	0.301	1
TPSB227*002#0200	B	220	2.5	85	1.7	125	4.4	16	200	0.652	0.587	0.261	1
TPSB227*002#0600	B	220	2.5	85	1.7	125	4.4	16	600	0.376	0.339	0.151	1
TPSD227*002#0045	D	220	2.5	85	1.7	125	5.5	8	45	1.826	1.643	0.730	1
TPSY337*002#0040	Y	330	2.5	85	1.7	125	8.2	8	40	1.768	1.591	0.707	1[1)]
TPSD477*002#0035	D	470	2.5	85	1.7	125	11.6	8	35	2.070	1.863	0.828	1
TPSF477*002#0200	F	470	2.5	85	1.7	125	11.8	12	200	0.707	0.636	0.283	1
TPSY477*002#0100	Y	470	2.5	85	1.7	125	11	12	100	1.118	1.006	0.447	1[1)]
TPSD687*002#0035	D	680	2.5	85	1.7	125	17	16	35	2.070	1.863	0.828	1
TPSD687*002#0050	D	680	2.5	85	1.7	125	17	16	50	1.732	1.559	0.693	1
TPSE687*002#0035	E	680	2.5	85	1.7	125	17	10	35	2.171	1.954	0.868	1[1)]
TPSE687*002#0050	E	680	2.5	85	1.7	125	17	10	50	1.817	1.635	0.727	1[1)]
TPSY687*002#0100	Y	680	2.5	85	1.7	125	17	12	100	1.118	1.006	0.447	1[1)]
TPSE108*002#0030	E	1000	2.5	85	1.7	125	25	14	30	2.345	2.111	0.938	1[1)]
TPSE108*002#0040	E	1000	2.5	85	1.7	125	25	14	40	2.031	1.828	0.812	1[1)]
TPSY108M002#0100	Y	1000	2.5	85	1.7	125	25	30	100	1.118	1.006	0.447	1[1)]
TPSD158*002#0100	D	1500	2.5	85	1.7	125	37.5	60	100	1.125	1.102	0.490	1
TPSE158*002#0050	E	1500	2.5	85	1.7	125	37.5	20	50	1.817	1.635	0.727	1[1)]
TPSV158M002#0030	V	1500	2.5	85	1.7	125	30	20	30	2.887	2.598	1.155	1[1)]
TPSV158M002#0040	V	1500	2.5	85	1.7	125	30	20	40	2.500	2.250	1.000	1[1)]
4 Volt @ 85°C													
TPSR106*004#3000	R	10	4	85	2.7	125	0.5	6	3000	0.135	0.122	0.054	1
TPSA476*004#0500	A	47	4	85	2.7	125	1.9	8	500	0.387	0.349	0.155	1
TPSB107*004#0200	B	100	4	85	2.7	125	4	8	200	0.652	0.587	0.261	1
TPSB107*004#0250	B	100	4	85	2.7	125	4	8	250	0.583	0.525	0.233	1
TPSB107*004#0350	B	100	4	85	2.7	125	4	8	350	0.493	0.444	0.197	1
TPSB107*004#0500	B	100	4	85	2.7	125	4	8	500	0.412	0.371	0.165	1
TPST107M004#0500	T	100	4	85	2.7	125	4	14	500	0.400	0.360	0.160	1
TPSW107*004#0100	W	100	4	85	2.7	125	4	6	100	0.949	0.854	0.379	1
TPSB157*004#0250	B	150	4	85	2.7	125	6	10	250	0.583	0.525	0.233	1
TPSC157*004#0070	C	150	4	85	2.7	125	6	6	70	1.254	1.128	0.501	1
TPSC157*004#0080	C	150	4	85	2.7	125	6	6	80	1.173	1.055	0.469	1
TPSD227*004#0040	D	220	4	85	2.7	125	8.8	8	40	1.936	1.743	0.775	1
TPSD227*004#0050	D	220	4	85	2.7	125	8.8	8	50	1.732	1.559	0.693	1
TPSD227*004#0100	D	220	4	85	2.7	125	8.8	8	100	1.225	1.102	0.490	1
TPSY227*004#0040	Y	220	4	85	2.7	125	8.8	8	40	1.768	1.591	0.707	1[1)]
TPSY227*004#0050	Y	220	4	85	2.7	125	8.8	8	50	1.581	1.423	0.632	1[1)]
TPSY227*004#0075	Y	220	4	85	2.7	125	8.8	8	75	1.291	1.162	0.516	1[1)]
TPSC337*004#0100	C	330	4	85	2.7	125	13.2	8	100	1.049	0.944	0.420	1
TPSD337*004#0035	D	330	4	85	2.7	125	13.2	8	35	2.070	1.863	0.828	1
TPSD337*004#0045	D	330	4	85	2.7	125	13.2	8	45	1.826	1.643	0.730	1
TPSD337*004#0100	D	330	4	85	2.7	125	13.2	8	100	1.225	1.102	0.490	1
TPSF337*004#0200	F	330	4	85	2.7	125	13.2	10	200	0.707	0.636	0.283	1
TPSX337*004#0100	X	330	4	85	2.7	125	13.2	8	100	1.000	0.900	0.400	1[1)]
TPSD477*004#0045	D	470	4	85	2.7	125	18.8	12	45	1.826	1.643	0.730	1
TPSD477*004#0100	D	470	4	85	2.7	125	18.8	12	100	1.225	1.102	0.490	1
TPSE477*004#0035	E	470	4	85	2.7	125	18.8	10	35	2.171	1.954	0.868	1[1)]
TPSE477*004#0045	E	470	4	85	2.7	125	18.8	10	45	1.915	1.723	0.766	1[1)]
TPSE477*004#0100	E	470	4	85	2.7	125	18.8	10	100	1.285	1.156	0.514	1[1)]
TPSD687*004#0045	D	680	4	85	2.7	125	27.2	14	45	1.826	1.643	0.730	1
TPSD687*004#0060	D	680	4	85	2.7	125	27.2	14	60	1.581	1.423	0.632	1
TPSD687*004#0100	D	680	4	85	2.7	125	27.2	14	100	1.225	1.102	0.490	1
TPSE687*004#0040	E	680	4	85	2.7	125	27.2	10	40	2.031	1.828	0.812	1[1)]
TPSE687*004#0060	E	680	4	85	2.7	125	27.2	10	60	1.658	1.492	0.663	1[1)]
TPSE687*004#0100	E	680	4	85	2.7	125	27.2	10	100	1.285	1.156	0.514	1[1)]
TPSE108*004#0040	E	1000	4	85	2.7	125	40	14	40	2.031	1.828	0.812	1[1)]
TPSE108*004#0060	E	1000	4	85	2.7	125	40	14	60	1.658	1.492	0.663	1[1)]
TPSV108*004#0025	V	1000	4	85	2.7	125	40	16	25	3.162	2.846	1.265	1[1)]
TPSV108*004#0035	V	1000	4	85	2.7	125	40	16	35	2.673	2.405	1.069	1[1)]
TPSV108*004#0040	V	1000	4	85	2.7	125	40	16	40	2.500	2.250	1.000	1[1)]
TPSV108*004#0050	V	1000	4	85	2.7	125	40	16	50	2.236	2.012	0.894	1[1)]
TPSE158*004#0050	E	1500	4	85	2.7	125	60	30	50	1.817	1.635	0.727	1[1)]
TPSE158*004#0075	E	1500	4	85	2.7	125	60	30	75	1.483	1.335	0.593	1[1)]
TPSV158M004#0050	V	1500	4	85	2.7	125	60	30	50	2.236	2.012	0.894	1[1)]
TPSV158M004#0075	V	1500	4	85	2.7	125	60	30	75	1.826	1.643	0.730	1[1)]
6.3 Volt @ 85°C													
TPSR225*006#7000	R	2.2	6.3	85	4	125	0.5	6	7000	0.089	0.080	0.035	1
TPSA335*006#2100	A	3.3	6.3	85	4	125	0.5	6	2100	0.189	0.170	0.076	1
TPSS475*006#4000	S	4.7	6.3	85	4	125	0.5	6	4000	0.127	0.115	0.051	1

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL Max. (µA)	DF Max. (%)	ESR Max. @ 100kHz (mΩ)	100kHz RMS Current (A)			MSL
										25°C	85°C	125°C	
TPSA685*006#1800	A	6.8	6.3	85	4	125	0.5	6	1800	0.204	0.184	0.082	1
TPSA106*006#1500	A	10	6.3	85	4	125	0.6	6	1500	0.224	0.201	0.089	1
TPSB106*006#1500	B	10	6.3	85	4	125	0.6	6	1500	0.238	0.214	0.095	1
TPSR106*006#1000	R	10	6.3	85	4	125	0.6	8	1000	0.235	0.211	0.094	1
TPSR106*006#1500	R	10	6.3	85	4	125	0.6	8	1500	0.191	0.172	0.077	1
TPSR106*006#3000	R	10	6.3	85	4	125	0.6	8	3000	0.135	0.122	0.054	1
TPST106*006#1000	T	10	6.3	85	4	125	0.6	6	1000	0.283	0.255	0.113	1
TPSA156*006#0700	A	15	6.3	85	4	125	0.9	6	700	0.327	0.295	0.131	1
TPSA156*006#1500	A	15	6.3	85	4	125	0.9	6	1500	0.224	0.201	0.089	1
TPSA226*006#0300	A	22	6.3	85	4	125	1.4	6	300	0.500	0.450	0.200	1
TPSA226*006#0500	A	22	6.3	85	4	125	1.4	6	500	0.387	0.349	0.155	1
TPSA226*006#0900	A	22	6.3	85	4	125	1.4	6	900	0.289	0.260	0.115	1
TPSB226*006#0375	B	22	6.3	85	4	125	1.4	6	375	0.476	0.428	0.190	1
TPSB226*006#0600	B	22	6.3	85	4	125	1.4	6	600	0.376	0.339	0.151	1
TPSC226*006#0500	C	22	6.3	85	4	125	1.4	6	500	0.469	0.422	0.188	1
TPSS226*006#0900	S	22	6.3	85	4	125	1.3	10	900	0.269	0.242	0.107	1
TPSA336*006#0600	A	33	6.3	85	4	125	2.1	8	600	0.354	0.318	0.141	1
TPSB336*006#0250	B	33	6.3	85	4	125	2.1	6	250	0.583	0.525	0.233	1
TPSB336*006#0350	B	33	6.3	85	4	125	2.1	6	350	0.493	0.444	0.197	1
TPSB336*006#0450	B	33	6.3	85	4	125	2.1	6	450	0.435	0.391	0.174	1
TPSB336*006#0600	B	33	6.3	85	4	125	2.1	6	600	0.376	0.339	0.151	1
TPST336*006#0800	T	33	6.3	85	4	125	2.1	10	800	0.316	0.285	0.126	1
TPSA476*006#0800	A	47	6.3	85	4	125	2.8	10	800	0.306	0.276	0.122	1
TPSB476*006#0250	B	47	6.3	85	4	125	3	6	250	0.583	0.525	0.233	1
TPSB476*006#0350	B	47	6.3	85	4	125	3	6	350	0.493	0.444	0.197	1
TPSB476*006#0500	B	47	6.3	85	4	125	3	6	500	0.412	0.371	0.165	1
TPSC476*006#0300	C	47	6.3	85	4	125	3	6	300	0.606	0.545	0.242	1
TPST476*006#1200	T	47	6.3	85	4	125	2.8	10	1200	0.258	0.232	0.103	1
TPSB686*006#0250	B	68	6.3	85	4	125	4	8	250	0.583	0.525	0.233	1
TPSB686*006#0350	B	68	6.3	85	4	125	4	8	350	0.493	0.444	0.197	1
TPSB686*006#0500	B	68	6.3	85	4	125	4	8	500	0.412	0.371	0.165	1
TPSC686*006#0150	C	68	6.3	85	4	125	4.3	6	150	0.856	0.771	0.343	1
TPSC686*006#0200	C	68	6.3	85	4	125	4.3	6	200	0.742	0.667	0.297	1
TPSW686*006#0110	W	68	6.3	85	4	125	4.3	6	110	0.905	0.814	0.362	1
TPSW686*006#0125	W	68	6.3	85	4	125	4.3	6	125	0.849	0.764	0.339	1
TPSW686*006#0250	W	68	6.3	85	4	125	4.3	6	250	0.600	0.540	0.240	1
TPSB107*006#0250	B	100	6.3	85	4	125	6.3	10	250	0.583	0.525	0.233	1
TPSB107*006#0400	B	100	6.3	85	4	125	6.3	10	400	0.461	0.415	0.184	1
TPSC107*006#0075	C	100	6.3	85	4	125	6.3	6	75	1.211	1.090	0.484	1
TPSC107*006#0150	C	100	6.3	85	4	125	6.3	6	150	0.856	0.771	0.343	1
TPSD107*006#0300	D	100	6.3	85	4	125	6.3	6	300	0.707	0.636	0.283	1
TPSW107*006#0100	W	100	6.3	85	4	125	6.3	6	100	0.949	0.854	0.379	1
TPSW107*006#0150	W	100	6.3	85	4	125	6.3	6	150	0.775	0.697	0.310	1
TPSY107*006#0100	Y	100	6.3	85	4	125	6.3	6	100	1.118	1.006	0.447	1[1)]
TPSC157*006#0050	C	150	6.3	85	4	125	9.5	6	50	1.483	1.335	0.593	1
TPSC157*006#0090	C	150	6.3	85	4	125	9.5	6	90	1.106	0.995	0.442	1
TPSC157*006#0150	C	150	6.3	85	4	125	9.5	6	150	0.856	0.771	0.343	1
TPSC157*006#0200	C	150	6.3	85	4	125	9.5	6	200	0.742	0.667	0.297	1
TPSC157*006#0250	C	150	6.3	85	4	125	9.5	6	250	0.663	0.597	0.265	1
TPSD157*006#0050	D	150	6.3	85	4	125	9.5	6	50	1.732	1.559	0.693	1
TPSD157*006#0125	D	150	6.3	85	4	125	9.5	6	125	1.095	0.986	0.438	1
TPSY157*006#0040	Y	150	6.3	85	4	125	9.5	6	40	1.768	1.591	0.707	1[1)]
TPSY157*006#0050	Y	150	6.3	85	4	125	9.5	6	50	1.581	1.423	0.632	1[1)]
TPSC227*006#0070	C	220	6.3	85	4	125	13.9	8	70	1.254	1.128	0.501	1
TPSC227*006#0100	C	220	6.3	85	4	125	13.9	8	100	1.049	0.944	0.420	1
TPSC227*006#0125	C	220	6.3	85	4	125	13.9	8	125	0.938	0.844	0.375	1
TPSC227*006#0250	C	220	6.3	85	4	125	13.9	8	250	0.663	0.597	0.265	1
TPSD227*006#0050	D	220	6.3	85	4	125	13.9	8	50	1.732	1.559	0.693	1
TPSD227*006#0100	D	220	6.3	85	4	125	13.9	8	100	1.225	1.102	0.490	1
TPSD227*006#0125	D	220	6.3	85	4	125	13.9	8	125	1.095	0.986	0.438	1
TPSE227*006#0100	E	220	6.3	85	4	125	13.9	8	100	1.285	1.156	0.514	1[1)]
TPSF227*006#0200	F	220	6.3	85	4	125	13.2	10	200	0.707	0.636	0.283	1
TPSY227*006#0100	Y	220	6.3	85	4	125	13.9	8	100	1.118	1.006	0.447	1[1)]
TPSY227*006#0150	Y	220	6.3	85	4	125	13.9	8	150	0.913	0.822	0.365	1[1)]
TPSC337*006#0080	C	330	6.3	85	4	125	19.8	12	80	1.173	1.055	0.469	1
TPSC337*006#0100	C	330	6.3	85	4	125	19.8	12	100	1.049	0.944	0.420	1
TPSD337*006#0045	D	330	6.3	85	4	125	20.8	8	45	1.826	1.643	0.730	1
TPSD337*006#0050	D	330	6.3	85	4	125	20.8	8	50	1.732	1.559	0.693	1
TPSD337*006#0070	D	330	6.3	85	4	125	20.8	8	70	1.464	1.317	0.586	1
TPSD337*006#0100	D	330	6.3	85	4	125	20.8	8	100	1.225	1.102	0.490	1
TPSE337*006#0050	E	330	6.3	85	4	125	20.8	8	50	1.817	1.635	0.727	1[1)]

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL Max. (µA)	DF Max. (%)	ESR Max. @ 100kHz (mΩ)	100kHz RMS Current (A)			MSL
										25°C	85°C	125°C	
TPSE337*006#0100	E	330	6.3	85	4	125	20.8	8	100	1.285	1.156	0.514	1[1)]
TPSE337*006#0125	E	330	6.3	85	4	125	20.8	8	125	1.149	1.034	0.460	1[1)]
TPSE337*006#0150	E	330	6.3	85	4	125	20.8	8	150	1.049	0.944	0.420	1[1)]
TPSV337*006#0100	V	330	6.3	85	4	125	20.8	8	100	1.581	1.423	0.632	1[1)]
TPSY337*006#0075	Y	330	6.3	85	4	125	20.8	12	75	1.291	1.162	0.516	1[1)]
TPSY337*006#0100	Y	330	6.3	85	4	125	20.8	12	100	1.118	1.006	0.447	1[1)]
TPSY337*006#0150	Y	330	6.3	85	4	125	20.8	12	150	0.913	0.822	0.365	1[1)]
TPSD477*006#0045	D	470	6.3	85	4	125	28	12	45	1.826	1.643	0.730	1
TPSD477*006#0060	D	470	6.3	85	4	125	28	12	60	1.581	1.423	0.632	1
TPSD477*006#0100	D	470	6.3	85	4	125	28	12	100	1.225	1.102	0.490	1
TPSD477*006#0200	D	470	6.3	85	4	125	28	12	200	0.866	0.779	0.346	1
TPSE477*006#0045	E	470	6.3	85	4	125	28	10	45	1.915	1.723	0.766	1[1)]
TPSE477*006#0050	E	470	6.3	85	4	125	28	10	50	1.817	1.635	0.727	1[1)]
TPSE477*006#0060	E	470	6.3	85	4	125	28	10	60	1.658	1.492	0.663	1[1)]
TPSE477*006#0100	E	470	6.3	85	4	125	28	10	100	1.285	1.156	0.514	1[1)]
TPSE477*006#0200	E	470	6.3	85	4	125	28	10	200	0.908	0.817	0.363	1[1)]
TPSV477*006#0040	V	470	6.3	85	4	125	28	10	40	2.500	2.250	1.000	1[1)]
TPSV477*006#0055	V	470	6.3	85	4	125	28	10	55	2.132	1.919	0.853	1[1)]
TPSV477*006#0100	V	470	6.3	85	4	125	28	10	100	1.581	1.423	0.632	1[1)]
TPSY477*006#0150	Y	470	6,3	85	4	125	28.2	20	150	0.913	0.822	0.365	1[1)]
TPSE687*006#0045	E	680	6.3	85	4	125	42.8	10	45	1.915	1.723	0.766	1[1)]
TPSE687*006#0060	E	680	6.3	85	4	125	42.8	10	60	1.658	1.492	0.663	1[1)]
TPSE687*006#0100	E	680	6.3	85	4	125	42.8	10	100	1.285	1.156	0.514	1[1)]
TPSV687*006#0035	V	680	6.3	85	4	125	42.8	14	35	2.673	2.405	1.069	1[1)]
TPSV687*006#0040	V	680	6.3	85	4	125	42.8	10	40	2.500	2.250	1.000	1[1)]
TPSV687*006#0050	V	680	6.3	85	4	125	42.8	10	50	2.236	2.012	0.894	1[1)]
TPSE108M006#0100	E	1000	6.3	85	4	125	60	20	100	1.285	1.156	0.514	1[1)]
TPSV108M006#0040	V	1000	6.3	85	4	125	60	16	40	2.500	2.250	1.000	1[1)]
TPSV108M006#0050	V	1000	6.3	85	4	125	60	16	50	2.236	2.012	0.894	1[1)]
10 Volt @ 85°C													
TPSR105*010#9000	R	1	10	85	7	125	0.5	4	9000	0.078	0.070	0.031	1
TPSA225*010#1800	A	2.2	10	85	7	125	0.5	6	1800	0.204	0.184	0.082	1
TPST335*010#1500	T	3.3	10	85	7	125	0.5	6	1500	0.231	0.208	0.092	1
TPSA475*010#1400	A	4.7	10	85	7	125	0.5	6	1400	0.231	0.208	0.093	1
TPSB475*010#1400	B	4.7	10	85	7	125	0.5	6	1400	0.246	0.222	0.099	1
TPSR475*010#3000	R	4.7	10	85	7	125	0.5	6	3000	0.135	0.122	0.054	1
TPSR475*010#5000	R	4.7	10	85	7	125	0.5	6	5000	0.105	0.094	0.042	1
TPSA685*010#1800	A	6.8	10	85	7	125	0.7	6	1800	0.204	0.184	0.082	1
TPSB685*010#1300	B	6.8	10	85	7	125	0.7	6	1300	0.256	0.230	0.102	1
TPST685*010#1800	T	6.8	10	85	7	125	0.7	6	1800	0.211	0.190	0.084	1
TPSA106*010#0900	A	10	10	85	7	125	1	6	900	0.289	0.260	0.115	1
TPSA106*010#1800	A	10	10	85	7	125	1	6	1800	0.204	0.184	0.082	1
TPSB106*010#1000	B	10	10	85	7	125	1	6	1000	0.292	0.262	0.117	1
TPSP106M010#2000	P	10	10	85	7	125	1	8	2000	0.173	0.156	0.069	1
TPSS106*010#0900	S	10	10	85	7	125	1	8	900	0.269	0.242	0.107	1
TPST106*010#1000	T	10	10	85	7	125	1	6	1000	0.283	0.255	0.113	1
TPST106*010#2000	T	10	10	85	7	125	1	6	2000	0.200	0.180	0.080	1
TPSA156*010#1000	A	15	10	85	7	125	1.5	6	1000	0.274	0.246	0.110	1
TPSB156*010#0450	B	15	10	85	7	125	1.5	6	450	0.435	0.391	0.174	1
TPSB156*010#0600	B	15	10	85	7	125	1.5	6	600	0.376	0.339	0.151	1
TPSC156*010#0700	C	15	10	85	7	125	1.5	6	700	0.396	0.357	0.159	1
TPST156*010#1200	T	15	10	85	7	125	1.5	8	1200	0.258	0.232	0.103	1
TPSA226*010#0900	A	22	10	85	7	125	2.2	8	900	0.289	0.260	0.115	1
TPSB226*010#0400	B	22	10	85	7	125	2.2	6	400	0.461	0.415	0.184	1
TPSB226*010#0500	B	22	10	85	7	125	2.2	6	500	0.412	0.371	0.165	1
TPSB226*010#0700	B	22	10	85	7	125	2.2	6	700	0.348	0.314	0.139	1
TPSC226*010#0300	C	22	10	85	7	125	2.2	6	300	0.606	0.545	0.242	1
TPST226*010#0800	T	22	10	85	7	125	2.2	8	800	0.316	0.285	0.126	1
TPSA336*010#0700	A	33	10	85	7	125	3.3	8	700	0.327	0.295	0.131	1
TPSB336*010#0250	B	33	10	85	7	125	3.3	6	250	0.583	0.525	0.233	1
TPSB336*010#0425	B	33	10	85	7	125	3.3	6	425	0.447	0.402	0.179	1
TPSB336*010#0500	B	33	10	85	7	125	3.3	6	500	0.412	0.371	0.165	1
TPSB336*010#0650	B	33	10	85	7	125	3.3	6	650	0.362	0.325	0.145	1
TPSC336*010#0150	C	33	10	85	7	125	3.3	6	150	0.856	0.771	0.343	1
TPSC336*010#0375	C	33	10	85	7	125	3.3	6	375	0.542	0.487	0.217	1
TPSC336*010#0500	C	33	10	85	7	125	3.3	6	500	0.469	0.422	0.188	1
TPSW336*010#0350	W	33	10	85	7	125	3.3	6	350	0.507	0.456	0.203	1
TPSB476*010#0250	B	47	10	85	7	125	4.7	8	250	0.583	0.525	0.233	1
TPSB476*010#0350	B	47	10	85	7	125	4.7	8	350	0.493	0.444	0.197	1
TPSB476*010#0500	B	47	10	85	7	125	4.7	8	500	0.412	0.371	0.165	1
TPSB476*010#0650	B	47	10	85	7	125	4.7	8	650	0.362	0.325	0.145	1

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL Max. (µA)	DF Max. (%)	ESR Max. @ 100kHz (mΩ)	100kHz RMS Current (A)			MSL
										25°C	85°C	125°C	
TPSC476*010#0200	C	47	10	85	7	125	4.7	6	200	0.742	0.667	0.297	1
TPSC476*010#0350	C	47	10	85	7	125	4.7	6	350	0.561	0.505	0.224	1
TPSD476*010#0100	D	47	10	85	7	125	4.7	6	100	1.225	1.102	0.490	1
TPSD476*010#0300	D	47	10	85	7	125	4.7	6	300	0.707	0.636	0.283	1
TPSW476*010#0125	W	47	10	85	7	125	4.7	6	125	0.849	0.764	0.339	1
TPSW476*010#0150	W	47	10	85	7	125	4.7	6	150	0.775	0.697	0.310	1
TPSW476*010#0250	W	47	10	85	7	125	4.7	6	250	0.600	0.540	0.240	1
TPSB686*010#0600	B	68	10	85	7	125	6.8	8	600	0.376	0.339	0.151	1
TPSC686*010#0080	C	68	10	85	7	125	6.8	6	80	1.173	1.055	0.469	1
TPSC686*010#0100	C	68	10	85	7	125	6.8	6	100	1.049	0.944	0.420	1
TPSC686*010#0200	C	68	10	85	7	125	6.8	6	200	0.742	0.667	0.297	1
TPSC686*010#0300	C	68	10	85	7	125	6.8	6	300	0.606	0.545	0.242	1
TPSD686*010#0100	D	68	10	85	7	125	6.8	6	100	1.225	1.102	0.490	1
TPSD686*010#0150	D	68	10	85	7	125	6.8	6	150	1.000	0.900	0.400	1
TPSY686*010#0100	Y	68	10	85	7	125	6.8	6	100	1.118	1.006	0.447	1[1)]
TPSY686*010#0200	Y	68	10	85	7	125	6.8	6	200	0.791	0.712	0.316	1[1)]
TPSW686*010#0100	W	68	10	85	7	125	6.8	6	100	0.949	0.854	0.379	1
TPSW686*010#0150	W	68	10	85	7	125	6.8	6	150	0.775	0.697	0.310	1
TPSB107*010#0400	B	100	10	85	7	125	10	8	400	0.461	0.415	0.184	1
TPSC107*010#0075	C	100	10	85	7	125	10	8	75	1.211	1.090	0.484	1
TPSC107*010#0100	C	100	10	85	7	125	10	8	100	1.049	0.944	0.420	1
TPSC107*010#0150	C	100	10	85	7	125	10	8	150	0.856	0.771	0.343	1
TPSC107*010#0200	C	100	10	85	7	125	10	8	200	0.742	0.667	0.297	1
TPSD107*010#0050	D	100	10	85	7	125	10	6	50	1.732	1.559	0.693	1
TPSD107*010#0065	D	100	10	85	7	125	10	6	65	1.519	1.367	0.608	1
TPSD107*010#0080	D	100	10	85	7	125	10	6	80	1.369	1.232	0.548	1
TPSD107*010#0100	D	100	10	85	7	125	10	6	100	1.225	1.102	0.490	1
TPSD107*010#0125	D	100	10	85	7	125	10	6	125	1.095	0.986	0.438	1
TPSD107*010#0150	D	100	10	85	7	125	10	6	150	1.000	0.900	0.400	1
TPSE107*010#0125	E	100	10	85	7	125	10	6	125	1.149	1.034	0.460	1[1)]
TPSW107*010#0150	W	100	10	85	7	125	10	6	150	0.775	0.697	0.310	1
TPSX107*010#0085	X	100	10	85	7	125	10	8	85	1.085	0.976	0.434	1[1)]
TPSX107*010#0150	X	100	10	85	7	125	10	8	150	0.816	0.735	0.327	1[1)]
TPSX107*010#0200	X	100	10	85	7	125	10	8	200	0.707	0.636	0.283	1[1)]
TPSY107*010#0100	Y	100	10	85	7	125	10	6	100	1.118	1.006	0.447	1[1)]
TPSY107*010#0150	Y	100	10	85	7	125	10	6	150	0.913	0.822	0.365	1[1)]
TPSY107*010#0200	Y	100	10	85	7	125	10	6	200	0.791	0.712	0.316	1[1)]
TPSC157*010#0150	C	150	10	85	7	125	15	8	150	0.856	0.771	0.343	1
TPSD157*010#0050	D	150	10	85	7	125	15	8	50	1.732	1.559	0.693	1
TPSD157*010#0085	D	150	10	85	7	125	15	8	85	1.328	1.196	0.531	1
TPSD157*010#0100	D	150	10	85	7	125	15	8	100	1.225	1.102	0.490	1
TPSE157*010#0100	E	150	10	85	7	125	15	8	100	1.285	1.156	0.514	1[1)]
TPSF157*010#0200	F	150	10	85	7	125	15	10	200	0.707	0.636	0.283	1
TPSX157M010#0100	X	150	10	85	7	125	15	6	100	1.000	0.900	0.400	1[1)]
TPSY157*010#0100	Y	150	10	85	7	125	15	6	100	1.118	1.006	0.447	1[1)]
TPSY157*010#0150	Y	150	10	85	7	125	15	6	150	0.913	0.822	0.365	1[1)]
TPSY157*010#0200	Y	150	10	85	7	125	15	6	200	0.791	0.712	0.316	1[1)]
TPSD227*010#0040	D	220	10	85	7	125	22	8	40	1.936	1.743	0.775	1
TPSD227*010#0050	D	220	10	85	7	125	22	8	50	1.732	1.559	0.693	1
TPSD227*010#0100	D	220	10	85	7	125	22	8	100	1.225	1.102	0.490	1
TPSD227*010#0150	D	220	10	85	7	125	22	8	150	1.000	0.900	0.400	1
TPSE227*010#0050	E	220	10	85	7	125	22	8	50	1.817	1.635	0.727	1[1)]
TPSE227*010#0060	E	220	10	85	7	125	22	8	60	1.658	1.492	0.663	1[1)]
TPSE227*010#0070	E	220	10	85	7	125	22	8	70	1.535	1.382	0.614	1[1)]
TPSE227*010#0100	E	220	10	85	7	125	22	8	100	1.285	1.156	0.514	1[1)]
TPSE227*010#0125	E	220	10	85	7	125	22	8	125	1.149	1.034	0.460	1[1)]
TPSE227*010#0150	E	220	10	85	7	125	22	8	150	1.049	0.944	0.420	1[1)]
TPSY227*010#0100	Y	220	10	85	7	125	22	10	100	1.118	1.006	0.447	1[1)]
TPSY227*010#0150	Y	220	10	85	7	125	22	10	150	0.913	0.822	0.365	1[1)]
TPSY227*010#0200	Y	220	10	85	7	125	22	10	200	0.791	0.712	0.316	1[1)]
TPSD337*010#0050	D	330	10	85	7	125	33	8	50	1.732	1.559	0.693	1
TPSD337*010#0065	D	330	10	85	7	125	33	8	65	1.519	1.367	0.608	1
TPSD337*010#0100	D	330	10	85	7	125	33	8	100	1.225	1.102	0.490	1
TPSD337*010#0150	D	330	10	85	7	125	33	8	150	1.000	0.900	0.400	1
TPSE337*010#0040	E	330	10	85	7	125	33	8	40	2.031	1.828	0.812	1[1)]
TPSE337*010#0050	E	330	10	85	7	125	33	8	50	1.817	1.635	0.727	1[1)]
TPSE337*010#0060	E	330	10	85	7	125	33	8	60	1.658	1.492	0.663	1[1)]
TPSE337*010#0100	E	330	10	85	7	125	33	8	100	1.285	1.156	0.514	1[1)]
TPSV337*010#0040	V	330	10	85	7	125	33	10	40	2.500	2.250	1.000	1[1)]
TPSV337*010#0060	V	330	10	85	7	125	33	10	60	2.041	1.837	0.816	1[1)]
TPSV337*010#0100	V	330	10	85	7	125	33	10	100	1.581	1.423	0.632	1[1)]
TPSE477*010#0045	E	470	10	85	7	125	47	10	45	1.915	1.723	0.766	1[1)]

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL Max. (µA)	DF Max. (%)	ESR Max. @ 100kHz (mΩ)	100kHz RMS Current (A)			MSL
										25°C	85°C	125°C	
TPSE477*010#0050	E	470	10	85	7	125	47	10	50	1.817	1.635	0.727	1[1)]
TPSE477*010#0060	E	470	10	85	7	125	47	10	60	1.658	1.492	0.663	1[1)]
TPSE477*010#0100	E	470	10	85	7	125	47	10	100	1.285	1.156	0.514	1[1)]
TPSE477*010#0200	E	470	10	85	7	125	47	10	200	0.908	0.817	0.363	1[1)]
TPSV477*010#0040	V	470	10	85	7	125	47	10	40	2.500	2.250	1.000	1[1)]
TPSV477*010#0060	V	470	10	85	7	125	47	10	60	2.041	1.837	0.816	1[1)]
TPSV477*010#0100	V	470	10	85	7	125	47	10	100	1.581	1.423	0.632	1[1)]
TPSE687M010#0150V	E	680	10	85	7	125	68	18	150	1.049	0.944	0.420	3
TPSV687M010#0100V	V	680	10	85	7	125	68	18	100	1.581	1.423	0.632	3
16 Volt @ 85°C													
TPSA105*016#6200	A	1	16	85	10	125	0.5	4	6200	0.110	0.099	0.044	1
TPSA225*016#1800	A	2.2	16	85	10	125	0.5	6	1800	0.204	0.184	0.082	1
TPSA225*016#3500	A	2.2	16	85	10	125	0.5	6	3500	0.146	0.132	0.059	1
TPST225*016#2000	T	2.2	16	85	10	125	0.5	6	2000	0.200	0.180	0.080	1
TPSA335*016#3500	A	3.3	16	85	10	125	0.5	6	3500	0.146	0.132	0.059	1
TPSB335*016#2500	B	3.3	16	85	10	125	0.5	6	2500	0.184	0.166	0.074	1
TPSA475*016#2000	A	4.7	16	85	10	125	0.8	6	2000	0.194	0.174	0.077	1
TPSB475*016#0800	B	4.7	16	85	10	125	0.8	6	800	0.326	0.293	0.130	1
TPSB475*016#1500	B	4.7	16	85	10	125	0.8	6	1500	0.238	0.214	0.095	1
TPSA685*016#1500	A	6.8	16	85	10	125	1.1	6	1500	0.224	0.201	0.089	1
TPSB685*016#0600	B	6.8	16	85	10	125	1.1	6	600	0.376	0.339	0.151	1
TPSB685*016#1200	B	6.8	16	85	10	125	1.1	6	1200	0.266	0.240	0.106	1
TPSA106*016#1000	A	10	16	85	10	125	1.6	6	1000	0.274	0.246	0.110	1
TPSB106*016#0500	B	10	16	85	10	125	1.6	6	500	0.412	0.371	0.165	1
TPSB106*016#0800	B	10	16	85	10	125	1.6	6	800	0.326	0.293	0.130	1
TPSC106*016#0500	C	10	16	85	10	125	1.6	6	500	0.469	0.422	0.188	1
TPST106*016#0800	T	10	16	85	10	125	1.6	8	800	0.316	0.285	0.126	1
TPST106*016#1000	T	10	16	85	10	125	1.6	8	1000	0.283	0.255	0.113	1
TPSW106*016#0500	W	10	16	85	10	125	1.6	6	500	0.424	0.382	0.170	1
TPSW106*016#0600	W	10	16	85	10	125	1.6	6	600	0.387	0.349	0.155	1
TPSB156*016#0500	B	15	16	85	10	125	2.4	6	500	0.412	0.371	0.165	1
TPSB156*016#0800	B	15	16	85	10	125	2.4	6	800	0.326	0.293	0.130	1
TPSC156*016#0300	C	15	16	85	10	125	2.4	6	300	0.606	0.545	0.242	1
TPSC156*016#0700	C	15	16	85	10	125	2.4	6	700	0.396	0.357	0.159	1
TPSB226*016#0400	B	22	16	85	10	125	3.5	6	400	0.461	0.415	0.184	1
TPSB226*016#0600	B	22	16	85	10	125	3.5	6	600	0.376	0.339	0.151	1
TPSC226*016#0150	C	22	16	85	10	125	3.5	6	150	0.856	0.771	0.343	1
TPSC226*016#0250	C	22	16	85	10	125	3.5	6	250	0.663	0.597	0.265	1
TPSC226*016#0300	C	22	16	85	10	125	3.5	6	300	0.606	0.545	0.242	1
TPSC226*016#0375	C	22	16	85	10	125	3.5	6	375	0.542	0.487	0.217	1
TPSD226*016#0700	D	22	16	85	10	125	3.5	6	700	0.463	0.417	0.185	1
TPSW226*016#0500	W	22	16	85	10	125	3.5	6	500	0.424	0.382	0.170	1
TPSB336*016#0350	B	33	16	85	10	125	5.3	8	350	0.493	0.444	0.197	1
TPSB336*016#0500	B	33	16	85	10	125	5.3	8	500	0.412	0.371	0.165	1
TPSC336*016#0100	C	33	16	85	10	125	5.3	6	100	1.049	0.944	0.420	1
TPSC336*016#0150	C	33	16	85	10	125	5.3	6	150	0.856	0.771	0.343	1
TPSC336*016#0225	C	33	16	85	10	125	5.3	6	225	0.699	0.629	0.280	1
TPSC336*016#0300	C	33	16	85	10	125	5.3	6	300	0.606	0.545	0.242	1
TPSD336*016#0200	D	33	16	85	10	125	5.3	6	200	0.866	0.779	0.346	1
TPSW336*016#0140	W	33	16	85	10	125	5.3	6	140	0.802	0.722	0.321	1
TPSW336*016#0175	W	33	16	85	10	125	5.3	6	175	0.717	0.645	0.287	1
TPSW336*016#0250	W	33	16	85	10	125	5.3	6	250	0.600	0.540	0.240	1
TPSW336*016#0400	W	33	16	85	10	125	5.3	6	400	0.474	0.427	0.190	1
TPSW336*016#0500	W	33	16	85	10	125	5.3	6	500	0.424	0.382	0.170	1
TPSY336*016#0300	Y	33	16	85	10	125	5.3	6	300	0.645	0.581	0.258	1[1)]
TPSY336*016#0400	Y	33	16	85	10	125	5.3	6	400	0.559	0.503	0.224	1[1)]
TPSC476*016#0110	C	47	16	85	10	125	7.5	6	110	1.000	0.900	0.400	1
TPSC476*016#0350	C	47	16	85	10	125	7.5	6	350	0.561	0.505	0.224	1
TPSD476*016#0080	D	47	16	85	10	125	7.5	6	80	1.369	1.232	0.548	1
TPSD476*016#0100	D	47	16	85	10	125	7.5	6	100	1.225	1.102	0.490	1
TPSD476*016#0150	D	47	16	85	10	125	7.5	6	150	1.000	0.900	0.400	1
TPSD476*016#0200	D	47	16	85	10	125	7.5	6	200	0.866	0.779	0.346	1
TPSW476*016#0200	W	47	16	85	10	125	7.5	6	200	0.671	0.604	0.268	1
TPSX476*016#0180	X	47	16	85	10	125	7.5	6	180	0.745	0.671	0.298	1[1)]
TPSY476*016#0250	Y	47	16	85	10	125	7.5	6	250	0.707	0.636	0.283	1[1)]
TPSC686*016#0125	C	68	16	85	10	125	10.9	6	125	0.938	0.844	0.375	1
TPSC686*016#0200	C	68	16	85	10	125	10.9	6	200	0.742	0.667	0.297	1
TPSD686*016#0070	D	68	16	85	10	125	10.9	6	70	1.464	1.317	0.586	1
TPSD686*016#0100	D	68	16	85	10	125	10.9	6	100	1.225	1.102	0.490	1
TPSD686*016#0150	D	68	16	85	10	125	10.9	6	150	1.000	0.900	0.400	1
TPSF686*016#0200	F	68	16	85	10	125	10.9	10	200	0.707	0.636	0.283	1
TPSX686*016#0150	X	68	16	85	10	125	10.9	8	150	0.816	0.735	0.327	1[1)]

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL Max. (µA)	DF Max. (%)	ESR Max. @ 100kHz (mΩ)	100kHz RMS Current (A)			MSL
										25°C	85°C	125°C	
TPSY686*016#0150	Y	68	16	85	10	125	10.9	6	150	0.913	0.822	0.365	1[1)]
TPSY686*016#0200	Y	68	16	85	10	125	10.9	6	200	0.791	0.712	0.316	1[1)]
TPSY686*016#0250	Y	68	16	85	10	125	10.9	6	250	0.707	0.636	0.283	1[1)]
TPSC107*016#0200	C	100	16	85	10	125	16	8	200	0.742	0.667	0.297	1
TPSD107*016#0060	D	100	16	85	10	125	16	6	60	1.581	1.423	0.632	1
TPSD107*016#0100	D	100	16	85	10	125	16	6	100	1.225	1.102	0.490	1
TPSD107*016#0125	D	100	16	85	10	125	16	6	125	1.095	0.986	0.438	1
TPSD107*016#0150	D	100	16	85	10	125	16	6	150	1.000	0.900	0.400	1
TPSE107*016#0055	E	100	16	85	10	125	16	6	55	1.732	1.559	0.693	1[1)]
TPSE107*016#0100	E	100	16	85	10	125	16	6	100	1.285	1.156	0.514	1[1)]
TPSE107*016#0125	E	100	16	85	10	125	16	6	125	1.149	1.034	0.460	1[1)]
TPSE107*016#0150	E	100	16	85	10	125	16	6	150	1.049	0.944	0.420	1[1)]
TPSF107M016#0150	F	100	16	85	10	125	16	10	150	0.816	0.735	0.327	1
TPSF107M016#0200	F	100	16	85	10	125	16	10	200	0.707	0.636	0.283	1
TPSY107*016#0100	Y	100	16	85	10	125	16	8	100	1.118	1.006	0.447	1[1)]
TPSY107*016#0150	Y	100	16	85	10	125	16	8	150	0.913	0.822	0.365	1[1)]
TPSY107*016#0200	Y	100	16	85	10	125	16	8	200	0.791	0.712	0.316	1[1)]
TPSD157*016#0060	D	150	16	85	10	125	24	6	60	1.581	1.423	0.632	1
TPSD157*016#0085	D	150	16	85	10	125	24	6	85	1.328	1.196	0.531	1
TPSD157*016#0100	D	150	16	85	10	125	24	6	100	1.225	1.102	0.490	1
TPSD157*016#0125	D	150	16	85	10	125	24	6	125	1.095	0.986	0.438	1
TPSD157*016#0150	D	150	16	85	10	125	24	6	150	1.000	0.900	0.400	1
TPSE157*016#0050V	E	150	16	85	10	125	24	8	50	1.817	1.635	0.727	3
TPSE157*016#0100	E	150	16	85	10	125	24	8	100	1.285	1.156	0.514	1[1)]
TPSV157*016#0045	V	150	16	85	10	125	24	8	45	2.357	2.121	0.943	1[1)]
TPSV157*016#0075	V	150	16	85	10	125	24	8	75	1.826	1.643	0.730	1[1)]
TPSY157M016#0200	Y	150	16	85	10	125	24	15	200	0.791	0.712	0.316	1[1)]
TPSD227M016#0200V	D	220	16	85	10	125	35.2	10	200	0.866	0.779	0.346	3
TPSE227*016#0050V	E	220	16	85	10	125	35.2	10	50	1.817	1.635	0.727	3
TPSE227*016#0100	E	220	16	85	10	125	35.2	10	100	1.285	1.156	0.514	1[1)]
TPSE227*016#0150	E	220	16	85	10	125	35.2	10	150	1.049	0.944	0.420	1[1)]
TPSV227*016#0050	V	220	16	85	10	125	35.2	8	50	2.236	2.012	0.894	1[1)]
TPSV227*016#0075	V	220	16	85	10	125	35.2	8	75	1.826	1.643	0.730	1[1)]
TPSV227*016#0100	V	220	16	85	10	125	35.2	8	100	1.581	1.423	0.632	1[1)]
TPSV227*016#0150	V	220	16	85	10	125	35.2	8	150	1.291	1.162	0.516	1[1)]
TPSE337M016#0200	E	330	16	85	10	125	52.8	30	200	0.908	0.817	0.363	1[1)]
20 Volt @ 85°C													
TPSA105*020#3000	A	1	20	85	13	125	0.5	4	3000	0.158	0.142	0.063	1
TPSR105*020#6000	R	1	20	85	13	125	0.5	4	6000	0.096	0.086	0.038	1
TPSS105*020#6000	S	1	20	85	13	125	0.5	4	6000	0.104	0.094	0.042	1
TPST105*020#2000	T	1	20	85	13	125	0.5	4	2000	0.200	0.180	0.080	1
TPSA155*020#3000	A	1.5	20	85	13	125	0.5	6	3000	0.158	0.142	0.063	1
TPSA225*020#3000	A	2.2	20	85	13	125	0.5	6	3000	0.158	0.142	0.063	1
TPSB225*020#1700	B	2.2	20	85	13	125	0.5	6	1700	0.224	0.201	0.089	1
TPSA335*020#2500	A	3.3	20	85	13	125	0.7	6	2500	0.173	0.156	0.069	1
TPSB335*020#1300	B	3.3	20	85	13	125	0.7	6	1300	0.256	0.230	0.102	1
TPSA475*020#1800	A	4.7	20	85	13	125	0.9	6	1800	0.204	0.184	0.082	1
TPSB475*020#0750	B	4.7	20	85	13	125	0.9	6	750	0.337	0.303	0.135	1
TPSB475*020#1000	B	4.7	20	85	13	125	0.9	6	1000	0.292	0.262	0.117	1
TPSA685*020#1000	A	6.8	20	85	13	125	1.4	6	1000	0.274	0.246	0.110	1
TPSB685*020#0600	B	6.8	20	85	13	125	1.4	6	600	0.376	0.339	0.151	1
TPSB685*020#1000	B	6.8	20	85	13	125	1.4	6	1000	0.292	0.262	0.117	1
TPSC685*020#0700	C	6.8	20	85	13	125	1.4	6	700	0.396	0.357	0.159	1
TPSB106*020#0500	B	10	20	85	13	125	2	6	500	0.412	0.371	0.165	1
TPSB106*020#1000	B	10	20	85	13	125	2	6	1000	0.292	0.262	0.117	1
TPSC106*020#0500	C	10	20	85	13	125	2	6	500	0.469	0.422	0.188	1
TPSC106*020#0700	C	10	20	85	13	125	2	6	700	0.396	0.357	0.159	1
TPSW106*020#0250	W	10	20	85	13	125	2	6	250	0.600	0.540	0.240	1
TPSW106*020#0500	W	10	20	85	13	125	2	6	500	0.424	0.382	0.170	1
TPSB156*020#0500	B	15	20	85	13	125	3	6	500	0.412	0.371	0.165	1
TPSC156*020#0400	C	15	20	85	13	125	3	6	400	0.524	0.472	0.210	1
TPSC156*020#0450	C	15	20	85	13	125	3	6	450	0.494	0.445	0.198	1
TPSB226*020#0400	B	22	20	85	13	125	4.4	6	400	0.461	0.415	0.184	1
TPSB226*020#0600	B	22	20	85	13	125	4.4	6	600	0.376	0.339	0.151	1
TPSC226*020#0100	C	22	20	85	13	125	4.4	6	100	1.049	0.944	0.420	1
TPSC226*020#0150	C	22	20	85	13	125	4.4	6	150	0.856	0.771	0.343	1
TPSC226*020#0400	C	22	20	85	13	125	4.4	6	400	0.524	0.472	0.210	1
TPSD226*020#0200	D	22	20	85	13	125	4.4	6	200	0.866	0.779	0.346	1
TPSD226*020#0300	D	22	20	85	13	125	4.4	6	300	0.707	0.636	0.283	1
TPSC336*020#0300	C	33	20	85	13	125	6.6	6	300	0.606	0.545	0.242	1
TPSD336*020#0100	D	33	20	85	13	125	6.6	6	100	1.225	1.102	0.490	1
TPSD336*020#0200	D	33	20	85	13	125	6.6	6	200	0.866	0.779	0.346	1

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL Max. (µA)	DF Max. (%)	ESR Max. @ 100kHz (mΩ)	100kHz RMS Current (A)			MSL
										25°C	85°C	125°C	
TPSD476*020#0075	D	47	20	85	13	125	9.4	6	75	1.414	1.273	0.566	1
TPSD476*020#0100	D	47	20	85	13	125	9.4	6	100	1.225	1.102	0.490	1
TPSD476*020#0200	D	47	20	85	13	125	9.4	6	200	0.866	0.779	0.346	1
TPSE476*020#0070	E	47	20	85	13	125	9.4	6	70	1.535	1.382	0.614	1[1)]
TPSE476*020#0125	E	47	20	85	13	125	9.4	6	125	1.149	1.034	0.460	1[1)]
TPSE476*020#0150	E	47	20	85	13	125	9.4	6	150	1.049	0.944	0.420	1[1)]
TPSE476*020#0200	E	47	20	85	13	125	9.4	6	200	0.908	0.817	0.363	1[1)]
TPSE476*020#0250	E	47	20	85	13	125	9.4	6	250	0.812	0.731	0.325	1[1)]
TPSX476*020#0200	X	47	20	85	13	125	9.4	6	200	0.707	0.636	0.283	1[1)]
TPSD686*020#0070	D	68	20	85	13	125	13.6	6	70	1.464	1.317	0.586	1
TPSD686*020#0150	D	68	20	85	13	125	13.6	6	150	1.000	0.900	0.400	1
TPSD686*020#0200	D	68	20	85	13	125	13.6	6	200	0.866	0.779	0.346	1
TPSD686*020#0300	D	68	20	85	13	125	13.6	6	300	0.707	0.636	0.283	1
TPSE686*020#0125	E	68	20	85	13	125	13.6	6	125	1.149	1.034	0.460	1[1)]
TPSE686*020#0150	E	68	20	85	13	125	13.6	6	150	1.049	0.944	0.420	1[1)]
TPSE686*020#0200	E	68	20	85	13	125	13.6	6	200	0.908	0.817	0.363	1[1)]
TPSY686*020#0200	Y	68	20	85	13	125	13.6	6	200	0.791	0.712	0.316	1[1)]
TPSD107*020#0085	D	100	20	85	13	125	20	6	85	1.328	1.196	0.531	1
TPSD107*020#0100	D	100	20	85	13	125	20	6	100	1.225	1.102	0.490	1
TPSD107*020#0150	D	100	20	85	13	125	20	6	150	1.000	0.900	0.400	1
TPSE107*020#0100	E	100	20	85	13	125	20	6	100	1.285	1.156	0.514	1[1)]
TPSE107*020#0150	E	100	20	85	13	125	20	6	150	1.049	0.944	0.420	1[1)]
TPSE107*020#0200	E	100	20	85	13	125	20	6	200	0.908	0.817	0.363	1[1)]
TPSV107*020#0060	V	100	20	85	13	125	20	8	60	2.041	1.837	0.816	1[1)]
TPSV107*020#0085	V	100	20	85	13	125	20	8	85	1.715	1.543	0.686	1[1)]
TPSV107*020#0100	V	100	20	85	13	125	20	8	100	1.581	1.423	0.632	1[1)]
TPSV107*020#0200	V	100	20	85	13	125	20	8	200	1.118	1.006	0.447	1[1)]
TPSV157*020#0080	V	150	20	85	13	125	30	8	80	1.768	1.591	0.707	1[1)]
25 Volt @ 85°C													
TPSA474*025#7000	A	0.47	25	85	17	125	0.5	4	7000	0.104	0.093	0.041	1
TPSA684*025#6000	A	0.68	25	85	17	125	0.5	4	6000	0.112	0.101	0.045	1
TPSA105*025#4000	A	1	25	85	17	125	0.5	4	4000	0.137	0.123	0.055	1
TPSR105*025#2500	R	1	25	85	17	125	0.5	4	2500	0.148	0.133	0.059	1
TPSR105*025#4000	R	1	25	85	17	125	0.5	4	4000	0.117	0.106	0.047	1
TPSA155*025#3000	A	1.5	25	85	17	125	0.5	6	3000	0.158	0.142	0.063	1
TPSB155*025#1800	B	1.5	25	85	17	125	0.5	6	1800	0.217	0.196	0.087	1
TPSA225*025#2500	A	2.2	25	85	17	125	0.6	6	2500	0.173	0.156	0.069	1
TPSB225*025#0900	B	2.2	25	85	17	125	0.6	6	900	0.307	0.277	0.123	1
TPSB225*025#1200	B	2.2	25	85	17	125	0.6	6	1200	0.266	0.240	0.106	1
TPSB225*025#2500	B	2.2	25	85	17	125	0.6	6	2500	0.184	0.166	0.074	1
TPSA335*025#1000	A	3.3	25	85	17	125	0.8	6	1000	0.274	0.246	0.110	1
TPSA335*025#1500	A	3.3	25	85	17	125	0.8	6	1500	0.224	0.201	0.089	1
TPSB335*025#0750	B	3.3	25	85	17	125	0.8	6	750	0.337	0.303	0.135	1
TPSB335*025#1500	B	3.3	25	85	17	125	0.8	6	1500	0.238	0.214	0.095	1
TPSB335*025#2000	B	3.3	25	85	17	125	0.8	6	2000	0.206	0.186	0.082	1
TPSB475*025#0700	B	4.7	25	85	17	125	1.2	6	700	0.348	0.314	0.139	1
TPSB475*025#0900	B	4.7	25	85	17	125	1.2	6	900	0.307	0.277	0.123	1
TPSB475*025#1500	B	4.7	25	85	17	125	1.2	6	1500	0.238	0.214	0.095	1
TPSC475*025#0700	C	4.7	25	85	17	125	1.2	6	700	0.396	0.357	0.159	1
TPSB685*025#0700	B	6.8	25	85	17	125	1.7	6	700	0.348	0.314	0.139	1
TPSC685*025#0500	C	6.8	25	85	17	125	1.7	6	500	0.469	0.422	0.188	1
TPSC685*025#0600	C	6.8	25	85	17	125	1.7	6	600	0.428	0.385	0.171	1
TPSC685*025#0700	C	6.8	25	85	17	125	1.7	6	700	0.396	0.357	0.159	1
TPSB106*025#1800	B	10	25	85	17	125	2.5	6	1800	0.217	0.196	0.087	1
TPSC106*025#0300	C	10	25	85	17	125	2.5	6	300	0.606	0.545	0.242	1
TPSC106*025#0500	C	10	25	85	17	125	2.5	6	500	0.469	0.422	0.188	1
TPSD106*025#0500	D	10	25	85	17	125	2.5	6	500	0.548	0.493	0.219	1
TPSC156*025#0220	C	15	25	85	17	125	3.8	6	220	0.707	0.636	0.283	1
TPSC156*025#0300	C	15	25	85	17	125	3.8	6	300	0.606	0.545	0.242	1
TPSD156*025#0100	D	15	25	85	17	125	3.8	6	100	1.225	1.102	0.490	1
TPSD156*025#0300	D	15	25	85	17	125	3.8	6	300	0.707	0.636	0.283	1
TPSC226*025#0275	C	22	25	85	17	125	5.5	6	275	0.632	0.569	0.253	1
TPSC226*025#0400	C	22	25	85	17	125	5.5	6	400	0.524	0.472	0.210	1
TPSD226*025#0100	D	22	25	85	17	125	5.5	6	100	1.225	1.102	0.490	1
TPSD226*025#0200	D	22	25	85	17	125	5.5	6	200	0.866	0.779	0.346	1
TPSD226*025#0300	D	22	25	85	17	125	5.5	6	300	0.707	0.636	0.283	1
TPSF226*025#0300	F	22	25	85	17	125	5.5	6	300	0.577	0.520	0.231	1
TPSC336*025#0400	C	33	25	85	17	125	8.3	6	400	0.524	0.472	0.210	1
TPSD336*025#0100	D	33	25	85	17	125	8.3	6	100	1.225	1.102	0.490	1
TPSD336*025#0200	D	33	25	85	17	125	8.3	6	200	0.866	0.779	0.346	1
TPSD336*025#0300	D	33	25	85	17	125	8.3	6	300	0.707	0.636	0.283	1
TPSE336*025#0100	E	33	25	85	17	125	8.3	6	100	1.285	1.156	0.514	1[1)]

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL Max. (µA)	DF Max. (%)	ESR Max. @ 100kHz (mΩ)	100kHz RMS Current (A)			MSL
										25°C	85°C	125°C	
TPSE336*025#0175	E	33	25	85	17	125	8.3	6	175	0.971	0.874	0.388	1[1)]
TPSE336*025#0200	E	33	25	85	17	125	8.3	6	200	0.908	0.817	0.363	1[1)]
TPSE336*025#0300	E	33	25	85	17	125	8.3	6	300	0.742	0.667	0.297	1[1)]
TPSY336*025#0200	Y	33	25	85	17	125	8.3	6	200	0.791	0.712	0.316	1[1)]
TPSD476*025#0125	D	47	25	85	17	125	11.8	6	125	1.095	0.986	0.438	1
TPSD476*025#0150	D	47	25	85	17	125	11.8	6	150	1.000	0.900	0.400	1
TPSD476*025#0250	D	47	25	85	17	125	11.8	6	250	0.775	0.697	0.310	1
TPSE476*025#0080	E	47	25	85	17	125	11.8	6	80	1.436	1.293	0.574	1[1)]
TPSE476*025#0100	E	47	25	85	17	125	11.8	6	100	1.285	1.156	0.514	1[1)]
TPSE476*025#0125	E	47	25	85	17	125	11.8	6	125	1.149	1.034	0.460	1[1)]
TPSY476*025#0250	Y	47	25	85	17	125	11.8	6	250	0.707	0.636	0.283	1[1)]
TPSD686*025#0150	D	68	25	85	17	125	17	6	150	1.000	0.900	0.400	1
TPSD686*025#0200	D	68	25	85	17	125	17	6	200	0.866	0.779	0.346	1
TPSD686*025#0300	D	68	25	85	17	125	17	6	300	0.707	0.636	0.283	1
TPSE686*025#0125	E	68	25	85	17	125	17	6	125	1.149	1.034	0.460	1[1)]
TPSE686*025#0200	E	68	25	85	17	125	17	6	200	0.908	0.817	0.363	1[1)]
TPSV686*025#0080	V	68	25	85	17	125	17	6	80	1.768	1.591	0.707	1[1)]
TPSV686*025#0095	V	68	25	85	17	125	17	6	95	1.622	1.460	0.649	1[1)]
TPSV686*025#0150	V	68	25	85	17	125	17	6	150	1.291	1.162	0.516	1[1)]
TPSV686*025#0200	V	68	25	85	17	125	17	6	200	1.118	1.006	0.447	1[1)]
TPSE107*025#0150	E	100	25	85	17	125	25	10	150	1.049	0.944	0.420	1[1)]
TPSV107*025#0100	V	100	25	85	17	125	25	8	100	1.581	1.423	0.632	1[1)]
TPSV157M025#0150	V	150	25	85	17	125	37.5	10	150	1.291	1.162	0.516	1[1)]
35 Volt @ 85°C													
TPSA224*035#6000	A	0.22	35	85	23	125	0.5	4	6000	0.112	0.101	0.045	1
TPSA334*035#6000	A	0.33	35	85	23	125	0.5	4	6000	0.112	0.101	0.045	1
TPSA474*035#6000	A	0.47	35	85	23	125	0.5	4	6000	0.112	0.101	0.045	1
TPSB474*035#4000	B	0.47	35	85	23	125	0.5	4	4000	0.146	0.131	0.058	1
TPSA684*035#6000	A	0.68	35	85	23	125	0.5	4	6000	0.112	0.101	0.045	1
TPSA105*035#3000	A	1	35	85	23	125	0.5	4	3000	0.158	0.142	0.063	1
TPSB105*035#2000	B	1	35	85	23	125	0.5	4	2000	0.206	0.186	0.082	1
TPSA155*035#3000	A	1.5	35	85	23	125	0.5	6	3000	0.158	0.142	0.063	1
TPSB155*035#2500	B	1.5	35	85	23	125	0.5	6	2500	0.184	0.166	0.074	1
TPSA225*035#1500	A	2.2	35	85	23	125	0.8	6	1500	0.224	0.201	0.089	1
TPSB225*035#0750	B	2.2	35	85	23	125	0.8	6	750	0.337	0.303	0.135	1
TPSB225*035#1500	B	2.2	35	85	23	125	0.8	6	1500	0.238	0.214	0.095	1
TPSB225*035#2000	B	2.2	35	85	23	125	0.8	6	2000	0.206	0.186	0.082	1
TPSC225*035#1000	C	2.2	35	85	23	125	0.8	6	1000	0.332	0.298	0.133	1
TPSB335*035#1000	B	3.3	35	85	23	125	1.2	6	1000	0.292	0.262	0.117	1
TPSC335*035#0700	C	3.3	35	85	23	125	1.2	6	700	0.396	0.357	0.159	1
TPSB475*035#0700	B	4.7	35	85	23	125	1.6	6	700	0.348	0.314	0.139	1
TPSB475*035#1500	B	4.7	35	85	23	125	1.6	6	1500	0.238	0.214	0.095	1
TPSC475*035#0600	C	4.7	35	85	23	125	1.6	6	600	0.428	0.385	0.171	1
TPSD475*035#0700	D	4.7	35	85	23	125	1.6	6	700	0.463	0.417	0.185	1
TPSC685*035#0350	C	6.8	35	85	23	125	2.4	6	350	0.561	0.505	0.224	1
TPSD685*035#0150	D	6.8	35	85	23	125	2.4	6	150	1.000	0.900	0.400	1
TPSD685*035#0400	D	6.8	35	85	23	125	2.4	6	400	0.612	0.551	0.245	1
TPSD685*035#0500	D	6.8	35	85	23	125	2.4	6	500	0.548	0.493	0.219	1
TPSC106*035#0600	C	10	35	85	23	125	3.5	6	600	0.428	0.385	0.171	1
TPSD106*035#0125	D	10	35	85	23	125	3.5	6	125	1.095	0.986	0.438	1
TPSD106*035#0300	D	10	35	85	23	125	3.5	6	300	0.707	0.636	0.283	1
TPSE106*035#0100V	E	10	35	85	23	125	3.5	6	100	1.285	1.156	0.514	3
TPSE106*035#0150V	E	10	35	85	23	125	3.5	6	150	1.049	0.944	0.420	3
TPSE106*035#0200	E	10	35	85	23	125	3.5	6	200	0.908	0.817	0.363	1[1)]
TPSY106*035#0250	Y	10	35	85	23	125	3.5	6	250	0.707	0.636	0.283	1[1)]
TPSC156*035#0350	C	15	35	85	23	125	5.3	6	350	0.561	0.505	0.224	1
TPSC156*035#0450	C	15	35	85	23	125	5.3	6	450	0.494	0.445	0.198	1
TPSD156*035#0100	D	15	35	85	23	125	5.3	6	100	1.225	1.102	0.490	1
TPSD156*035#0300	D	15	35	85	23	125	5.3	6	300	0.707	0.636	0.283	1
TPSY156*035#0250	Y	15	35	85	23	125	5.3	6	250	0.707	0.636	0.283	1[1)]
TPSD226*035#0125	D	22	35	85	23	125	7.7	6	125	1.095	0.986	0.438	1
TPSD226*035#0200	D	22	35	85	23	125	7.7	6	200	0.866	0.779	0.346	1
TPSD226*035#0300	D	22	35	85	23	125	7.7	6	300	0.707	0.636	0.283	1
TPSD226*035#0400	D	22	35	85	23	125	7.7	6	400	0.612	0.551	0.245	1
TPSE226*035#0125	E	22	35	85	23	125	7.7	6	125	1.149	1.034	0.460	1[1)]
TPSE226*035#0200	E	22	35	85	23	125	7.7	6	200	0.908	0.817	0.363	1[1)]
TPSE226*035#0300	E	22	35	85	23	125	7.7	6	300	0.742	0.667	0.297	1[1)]
TPSY226*035#0200	Y	22	35	85	23	125	7.7	6	200	0.791	0.712	0.316	1[1)]
TPSD336*035#0200	D	33	35	85	23	125	11.6	6	200	0.866	0.779	0.346	1
TPSD336*035#0300	D	33	35	85	23	125	11.6	6	300	0.707	0.636	0.283	1
TPSE336*035#0100	E	33	35	85	23	125	11.6	6	100	1.285	1.156	0.514	1[1)]

TPS Series

Low ESR

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	Rated Temperature (°C)	Category Voltage (V)	Category Temperature (°C)	DCL Max. (µA)	DF Max. (%)	ESR Max. @ 100kHz (mΩ)	100kHz RMS Current (A)			MSL
										25°C	85°C	125°C	
TPSE336*035#0250	E	33	35	85	23	125	11.6	6	250	0.812	0.731	0.325	1[1)]
TPSE336*035#0300	E	33	35	85	23	125	11.6	6	300	0.742	0.667	0.297	1[1)]
TPSV336*035#0200	V	33	35	85	23	125	11.6	6	200	1.118	1.006	0.447	1[1)]
TPSD476*035#0300V	D	47	35	85	23	125	16.5	6	300	0.707	0.636	0.283	3
TPSE476*035#0200	E	47	35	85	23	125	16.5	6	200	0.908	0.817	0.363	1[1)]
TPSE476*035#0250	E	47	35	85	23	125	16.5	6	250	0.812	0.731	0.325	1[1)]
TPSV476*035#0150	V	47	35	85	23	125	16.5	6	150	1.291	1.162	0.516	1[1)]
TPSV476*035#0200	V	47	35	85	23	125	16.5	6	200	1.118	1.006	0.447	1[1)]
TPSV686*035#0150	V	68	35	85	23	125	23.8	6	150	1.291	1.162	0.516	1[1)]
TPSV686*035#0200	V	68	35	85	23	125	23.8	6	200	1.118	1.006	0.447	1[1)]
50 Volt @ 85°C													
TPSA154*050#9000	A	0.15	50	85	33	125	0.5	4	9000	0.091	0.082	0.037	1
TPSA224*050#7000	A	0.22	50	85	33	125	0.5	4	7000	0.104	0.093	0.041	1
TPSA334*050#7000	A	0.33	50	85	33	125	0.5	4	7000	0.104	0.093	0.041	1
TPSA474*050#6500	A	0.47	50	85	33	125	0.5	4	6500	0.107	0.097	0.043	1
TPSB474*050#6000	B	0.47	50	85	33	125	0.5	4	6000	0.119	0.107	0.048	1
TPSC474*050#2300	C	0.47	50	85	33	125	0.5	4	2300	0.219	0.197	0.087	1
TPSB684*050#4000	B	0.68	50	85	33	125	0.5	4	4000	0.146	0.131	0.058	1
TPSB105*050#3000	B	1	50	85	33	125	0.5	6	3000	0.168	0.151	0.067	1
TPSC105*050#2500	C	1	50	85	33	125	0.5	4	2500	0.210	0.189	0.084	1
TPSC155*050#1500	C	1.5	50	85	33	125	0.8	6	1500	0.271	0.244	0.108	1
TPSC155*050#2000	C	1.5	50	85	33	125	0.8	6	2000	0.235	0.211	0.094	1
TPSC225*050#1500	C	2.2	50	85	33	125	1.1	8	1500	0.271	0.244	0.108	1
TPSD225*050#1200	D	2.2	50	85	33	125	1.1	6	1200	0.354	0.318	0.141	1
TPSC335*050#1000	C	3.3	50	85	33	125	1.6	6	1000	0.332	0.298	0.133	1
TPSD335*050#0800	D	3.3	50	85	33	125	1.7	6	800	0.433	0.390	0.173	1
TPSC475*050#0800	C	4.7	50	85	33	125	2.4	6	800	0.371	0.334	0.148	1
TPSD475*050#0250	D	4.7	50	85	33	125	2.4	6	250	0.775	0.697	0.310	1
TPSD475*050#0300	D	4.7	50	85	33	125	2.4	6	300	0.707	0.636	0.283	1
TPSD475*050#0500	D	4.7	50	85	33	125	2.4	6	500	0.548	0.493	0.219	1
TPSD475*050#0700	D	4.7	50	85	33	125	2.4	6	700	0.463	0.417	0.185	1
TPSX475*050#0500V	X	4.7	50	85	33	125	2.4	6	500	0.447	0.402	0.179	3
TPSD685*050#0200	D	6.8	50	85	33	125	3.4	6	200	0.866	0.779	0.346	1
TPSD685*050#0300	D	6.8	50	85	33	125	3.4	6	300	0.707	0.636	0.283	1
TPSD685*050#0500	D	6.8	50	85	33	125	3.4	6	500	0.548	0.493	0.219	1
TPSD685*050#0600	D	6.8	50	85	33	125	3.4	6	600	0.500	0.450	0.200	1
TPSD106*050#0500	D	10	50	85	33	125	5	6	500	0.548	0.493	0.219	1
TPSE106*050#0250	E	10	50	85	33	125	5	6	250	0.812	0.731	0.325	1[1)]
TPSE106*050#0300	E	10	50	85	33	125	5	6	300	0.742	0.667	0.297	1[1)]
TPSE106*050#0400	E	10	50	85	33	125	5	6	400	0.642	0.578	0.257	1[1)]
TPSE106*050#0500	E	10	50	85	33	125	5	6	500	0.574	0.517	0.230	1[1)]
TPSE156*050#0250	E	15	50	85	33	125	7.5	6	250	0.812	0.731	0.325	1[1)]
TPSV156*050#0250	V	15	50	85	33	125	7.5	6	250	1.000	0.900	0.400	1[1)]

1[1)] –Dry pack option (see How to order) is recommended for reduction of stress during soldering. Dry pack parts should be treated as MSL 3.

For AEC-Q200 availability, please contact AVX.

Moisture Sensitivity Level (MSL) is defined according to J-STD-020

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 ismeasured at rated voltage after 5 minutes.

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

For typical weight and composition see page 274.

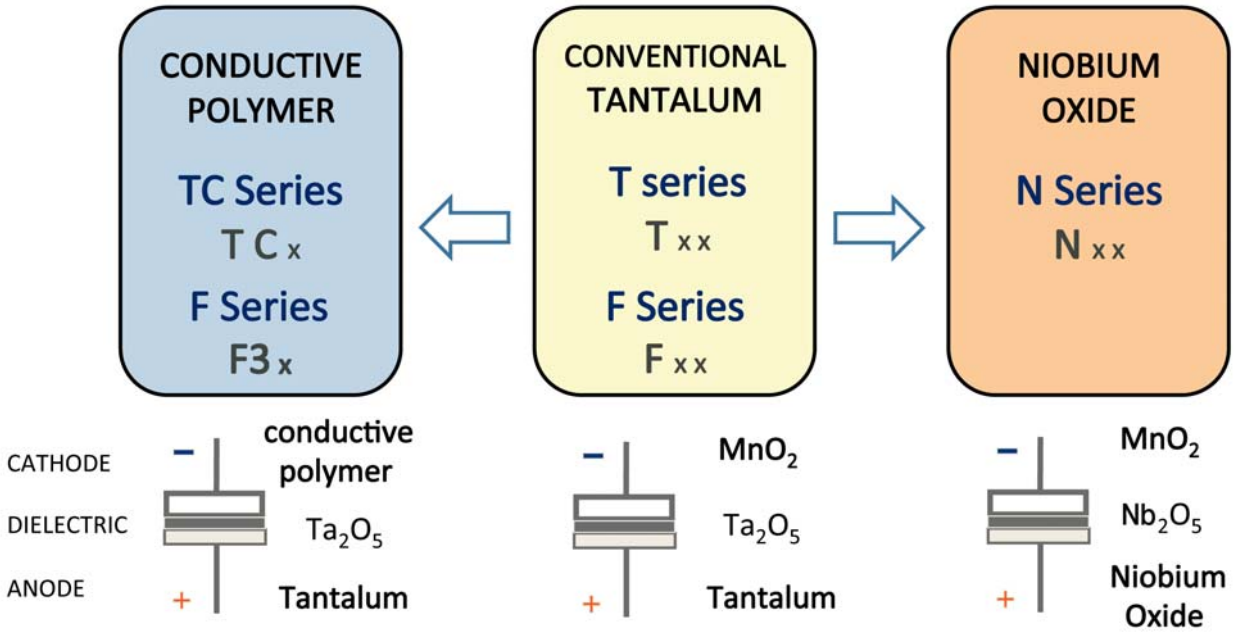
NOTE: AVX reserves the right to supply higher voltage ratings or tighter tolerance part in the same case size, to the same reliability standards.

QUALIFICATION TABLE

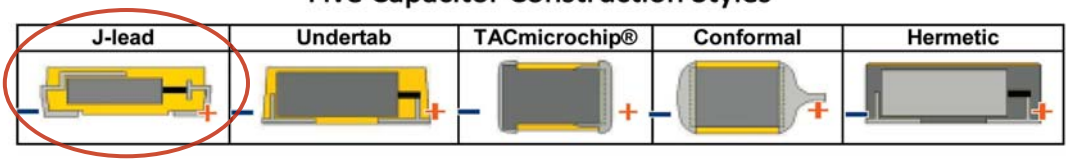
<table>
<tr><th>TEST</th><th colspan="8">TPS series (Temperature range -55ºC to +125ºC)</th></tr>
<tr><th></th><th colspan="3">Condition</th><th colspan="5">Characteristics</th></tr>
<tr><td rowspan="5">Endurance</td><td colspan="3" rowspan="5">Apply rated voltage (Ur) at 85ºC and / or category voltage (Uc) at 125ºC for 2000 hours through a circuit impedance of ≤0.1Ω/V. Stabilize at room temperature for 1-2 hours before measuring.</td><td>Visual examination</td><td colspan="4">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="4">1.5 x initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="4">within ±10% of initial value</td></tr>
<tr><td>DF</td><td colspan="4">initial limit</td></tr>
<tr><td>ESR</td><td colspan="4">1.25 x initial limit</td></tr>
<tr><td rowspan="5">Humidity</td><td colspan="3" rowspan="5">Store at 65ºC and 95% relative humidity for 500 hours, with no applied voltage. Stabilize at room temperature and humidity for 1-2 hours before measuring.</td><td>Visual examination</td><td colspan="4">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="4">1.5 x initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="4">within ±10% of initial value</td></tr>
<tr><td>DF</td><td colspan="4">1.2 x initial limit</td></tr>
<tr><td>ESR</td><td colspan="4">1.25 x initial limit</td></tr>
<tr><td rowspan="8">Temperature Stability</td><td>Step</td><td>Temperature°C</td><td>Duration(min)</td><td></td><td>+20ºC</td><td>-55ºC</td><td>+20ºC</td><td>+85ºC</td><td>+125ºC</td><td>+20ºC</td></tr>
<tr><td>1</td><td>+20</td><td>15</td><td>DCL</td><td>IL*</td><td>n/a</td><td>IL*</td><td>10 x IL*</td><td>12.5 x IL*</td><td>IL*</td></tr>
<tr><td>2</td><td>-55</td><td>15</td><td>ΔC/C</td><td>n/a</td><td>+0/-10%</td><td>±5%</td><td>+10/-0%</td><td>+12/-0%</td><td>±5%</td></tr>
<tr><td>3</td><td>+20</td><td>15</td><td>DF</td><td>IL*</td><td>1.5 x IL*</td><td>IL*</td><td>1.5 x IL*</td><td>2 x IL*</td><td>IL*</td></tr>
<tr><td>4</td><td>+85</td><td>15</td><td rowspan="3">ESR</td><td rowspan="3">1.25 x IL*</td><td rowspan="3">2.5 x IL*</td><td rowspan="3">1.25 x IL*</td><td rowspan="3">1.25 x IL*</td><td rowspan="3">1.25 x IL*</td><td rowspan="3">1.25 x IL*</td></tr>
<tr><td>5</td><td>+125</td><td>15</td></tr>
<tr><td>6</td><td>+20</td><td>15</td></tr>
<tr><td rowspan="5">Surge Voltage</td><td colspan="3" rowspan="5">Apply 1.3x category voltage (Uc) at 125ºC for 1000 cycles of duration 6 min (30 sec charge, 5 min 30 sec discharge) through a charge / discharge resistance of 1000Ω</td><td>Visual examination</td><td colspan="4">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="4">initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="4">within ±5% of initial value</td></tr>
<tr><td>DF</td><td colspan="4">initial limit</td></tr>
<tr><td>ESR</td><td colspan="4">1.25 x initial limit</td></tr>
<tr><td rowspan="5">Mechanical Shock</td><td colspan="3" rowspan="5">MIL-STD-202, Method 213, Condition C</td><td>Visual examination</td><td colspan="4">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="4">initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="4">within ±5% of initial value</td></tr>
<tr><td>DF</td><td colspan="4">initial limit</td></tr>
<tr><td>ESR</td><td colspan="4">initial limit</td></tr>
<tr><td rowspan="5">Vibration</td><td colspan="3" rowspan="5">MIL-STD-202, Method 204, Condition D</td><td>Visual examination</td><td colspan="4">no visible damage</td></tr>
<tr><td>DCL</td><td colspan="4">initial limit</td></tr>
<tr><td>ΔC/C</td><td colspan="4">within ±5% of initial value</td></tr>
<tr><td>DF</td><td colspan="4">initial limit</td></tr>
<tr><td>ESR</td><td colspan="4">initial limit</td></tr>
</table>

*Initial Limit

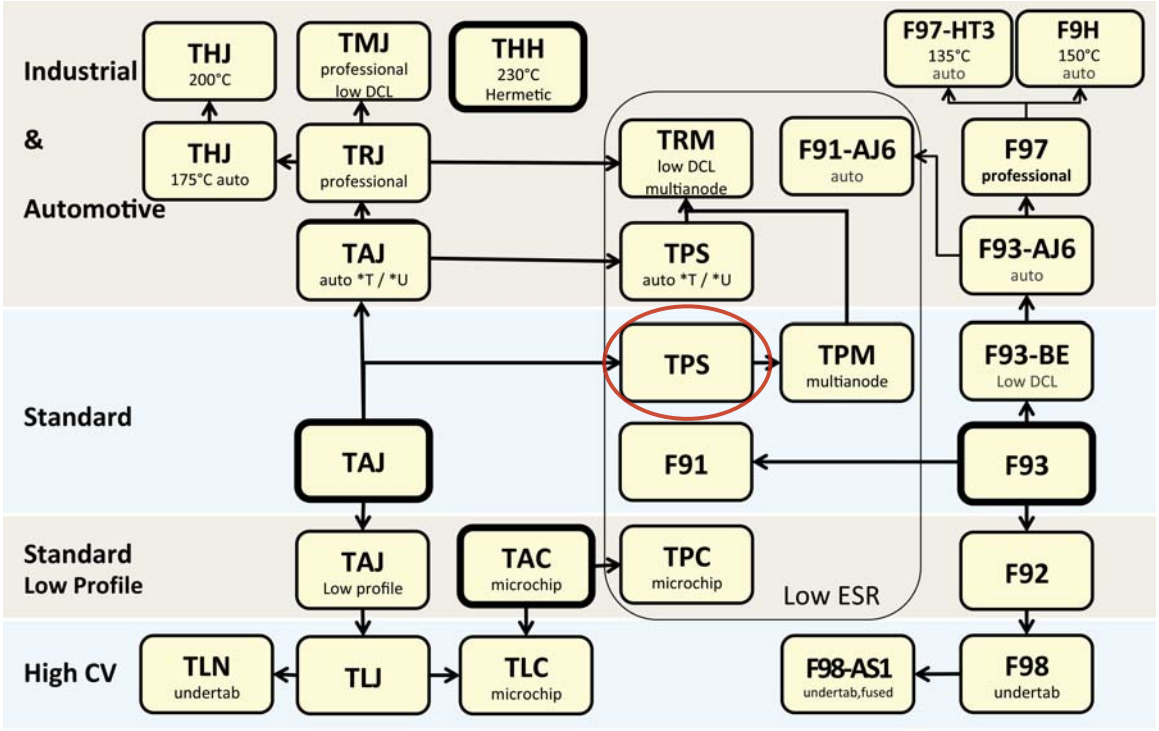
AVX SOLID ELECTROLYTIC CAPACITOR ROADMAP



Five Capacitor Construction Styles



SERIES LINE UP: CONVENTIONAL SMD MnO_2



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