

TPS Series

Low ESR



- Low ESR series of robust MnO₂ solid electrolyte capacitors
- CV range: 0.15-1500μF / 2.5-50V
- 14 case sizes available
- Power supply applications

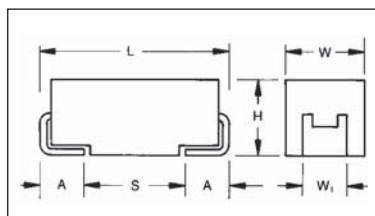


LEAD-FREE COMPATIBLE COMPONENT

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 _t ±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)	2.6 (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.	1.0±0.1 (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.	1.0±0.1 (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)	3.45 ±0.30 (0.136 ±0.012)	3.10 (0.120)	1.40 (0.055)	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)

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



For part marking see page 131

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 = Lead Free 7" Reel S = Lead Free 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 codes 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									
	Meets requirements of AEC-Q200									

CAPACITANCE AND RATED VOLTAGE, VR (VOLTAGE CODE) 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)	
0.47	474							A(7000)	A(6000) B(4000)	C(2300)
0.68	684							A(6000)	A(6000)	
1	105				R(9000)		A(3000), R(6000) S(6000), T(2000)	R(2500,4000)	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(1000,1500) 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(700)	D(300,500,700)
6.8	685			A(1800)	A(1800) 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) R(1000,1500,3000) T(1000)	A(900,1800) P(2000) ^M T(1000,2000)	B(500,800), C(500) T(800,1000) W(500,600)	B(500,1000) C(500,700) W(500)	B(1800) C(300,500)	D(125,300) E(200), Y(250)	E(250,300, 400,500)
15	156			A(700,1500)	A(1000) B(450,600) T(1200)	B(500,800)	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(500,900) B(375,600) S(900)	A(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) 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)	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) 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)	D(125,150,250) E(80,100,125)	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)	E(125,200) V(80,95,150,200)	V(150,200) ^M	
100	107	B(200)	B(200,250, 350,500) W(100)	B(250,400) C(75,150) W(100,150) Y(100)	B(400) ^M 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)	V(100)		
150	157	B(150)	B(250) C(70,80)	C(50,90,150,200,250) D(50,125), Y(40,50)	D(50,85,100), E(100) F(200), X(100) ^M Y(100,150,200)	D(60,85,100,125,150) E(100), V(45,75) Y(200) ^M	V(80)			
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)	E(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(100,150)	D(50,65,100,150) E(40,50,60,100) V(40,60,100)					
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)						
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							

Released codes ^(M tolerance only)

Engineering samples - please contact manufacturer

*Codes under development - subject to change

ESR limits quoted in brackets (milliohms)

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

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (µF)	Rated Voltage (V)	DCL (µA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	MSL	100kHz RMS Current (A)			100kHz RMS Voltage (V)		
								25°C	85°C	125°C	25°C	85°C	125°C
2.5 Volt @ 85°C (1.7 Volt @ 125°C)													
TPSB107*002#0200	B	100	2.5	5	6	200	1	0.652	0.587	0.261	0.130	0.117	0.052
TPSB157*002#0150	B	150	2.5	3	10	150	1	0.753	0.677	0.301	0.113	0.102	0.045
TPSB227*002#0150	B	220	2.5	4.4	16	150	1	0.753	0.677	0.301	0.113	0.102	0.045
TPSB227*002#0200	B	220	2.5	4.4	16	200	1	0.652	0.587	0.261	0.130	0.117	0.052
TPSB227*002#0600	B	220	2.5	4.4	16	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPSD227*002#0045	D	220	2.5	4.4	8	45	1	1.826	1.643	0.730	0.082	0.074	0.033
TPSY337*002#0040	Y	330	2.5	8.2	8	40	1 ¹⁾	1.768	1.591	0.707	0.071	0.064	0.028
TPSD477*002#0035	D	470	2.5	11.6	8	35	1	2.070	1.863	0.828	0.072	0.065	0.029
TPSF477*002#0200	F	470	2.5	11.8	12	200	1	0.707	0.636	0.283	0.141	0.127	0.057
TPSY477*002#0100	Y	470	2.5	11	12	100	1 ¹⁾	1.118	1.006	0.447	0.112	0.101	0.045
TPSD687*002#0035	D	680	2.5	17	16	35	1	2.070	1.863	0.828	0.072	0.065	0.029
TPSD687*002#0050	D	680	2.5	17	16	50	1	1.732	1.559	0.693	0.087	0.078	0.035
TPSE687*002#0035	E	680	2.5	17	10	35	1 ¹⁾	2.171	1.954	0.868	0.076	0.068	0.030
TPSE687*002#0050	E	680	2.5	17	10	50	1 ¹⁾	1.817	1.635	0.727	0.091	0.082	0.036
TPSY687*002#0100	Y	680	2.5	17	12	100	1 ¹⁾	1.118	1.006	0.447	0.112	0.101	0.045
TPSE108*002#0030	E	1000	2.5	20	14	30	1 ¹⁾	2.345	2.111	0.938	0.070	0.063	0.028
TPSE108*002#0040	E	1000	2.5	20	14	40	1 ¹⁾	2.031	1.828	0.812	0.081	0.073	0.032
TPSY108M002#0100	Y	1000	2.5	25	30	100	1 ¹⁾	1.118	1.006	0.447	0.112	0.101	0.045
TPSD158*002#0100	D	1500	2.5	37.5	60	100	1	1.125	1.102	0.490	0.122	0.110	0.049
TPSE158*002#0050	E	1500	2.5	37.5	20	50	1 ¹⁾	1.817	1.635	0.727	0.001	0.082	0.036
TPSV158M002#0030	V	1500	2.5	30	20	30	1 ¹⁾	2.887	2.598	1.155	0.087	0.078	0.035
TPSV158M002#0040	V	1500	2.5	30	20	40	1 ¹⁾	2.500	2.250	1.000	0.100	0.090	0.040
4 Volt @ 85°C (2.7 Volt @ 125°C)													
TPSR106*004#3000	R	10	4	0.5	6	3000	1	0.135	0.122	0.054	0.406	0.366	0.162
TPSA476*004#0500	A	47	4	1.9	8	500	1	0.387	0.349	0.155	0.194	0.174	0.077
TPSB107*004#0200	B	100	4	4	8	200	1	0.652	0.587	0.261	0.130	0.117	0.052
TPSB107*004#0250	B	100	4	4	8	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB107*004#0350	B	100	4	4	8	350	1	0.493	0.444	0.197	0.172	0.155	0.069
TPSB107*004#0500	B	100	4	4	8	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSW107*004#0100	W	100	4	4	6	100	1	0.949	0.854	0.379	0.095	0.085	0.038
TPSB157*004#0250	B	150	4	6	10	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSC157*004#0070	C	150	4	6	6	70	1	1.254	1.128	0.501	0.088	0.079	0.035
TPSC157*004#0080	C	150	4	6	6	80	1	1.173	1.055	0.469	0.094	0.084	0.038
TPSD227*004#0040	D	220	4	8.8	8	40	1	1.936	1.743	0.775	0.077	0.070	0.031
TPSD227*004#0050	D	220	4	8.8	8	50	1	1.732	1.559	0.693	0.087	0.078	0.035
TPSD227*004#0100	D	220	4	8.8	8	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSY227*004#0040	Y	220	4	8.8	8	40	1 ¹⁾	1.768	1.591	0.707	0.071	0.064	0.028
TPSY227*004#0050	Y	220	4	8.8	8	50	1 ¹⁾	1.581	1.423	0.632	0.095	0.085	0.038
TPSY227*004#0075	Y	220	4	8.8	8	75	1 ¹⁾	1.291	1.162	0.516	0.097	0.087	0.039
TPSC337*004#0100	C	330	4	13.2	8	100	1	1.049	0.944	0.420	0.105	0.094	0.042
TPSD337*004#0035	D	330	4	13.2	8	35	1	2.070	1.863	0.828	0.072	0.065	0.029
TPSD337*004#0045	D	330	4	13.2	8	45	1	1.826	1.643	0.730	0.082	0.074	0.033
TPSD337*004#0100	D	330	4	13.2	8	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSF337*004#0200	F	330	4	13.2	10	200	1	0.707	0.636	0.283	0.141	0.127	0.057
TPSX337*004#0100	X	330	4	13.2	8	100	1 ¹⁾	1.000	0.900	0.400	0.100	0.090	0.040
TPSD477*004#0045	D	470	4	18.8	12	45	1	1.826	1.643	0.730	0.082	0.074	0.033
TPSD477*004#0100	D	470	4	18.8	12	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSE477*004#0035	E	470	4	18.8	12	35	1 ¹⁾	2.171	1.954	0.868	0.076	0.068	0.030
TPSE477*004#0045	E	470	4	18.8	12	45	1 ¹⁾	1.915	1.723	0.766	0.086	0.078	0.034
TPSE477*004#0100	E	470	4	18.8	12	100	1 ¹⁾	1.285	1.156	0.514	0.128	0.116	0.051
TPSD687*004#0045	D	680	4	27.2	14	45	1	1.915	1.643	0.730	0.082	0.074	0.033
TPSD687*004#0060	D	680	4	27.2	14	60	1	1.581	1.423	0.632	0.095	0.085	0.038
TPSD687*004#0100	D	680	4	27.2	14	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSE687*004#0040	E	680	4	27.2	10	40	1 ¹⁾	2.031	1.828	0.812	0.081	0.073	0.032
TPSE687*004#0060	E	680	4	27.2	10	60	1 ¹⁾	1.658	1.492	0.663	0.099	0.090	0.040
TPSE687*004#0100	E	680	4	27.2	10	100	1 ¹⁾	1.285	1.156	0.514	0.128	0.116	0.051
TPSE108*004#0040	E	1000	4	40	14	40	1 ¹⁾	2.031	1.828	0.812	0.081	0.073	0.032
TPSE108*004#0060	E	1000	4	40	14	60	1 ¹⁾	1.658	1.492	0.663	0.099	0.090	0.040
TPSV108*004#0025	V	1000	4	40	16	25	1 ¹⁾	3.162	2.846	1.265	0.079	0.071	0.032
TPSV108*004#0035	V	1000	4	40	16	35	1 ¹⁾	2.673	2.405	1.069	0.094	0.084	0.037
TPSV108*004#0040	V	1000	4	40	16	40	1 ¹⁾	2.500	2.250	1.000	0.100	0.090	0.040
TPSV108*004#0050	V	1000	4	40	16	50	1 ¹⁾	2.236	2.012	0.894	0.112	0.101	0.045
TPSE158*004#0050	E	1500	4	60	30	50	1 ¹⁾	1.817	1.635	0.727	0.091	0.082	0.036
TPSE158*004#0075	E	1500	4	60	30	75	1 ¹⁾	1.483	1.335	0.593	0.111	0.100	0.044
TPSV158M004#0050	V	1500	4	60	30	50	1 ¹⁾	2.236	2.012	0.894	0.112	0.101	0.045
TPSV158M004#0075	V	1500	4	60	30	75	1 ¹⁾	1.826	1.643	0.730	0.137	0.123	0.055

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

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 is measured 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 124.

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

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (μF)	Rated Voltage (V)	DCL (μA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	MSL	100kHz RMS Current (A)			100kHz RMS Voltage (V)		
								25°C	85°C	125°C	25°C	85°C	125°C
6.3 Volt @ 85°C (4 Volt @ 125°C)													
TPSR225*006#7000	R	2.2	6.3	0.5	6	7000	1	0.089	0.080	0.035	0.620	0.558	0.248
TPSS475*006#4000	S	4.7	6.3	0.5	6	4000	1	0.127	0.115	0.051	0.510	0.459	0.204
TPSA685*006#1800	A	6.8	6.3	0.5	6	1800	1	0.204	0.184	0.082	0.367	0.331	0.147
TPSA106*006#1500	A	10	6.3	0.6	6	1500	1	0.224	0.201	0.089	0.335	0.302	0.134
TPSR106*006#1000	R	10	6.3	0.6	8	1000	1	0.235	0.211	0.094	0.235	0.211	0.094
TPSR106*006#1500	R	10	6.3	0.6	8	1500	1	0.191	0.172	0.077	0.287	0.259	0.115
TPSR106*006#3000	R	10	6.3	0.6	8	3000	1	0.135	0.122	0.054	0.406	0.366	0.162
TPST106*006#1000	T	10	6.3	0.6	6	1000	1	0.283	0.255	0.113	0.283	0.255	0.113
TPSA156*006#0700	A	15	6.3	0.9	6	700	1	0.327	0.295	0.131	0.229	0.206	0.092
TPSA156*006#1500	A	15	6.3	0.9	6	1500	1	0.224	0.201	0.089	0.335	0.302	0.134
TPSA226*006#0500	A	22	6.3	1.4	6	500	1	0.387	0.349	0.155	0.194	0.174	0.077
TPSA226*006#0900	A	22	6.3	1.4	6	900	1	0.289	0.260	0.115	0.260	0.234	0.104
TPSB226*006#0375	B	22	6.3	1.4	6	375	1	0.476	0.428	0.190	0.179	0.161	0.071
TPSB226*006#0600	B	22	6.3	1.4	6	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPSS226*006#0900	S	22	6.3	1.4	8	900	1	0.269	0.242	0.107	0.242	0.218	0.097
TPSA336*006#0600	A	33	6.3	2.1	8	600	1	0.354	0.318	0.141	0.212	0.191	0.085
TPSB336*006#0250	B	33	6.3	2.1	6	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB336*006#0350	B	33	6.3	2.1	6	350	1	0.493	0.444	0.197	0.172	0.155	0.069
TPSB336*006#0450	B	33	6.3	2.1	6	450	1	0.435	0.391	0.174	0.196	0.176	0.078
TPSB336*006#0600	B	33	6.3	2.1	6	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPST336*006#0800	T	33	6.3	2.1	10	800	1	0.316	0.285	0.126	0.253	0.228	0.101
TPSA476*006#0800	A	47	6.3	2.8	10	800	1	0.306	0.276	0.122	0.245	0.220	0.098
TPSB476*006#0250	B	47	6.3	3	6	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB476*006#0350	B	47	6.3	3	6	350	1	0.493	0.444	0.197	0.172	0.155	0.069
TPSB476*006#0500	B	47	6.3	3	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSC476*006#0300	C	47	6.3	3	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPST476*006#1200	T	47	6.3	2.8	10	1200	1	0.258	0.232	0.103	0.310	0.279	0.124
TPSB686*006#0250	B	68	6.3	4.3	8	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB686*006#0350	B	68	6.3	4.3	8	350	1	0.493	0.444	0.197	0.172	0.155	0.069
TPSB686*006#0500	B	68	6.3	4.3	8	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSC686*006#0150	C	68	6.3	4.3	6	150	1	0.856	0.771	0.343	0.128	0.116	0.051
TPSC686*006#0200	C	68	6.3	4.3	6	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSW686*006#0110	W	68	6.3	4.3	6	110	1	0.905	0.814	0.362	0.099	0.090	0.040
TPSW686*006#0125	W	68	6.3	4.3	6	125	1	0.849	0.764	0.339	0.106	0.095	0.042
TPSW686*006#0250	W	68	6.3	4.3	6	250	1	0.600	0.540	0.240	0.150	0.135	0.060
TPSB107*006#0250	B	100	6.3	6.3	10	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB107*006#0400	B	100	6.3	6.3	10	400	1	0.461	0.415	0.184	0.184	0.166	0.074
TPSC107*006#0075	C	100	6.3	6.3	6	75	1	1.211	1.090	0.484	0.091	0.082	0.036
TPSC107*006#0150	C	100	6.3	6.3	6	150	1	0.856	0.771	0.343	0.128	0.116	0.051
TPSW107*006#0100	W	100	6.3	6.3	6	100	1	0.949	0.854	0.379	0.095	0.085	0.038
TPSW107*006#0150	W	100	6.3	6.3	6	150	1	0.775	0.697	0.310	0.116	0.105	0.046
TPSY107*006#0100	Y	100	6.3	6.3	6	100	1 ¹⁾	1.118	1.006	0.447	0.112	0.101	0.045
TPSC157*006#0050	C	150	6.3	9.5	6	50	1	1.483	1.335	0.593	0.074	0.067	0.030
TPSC157*006#0090	C	150	6.3	9.5	6	90	1	1.106	0.995	0.442	0.099	0.090	0.040
TPSC157*006#0150	C	150	6.3	9.5	6	150	1	0.856	0.771	0.343	0.128	0.116	0.051
TPSC157*006#0200	C	150	6.3	9.5	6	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSC157*006#0250	C	150	6.3	9.5	6	250	1	0.663	0.597	0.265	0.166	0.149	0.066
TPSD157*006#0050	D	150	6.3	9.5	6	50	1	1.732	1.559	0.693	0.087	0.078	0.035
TPSD157*006#0125	D	150	6.3	9.5	6	125	1	1.095	0.986	0.438	0.137	0.123	0.055
TPSY157*006#0040	Y	150	6.3	9.5	6	40	1 ¹⁾	1.768	1.591	0.707	0.071	0.064	0.028
TPSY157*006#0050	Y	150	6.3	9.5	6	50	1 ¹⁾	1.581	1.423	0.632	0.079	0.071	0.032
TPSC227*006#0070	C	220	6.3	13.9	8	70	1	1.254	1.128	0.501	0.088	0.079	0.035
TPSC227*006#0100	C	220	6.3	13.9	8	100	1	1.049	0.944	0.420	0.105	0.094	0.042
TPSC227*006#0125	C	220	6.3	13.9	8	125	1	0.938	0.844	0.375	0.117	0.106	0.047
TPSC227*006#0250	C	220	6.3	13.9	8	250	1	0.663	0.597	0.265	0.166	0.149	0.066
TPSD227*006#0050	D	220	6.3	13.9	8	50	1	1.732	1.559	0.693	0.087	0.078	0.035
TPSD227*006#0100	D	220	6.3	13.9	8	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD227*006#0125	D	220	6.3	13.9	8	125	1	1.095	0.986	0.438	0.137	0.123	0.055
TPSE227*006#0100	E	220	6.3	13.9	8	100	1 ¹⁾	1.285	1.156	0.514	0.128	0.116	0.051
TPSF227*006#0200	F	220	6.3	13.2	10	200	1	0.707	0.636	0.283	0.141	0.127	0.057
TPSY227*006#0100	Y	220	6.3	13.9	10	100	1 ¹⁾	1.118	1.006	0.447	0.112	0.101	0.045
TPSY227*006#0150	Y	220	6.3	13.9	10	150	1 ¹⁾	0.913	0.822	0.365	0.137	0.123	0.055
TPSC337*006#0080	C	330	6.3	19.8	12	80	1	1.173	1.055	0.469	0.094	0.084	0.038
TPSC337*006#0100	C	330	6.3	19.8	12	100	1	1.049	0.944	0.420	0.105	0.094	0.042
TPSD337*006#0045	D	330	6.3	20.8	8	45	1	1.826	1.643	0.730	0.082	0.074	0.033
TPSD337*006#0050	D	330	6.3	20.8	8	50	1	1.732	1.559	0.693	0.087	0.078	0.035

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

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 is measured 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 124.

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

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (μF)	Rated Voltage (V)	DCL (μA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	MSL	100kHz RMS Current (A)			100kHz RMS Voltage (V)		
								25°C	85°C	125°C	25°C	85°C	125°C
TPSD337*006#0070	D	330	6.3	20.8	8	70	1	1.464	1.317	0.586	0.102	0.092	0.041
TPSD337*006#0100	D	330	6.3	20.8	8	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSE337*006#0050	E	330	6.3	20.8	8	50	1 ¹⁾	1.817	1.635	0.727	0.091	0.082	0.036
TPSE337*006#0100	E	330	6.3	20.8	8	100	1 ¹⁾	1.285	1.156	0.514	0.128	0.116	0.051
TPSE337*006#0125	E	330	6.3	20.8	8	125	1 ¹⁾	1.149	1.034	0.460	0.144	0.129	0.057
TPSE337*006#0150	E	330	6.3	20.8	8	150	1 ¹⁾	1.049	0.944	0.420	0.157	0.142	0.063
TPSV337*006#0100	V	330	6.3	20.8	8	100	1 ¹⁾	1.581	1.423	0.632	0.158	0.142	0.063
TPSY337*006#0100	Y	330	6.3	20.8	12	100	1 ¹⁾	1.118	1.006	0.447	0.112	0.101	0.045
TPSY337*006#0150	Y	330	6.3	20.8	12	150	1 ¹⁾	0.913	0.822	0.365	0.137	0.123	0.055
TPSD477*006#0045	D	470	6.3	29.6	12	45	1	1.826	1.643	0.730	0.082	0.074	0.033
TPSD477*006#0060	D	470	6.3	29.6	12	60	1	1.581	1.423	0.632	0.095	0.085	0.038
TPSD477*006#0100	D	470	6.3	29.6	12	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD477*006#0200	D	470	6.3	29.6	12	200	1	0.866	0.779	0.346	0.173	0.156	0.069
TPSE477*006#0045	E	470	6.3	29.6	10	45	1 ¹⁾	1.915	1.723	0.766	0.086	0.078	0.034
TPSE477*006#0050	E	470	6.3	29.6	10	50	1 ¹⁾	1.817	1.635	0.727	0.091	0.082	0.036
TPSE477*006#0060	E	470	6.3	29.6	10	60	1 ¹⁾	1.658	1.492	0.663	0.099	0.090	0.040
TPSE477*006#0100	E	470	6.3	29.6	10	100	1 ¹⁾	1.285	1.156	0.514	0.128	0.116	0.051
TPSE477*006#0200	E	470	6.3	29.6	10	200	1 ¹⁾	0.908	0.817	0.363	0.182	0.163	0.073
TPSV477*006#0040	V	470	6.3	29.6	10	40	1 ¹⁾	2.500	2.250	1.000	0.100	0.090	0.040
TPSV477*006#0055	V	470	6.3	29.6	10	55	1 ¹⁾	2.132	1.919	0.853	0.117	0.106	0.047
TPSV477*006#0100	V	470	6.3	29.6	10	100	1 ¹⁾	1.581	1.423	0.632	0.158	0.142	0.063
TPSY477*006#0150	Y	470	6.3	28.2	20	150	1 ¹⁾	0.913	0.822	0.365	0.137	0.123	0.055
TPSE687*006#0045	E	680	6.3	42.8	10	45	1 ¹⁾	1.915	1.723	0.766	0.086	0.078	0.034
TPSE687*006#0060	E	680	6.3	42.8	10	60	1 ¹⁾	1.658	1.492	0.663	0.099	0.090	0.040
TPSE687*006#0100	E	680	6.3	42.8	10	100	1 ¹⁾	1.285	1.156	0.514	0.128	0.116	0.051
TPSV687*006#0035	V	680	6.3	42.8	14	35	1 ¹⁾	2.673	2.405	1.069	0.094	0.084	0.037
TPSV687*006#0040	V	680	6.3	42.8	10	40	1 ¹⁾	2.500	2.250	1.000	0.100	0.090	0.040
TPSV687*006#0050	V	680	6.3	42.8	10	50	1 ¹⁾	2.236	2.012	0.894	0.112	0.101	0.045
TPSE108M006#0100	E	1000	6.3	60	20	100	1 ¹⁾	1.285	1.156	0.514	0.128	0.116	0.051
TPSV108M006#0040	V	1000	6.3	60	16	40	1 ¹⁾	2.500	2.250	1.000	0.100	0.090	0.040
TPSV108M006#0050	V	1000	6.3	60	16	50	1 ¹⁾	2.236	2.012	0.894	0.112	0.101	0.045
10 Volt @ 85°C (7 Volt @ 125°C)													
TPSR105*010#9000	R	1	10	0.5	4	9000	1	0.078	0.070	0.031	0.704	0.633	0.281
TPSA225*010#1800	A	2.2	10	0.5	6	1800	1	0.204	0.184	0.082	0.367	0.331	0.147
TPST335*010#1500	T	3.3	10	0.5	6	1500	1	0.231	0.208	0.092	0.346	0.312	0.139
TPSA475*010#1400	A	4.7	10	0.5	6	1400	1	0.231	0.208	0.093	0.324	0.292	0.130
TPSR475*010#3000	R	4.7	10	0.5	6	3000	1	0.135	0.122	0.054	0.406	0.366	0.162
TPSR475*010#5000	R	4.7	10	0.5	6	5000	1	0.105	0.094	0.042	0.524	0.472	0.210
TPSA685*010#1800	A	6.8	10	0.7	6	1800	1	0.204	0.184	0.082	0.367	0.331	0.147
TPST685*010#1800	T	6.8	10	0.7	6	1800	1	0.211	0.190	0.084	0.379	0.342	0.152
TPSA106*010#0900	A	10	10	1	6	900	1	0.289	0.260	0.115	0.260	0.234	0.104
TPSA106*010#1800	A	10	10	1	6	1800	1	0.204	0.184	0.082	0.367	0.331	0.147
TPSP106M010#2000	P	10	10	1	8	2000	1	0.173	0.156	0.069	0.346	0.312	0.139
TPST106*010#1000	T	10	10	1	6	1000	1	0.283	0.255	0.113	0.283	0.255	0.113
TPST106*010#2000	T	10	10	1	6	2000	1	0.200	0.180	0.080	0.400	0.360	0.160
TPSA156*010#1000	A	15	10	1.5	6	1000	1	0.274	0.246	0.110	0.274	0.246	0.110
TPSB156*010#0450	B	15	10	1.5	6	450	1	0.435	0.391	0.174	0.196	0.176	0.078
TPSB156*010#0600	B	15	10	1.5	6	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPST156*010#1200	T	15	10	1.5	8	1200	1	0.258	0.232	0.103	0.310	0.279	0.124
TPSB226*010#0400	B	22	10	2.2	6	400	1	0.461	0.415	0.184	0.184	0.166	0.074
TPSB226*010#0500	B	22	10	2.2	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSB226*010#0700	B	22	10	2.2	6	700	1	0.348	0.314	0.139	0.244	0.220	0.098
TPSC226*010#0300	C	22	10	2.2	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPST226*010#0800	T	22	10	2.2	8	800	1	0.316	0.285	0.126	0.253	0.228	0.101
TPSA336*010#0700	A	33	10	3.3	8	700	1	0.327	0.295	0.131	0.229	0.206	0.092
TPSB336*010#0250	B	33	10	3.3	6	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB336*010#0425	B	33	10	3.3	6	425	1	0.447	0.402	0.179	0.190	0.171	0.076
TPSB336*010#0500	B	33	10	3.3	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSB336*010#0650	B	33	10	3.3	6	650	1	0.362	0.325	0.145	0.235	0.212	0.094
TPSC336*010#0150	C	33	10	3.3	6	150	1	0.856	0.771	0.343	0.128	0.116	0.051
TPSC336*010#0375	C	33	10	3.3	6	375	1	0.542	0.487	0.217	0.203	0.183	0.081
TPSC336*010#0500	C	33	10	3.3	6	500	1	0.469	0.422	0.188	0.235	0.211	0.094
TPSW336*010#0350	W	33	10	3.3	6	350	1	0.507	0.456	0.203	0.177	0.160	0.071
TPSB476*010#0250	B	47	10	4.7	8	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB476*010#0350	B	47	10	4.7	8	350	1	0.493	0.444	0.197	0.172	0.155	0.069
TPSB476*010#0500	B	47	10	4.7	8	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSB476*010#0650	B	47	10	4.7	8	650	1	0.362	0.325	0.145	0.235	0.212	0.094

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

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 is measured 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 124.

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

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (μF)	Rated Voltage (V)	DCL (μA) Max.	DF % Max.	ESR Max. (mΩ) @100kHz	MSL	100kHz RMS Current (A)			100kHz RMS Voltage (V)		
								25°C	85°C	125°C	25°C	85°C	125°C
TPSC476*010#0200	C	47	10	4.7	6	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSC476*010#0350	C	47	10	4.7	6	350	1	0.561	0.505	0.224	0.196	0.177	0.078
TPSD476*010#0100	D	47	10	4.7	6	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSW476*010#0125	W	47	10	4.7	6	125	1	0.849	0.764	0.339	0.106	0.095	0.042
TPSW476*010#0150	W	47	10	4.7	6	150	1	0.775	0.697	0.310	0.116	0.105	0.046
TPSW476*010#0250	W	47	10	4.7	6	250	1	0.600	0.540	0.240	0.150	0.135	0.060
TPSB686*010#0600	B	68	10	6.8	8	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPSC686*010#0080	C	68	10	6.8	6	80	1	1.173	1.055	0.469	0.094	0.084	0.038
TPSC686*010#0100	C	68	10	6.8	6	100	1	1.049	0.944	0.420	0.105	0.094	0.042
TPSC686*010#0200	C	68	10	6.8	6	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSC686*010#0300	C	68	10	6.8	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSD686*010#0100	D	68	10	6.8	6	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD686*010#0150	D	68	10	6.8	6	150	1	1.000	0.900	0.400	0.150	0.135	0.060
TPSY686*010#0100	Y	68	10	6.8	6	100	1 ¹⁾	1.118	1.006	0.447	0.112	0.101	0.045
TPSY686*010#0200	Y	68	10	6.8	6	200	1 ¹⁾	0.791	0.712	0.316	0.158	0.142	0.063
TPSW686*010#0100	W	68	10	6.8	6	100	1	0.949	0.854	0.379	0.095	0.085	0.038
TPSW686*010#0150	W	68	10	6.8	6	150	1	0.775	0.697	0.310	0.116	0.105	0.046
TPSB107M010#0400	B	100	10	10	8	400	1	0.461	0.415	0.184	0.184	0.166	0.074
TPSC107*010#0075	C	100	10	10	8	75	1	1.211	1.090	0.484	0.091	0.082	0.036
TPSC107*010#0100	C	100	10	10	8	100	1	1.049	0.944	0.420	0.105	0.094	0.042
TPSC107*010#0150	C	100	10	10	8	150	1	0.856	0.771	0.343	0.128	0.116	0.051
TPSC107*010#0200	C	100	10	10	8	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSD107*010#0050	D	100	10	10	6	50	1	1.732	1.559	0.693	0.087	0.078	0.035
TPSD107*010#0065	D	100	10	10	6	65	1	1.519	1.367	0.608	0.099	0.089	0.039
TPSD107*010#0080	D	100	10	10	6	80	1	1.369	1.232	0.548	0.110	0.099	0.044
TPSD107*010#0100	D	100	10	10	6	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD107*010#0125	D	100	10	10	6	125	1	1.095	0.986	0.438	0.137	0.123	0.055
TPSD107*010#0150	D	100	10	10	6	150	1	1.000	0.900	0.400	0.150	0.135	0.060
TPSE107*010#0125	E	100	10	10	6	125	1 ¹⁾	1.149	1.034	0.460	0.144	0.129	0.057
TPSW107*010#0150	W	100	10	10	6	150	1	0.775	0.697	0.310	0.116	0.105	0.046
TPSX107*010#0085	X	100	10	10	8	85	1 ¹⁾	1.085	0.976	0.434	0.092	0.083	0.037
TPSX107*010#0150	X	100	10	10	8	150	1 ¹⁾	0.816	0.735	0.327	0.122	0.110	0.049
TPSX107*010#0200	X	100	10	10	8	200	1 ¹⁾	0.707	0.636	0.283	0.141	0.127	0.057
TPSY107*010#0100	Y	100	10	10	6	100	1 ¹⁾	1.118	1.006	0.447	0.112	0.101	0.045
TPSY107*010#0150	Y	100	10	10	6	150	1 ¹⁾	0.913	0.822	0.365	0.137	0.123	0.055
TPSY107*010#0200	Y	100	10	10	6	200	1 ¹⁾	0.791	0.712	0.316	0.158	0.142	0.063
TPSD157*010#0050	D	150	10	15	8	50	1	1.732	1.559	0.693	0.087	0.078	0.035
TPSD157*010#0085	D	150	10	15	8	85	1	1.328	1.196	0.531	0.113	0.102	0.045
TPSD157*010#0100	D	150	10	15	8	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSE157*010#0100	E	150	10	15	8	100	1 ¹⁾	1.285	1.156	0.514	0.128	0.116	0.051
TPSF157*010#0200	F	150	10	15	10	200	1	0.707	0.636	0.283	0.141	0.127	0.057
TPSX157M010#0100	X	150	10	15	6	100	1 ¹⁾	1.000	0.900	0.400	0.100	0.090	0.040
TPSY157*010#0100	Y	150	10	15	6	100	1 ¹⁾	1.118	1.006	0.447	0.112	0.101	0.045
TPSY157*010#0150	Y	150	10	15	6	150	1 ¹⁾	0.913	0.822	0.365	0.137	0.123	0.055
TPSY157*010#0200	Y	150	10	15	6	200	1 ¹⁾	0.791	0.712	0.316	0.158	0.142	0.063
TPSD227*010#0050	D	220	10	22	8	50	1	1.732	1.559	0.693	0.087	0.078	0.035
TPSD227*010#0100	D	220	10	22	8	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD227*010#0150	D	220	10	22	8	150	1	1.000	0.900	0.400	0.150	0.135	0.060
TPSE227*010#0050	E	220	10	22	8	50	1 ¹⁾	1.817	1.635	0.727	0.091	0.082	0.036
TPSE227*010#0060	E	220	10	22	8	60	1 ¹⁾	1.658	1.492	0.663	0.099	0.090	0.040
TPSE227*010#0070	E	220	10	22	8	70	1 ¹⁾	1.535	1.382	0.614	0.107	0.097	0.043
TPSE227*010#0100	E	220	10	22	8	100	1 ¹⁾	1.285	1.156	0.514	0.128	0.116	0.051
TPSE227*010#0125	E	220	10	22	8	125	1 ¹⁾	1.149	1.034	0.460	0.144	0.129	0.057
TPSE227*010#0150	E	220	10	22	8	150	1 ¹⁾	1.049	0.944	0.420	0.157	0.142	0.063
TPSY227*010#0100	Y	220	10	22	10	100	1 ¹⁾	1.118	1.006	0.447	0.112	0.101	0.045
TPSY227*010#0150	Y	220	10	22	10	150	1 ¹⁾	0.913	0.822	0.365	0.137	0.123	0.055
TPSY227*010#0200	Y	220	10	22	10	200	1 ¹⁾	0.791	0.712	0.316	0.158	0.142	0.063
TPSD337*010#0050	D	330	10	33	8	50	1	1.732	1.559	0.693	0.087	0.078	0.035
TPSD337*010#0065	D	330	10	33	8	65	1	1.519	1.367	0.608	0.099	0.089	0.039
TPSD337*010#0100	D	330	10	33	8	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD337*010#0150	D	330	10	33	8	150	1	1.000	0.900	0.400	0.150	0.135	0.060
TPSE337*010#0040	E	330	10	33	8	40	1 ¹⁾	2.031	1.828	0.812	0.081	0.073	0.032
TPSE337*010#0050	E	330	10	33	8	50	1 ¹⁾	1.817	1.635	0.727	0.091	0.082	0.036
TPSE337*010#0060	E	330	10	33	8	60	1 ¹⁾	1.658	1.492	0.663	0.099	0.090	0.040
TPSE337*010#0100	E	330	10	33	8	100	1 ¹⁾	1.285	1.156	0.514	0.128	0.116	0.051
TPSV337*010#0040	V	330	10	33	10	40	1 ¹⁾	2.500	2.250	1.000	0.100	0.090	0.040
TPSV337*010#0060	V	330	10	33	10	60	1 ¹⁾	2.041	1.837	0.816	0.122	0.110	0.049

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

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 is measured 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 124.

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

RATINGS & PART NUMBER REFERENCE

AVX Part No.	Case Size	Capacitance (μ F)	Rated Voltage (V)	DCL (μ A) Max.	DF % Max.	ESR Max. (m Ω) @100kHz	MSL	100kHz RMS Current (A)			100kHz RMS Voltage (V)		
								25°C	85°C	125°C	25°C	85°C	125°C
TPSC474*050#2300	C	0.47	50	0.5	4	2300	1	0.219	0.197	0.087	0.503	0.453	0.201
TPSC105*050#2500	C	1	50	0.5	4	2500	1	0.210	0.189	0.084	0.524	0.472	0.210
TPSC155*050#1500	C	1.5	50	0.8	6	1500	1	0.271	0.244	0.108	0.406	0.366	0.162
TPSC155*050#2000	C	1.5	50	0.8	6	2000	1	0.235	0.211	0.094	0.469	0.422	0.188
TPSD225*050#1200	D	2.2	50	1.1	6	1200	1	0.354	0.318	0.141	0.424	0.382	0.170
TPSD335*050#0800	D	3.3	50	1.7	6	800	1	0.433	0.390	0.173	0.346	0.312	0.139
TPSD475*050#0300	D	4.7	50	2.4	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSD475*050#0500	D	4.7	50	2.4	6	500	1	0.548	0.493	0.219	0.274	0.246	0.110
TPSD475*050#0700	D	4.7	50	2.4	6	700	1	0.463	0.417	0.185	0.324	0.292	0.130
TPSD685*050#0200	D	6.8	50	3.4	6	200	1	0.866	0.779	0.346	0.173	0.156	0.069
TPSD685*050#0300	D	6.8	50	3.4	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSD685*050#0500	D	6.8	50	3.4	6	500	1	0.548	0.493	0.219	0.274	0.246	0.110
TPSD685*050#0600	D	6.8	50	3.4	6	600	1	0.500	0.450	0.200	0.300	0.270	0.120
TPSE106*050#0250	E	10	50	5	6	250	1 ¹⁾	0.812	0.731	0.325	0.203	0.183	0.081
TPSE106*050#0300	E	10	50	5	6	300	1 ¹⁾	0.742	0.667	0.297	0.222	0.200	0.089
TPSE106*050#0400	E	10	50	5	6	400	1 ¹⁾	0.642	0.578	0.257	0.257	0.231	0.103
TPSE106*050#0500	E	10	50	5	6	500	1 ¹⁾	0.574	0.517	0.230	0.287	0.259	0.115
TPSE156*050#0250	E	15	50	7.5	6	250	1 ¹⁾	0.812	0.731	0.325	0.203	0.183	0.081
TPSV156*050#0250	V	15	50	7.5	6	250	1 ¹⁾	1.000	0.900	0.400	0.250	0.225	0.100

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

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 is measured at rated voltage after 5 minutes.

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