

# TPS Series



## Low ESR

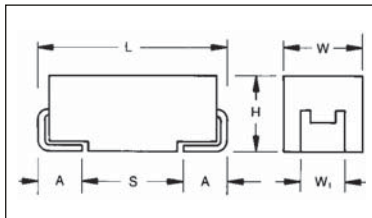


- Low ESR series of robust MnO<sub>2</sub> solid electrolyte capacitors
- CV range: 0.15-1500µF / 2.5-50V
- 14 case sizes available
- Power supply applications



SnPb termination option is not RoHS compliant.

### CASE DIMENSIONS: millimeters (inches)



For part marking see page 132

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 <sub>1</sub> ±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

<b>TPS</b>	<b>C</b>	<b>107</b>	<b>M</b>	<b>010</b>	<b>R</b>	<b>0100</b>	<b>-</b>
<b>Type</b>	<b>Case Size</b> See table above	<b>Capacitance Code</b> pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)	<b>Tolerance</b> K = ±10% M = ±20%	<b>Rated DC Voltage</b> 002 = 2.5Vdc 004 = 4Vdc 006 = 6.3Vdc 010 = 10Vdc 016 = 16Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc	<b>Packaging</b> 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	<b>ESR in mΩ</b>	<b>Additional characters may be added for special requirements</b> 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 <sub>R</sub> )	≤ +85°C:	2.5	4	6.3	10	16	20	25	35	50
Category Voltage (V <sub>C</sub> )	≤ +125°C:	1.7	2.7	4	7	10	13	17	23	33
Surge Voltage (V <sub>S</sub> )	≤ +85°C:	3.3	5.2	8	13	20	26	32	46	65
Surge Voltage (V <sub>S</sub> )	≤ +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 <sub>R</sub> 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									



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

Capacitance		Rated Voltage DC (V <sub>R</sub> ) 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)	A(1500), 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(300,500,700)
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)*, S(900) T(1000,2000)	A(1000), B(500,800) C(500), T(800,1000) W(500,800)	B(500,1000) C(500,700) W(250, 500)	B(1800) C(300,500) D(500)	C(600) D(125,300) E(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(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(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)	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(100,300) 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)	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)	
100	107	B(200)	B(200,250, 350,500) W(100)	B(250,400) C(75,150), D(300) W(100,150) Y(100)	B(400) <sup>M</sup> 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) <sup>M</sup> Y(100,150,200)	D(85,100,150) E(100,150,200) V(60,85,100,200)	E(150) <sup>M</sup> , 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) <sup>M</sup> Y(100,150,200)	D(60,85,100,125,150) E(100), V(45,75) Y(200) <sup>M</sup>	V(80)	V(150) <sup>M</sup>		
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(60,100,125,150) V(100), Y(100,150)	D(60,65,100,150) E(40,60,60,100) V(40,60,100)	E(200) <sup>M</sup>				
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) <sup>M</sup>	E(40,60) V(25,35,40,50)	E(100) <sup>M</sup> , V(40,50) <sup>M</sup>						
1500	158	D(100) E(50) V(30,40) <sup>M</sup>	E(50,75) V(50,75) <sup>M</sup>							

Not recommended for new designs, higher voltage or smaller case size substitution are offered.

Released codes <sup>(M tolerance only)</sup>

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
TPSW106*020#0250	W	10	20	2	6	250	1	0.600	0.540	0.240	0.150	0.135	0.060
TPSW106*020#0500	W	10	20	2	6	500	1	0.424	0.382	0.170	0.212	0.191	0.850
TPSB156*020#0500	B	15	20	3	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSC156*020#0400	C	15	20	3	6	400	1	0.524	0.472	0.210	0.210	0.189	0.084
TPSC156*020#0450	C	15	20	3	6	450	1	0.494	0.445	0.198	0.222	0.200	0.089
TPSB226*020#0400	B	22	20	4.4	6	400	1	0.461	0.415	0.184	0.184	0.166	0.074
TPSB226*020#0600	B	22	20	4.4	6	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPSD226*020#0100	C	22	20	4.4	6	100	1	1.049	0.944	0.420	0.105	0.094	0.042
TPSC226*020#0150	C	22	20	4.4	6	150	1	0.856	0.771	0.343	0.128	0.116	0.051
TPSC226*020#0400	C	22	20	4.4	6	400	1	0.524	0.472	0.210	0.210	0.189	0.084
TPSD226*020#0200	D	22	20	4.4	6	200	1	0.866	0.779	0.346	0.173	0.156	0.069
TPSD226*020#0300	D	22	20	4.4	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSC336*020#0300	C	33	20	6.6	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSD336*020#0100	D	33	20	6.6	6	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD336*020#0200	D	33	20	6.6	6	200	1	0.866	0.779	0.346	0.173	0.155	0.069
TPSD476*020#0075	D	47	20	9.4	6	75	1	1.414	1.273	0.566	0.106	0.095	0.042
TPSD476*020#0100	D	47	20	9.4	6	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD476*020#0200	D	47	20	9.4	6	200	1	0.866	0.779	0.346	0.173	0.156	0.069
TPSE476*020#0070	E	47	20	9.4	6	70	1 <sup>1)</sup>	1.535	1.382	0.614	0.107	0.097	0.043
TPSE476*020#0125	E	47	20	9.4	6	125	1 <sup>1)</sup>	1.149	1.034	0.460	0.144	0.129	0.057
TPSE476*020#0150	E	47	20	9.4	6	150	1 <sup>1)</sup>	1.049	0.944	0.420	0.157	0.142	0.063
TPSE476*020#0200	E	47	20	9.4	6	200	1 <sup>1)</sup>	0.908	0.817	0.363	0.182	0.163	0.073
TPSE476*020#0250	E	47	20	9.4	6	250	1 <sup>1)</sup>	0.812	0.731	0.325	0.203	0.183	0.081
TPSD686*020#0070	D	68	20	13.6	6	70	1	1.464	1.317	0.586	0.102	0.092	0.041
TPSD686*020#0150	D	68	20	13.6	6	150	1	1.000	0.900	0.400	0.150	0.135	0.060
TPSD686*020#0200	D	68	20	13.6	6	200	1	0.866	0.779	0.346	0.173	0.156	0.069
TPSD686*020#0300	D	68	20	13.6	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSE686*020#0125	E	68	20	13.6	6	125	1 <sup>1)</sup>	1.149	1.034	0.460	0.144	0.129	0.057
TPSE686*020#0150	E	68	20	13.6	6	150	1 <sup>1)</sup>	1.049	0.944	0.420	0.157	0.142	0.063
TPSE686*020#0200	E	68	20	13.6	6	200	1 <sup>1)</sup>	0.908	0.817	0.363	0.182	0.163	0.073
TPSD107*020#0085	D	100	20	20	6	85	1	1.328	1.196	0.531	0.113	0.102	0.045
TPSD107*020#0100	D	100	20	20	6	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD107*020#0150	D	100	20	20	6	150	1	1.000	0.900	0.400	0.150	0.135	0.060
TPSE107*020#0100	E	100	20	20	6	100	1 <sup>1)</sup>	1.285	1.156	0.514	0.128	0.116	0.051
TPSE107*020#0150	E	100	20	20	6	150	1 <sup>1)</sup>	1.049	0.944	0.420	0.157	0.142	0.063
TPSE107*020#0200	E	100	20	20	6	200	1 <sup>1)</sup>	0.908	0.817	0.363	0.182	0.163	0.073
TPSV107*020#0060	V	100	20	20	8	60	1 <sup>1)</sup>	2.041	1.837	0.816	0.122	0.110	0.049
TPSV107*020#0085	V	100	20	20	8	85	1 <sup>1)</sup>	1.715	1.543	0.686	0.146	0.131	0.058
TPSV107*020#0100	V	100	20	20	8	100	1 <sup>1)</sup>	1.581	1.423	0.632	0.158	0.142	0.063
TPSV107*020#0200	V	100	20	20	8	200	1 <sup>1)</sup>	1.118	1.006	0.447	0.224	0.201	0.089
TPSV157*020#0080	V	150	20	30	8	80	1 <sup>1)</sup>	1.768	1.591	0.707	0.141	0.127	0.057
<b>25 Volt @ 85°C (17 Volt @ 125°C)</b>													
TPSA474*025#7000	A	0.47	25	0.5	4	7000	1	0.104	0.093	0.041	0.725	0.652	0.290
TPSA684*025#6000	A	0.68	25	0.5	4	6000	1	0.112	0.101	0.045	0.671	0.604	0.268
TPSA105*025#4000	A	1	25	0.5	4	4000	1	0.137	0.123	0.055	0.548	0.493	0.219
TPSR105*025#2500	R	1	25	0.5	4	2500	1	0.148	0.133	0.059	0.371	0.334	0.148
TPSR105*025#4000	R	1	25	0.5	4	4000	1	0.117	0.106	0.047	0.469	0.422	0.188
TPSA155*025#3000	A	1.5	25	0.5	6	3000	1	0.158	0.142	0.063	0.474	0.427	0.190
TPSB155*025#1800	B	1.5	25	0.5	6	1800	1	0.217	0.196	0.087	0.391	0.352	0.156
TPSA225*025#2500	A	2.2	25	0.6	6	2500	1	0.173	0.156	0.069	0.433	0.390	0.173
TPSB225*025#0900	B	2.2	25	0.6	6	900	1	0.307	0.277	0.123	0.277	0.249	0.111
TPSB225*025#1200	B	2.2	25	0.6	6	1200	1	0.266	0.240	0.106	0.319	0.287	0.128
TPSB225*025#2500	B	2.2	25	0.6	6	2500	1	0.184	0.166	0.074	0.461	0.415	0.184
TPSA335*025#1000	A	3.3	25	0.8	6	1000	1	0.274	0.246	0.110	0.274	0.246	0.110
TPSA335*025#1500	A	3.3	25	0.8	6	1500	1	0.224	0.201	0.089	0.335	0.302	0.134
TPSB335*025#0750	B	3.3	25	0.8	6	750	1	0.337	0.303	0.135	0.252	0.227	0.101
TPSB335*025#1500	B	3.3	25	0.8	6	1500	1	0.238	0.214	0.095	0.357	0.321	0.143
TPSB335*025#2000	B	3.3	25	0.8	6	2000	1	0.206	0.186	0.082	0.412	0.371	0.165
TPSB475*025#0700	B	4.7	25	1.2	6	700	1	0.348	0.314	0.139	0.244	0.220	0.098
TPSB475*025#0900	B	4.7	25	1.2	6	900	1	0.307	0.277	0.123	0.277	0.249	0.111
TPSB475*025#1500	B	4.7	25	1.2	6	1500	1	0.238	0.214	0.095	0.357	0.321	0.143
TPSC475*025#0700	C	4.7	25	1.2	6	700	1	0.396	0.357	0.159	0.277	0.250	0.111
TPSB685*025#0700	B	6.8	25	1.7	6	700	1	0.348	0.314	0.139	0.244	0.220	0.098
TPSC685*025#0500	C	6.8	25	1.7	6	500	1	0.469	0.422	0.188	0.235	0.211	0.094
TPSC685*025#0600	C	6.8	25	1.7	6	600	1	0.428	0.385	0.171	0.257	0.231	0.103
TPSC685*025#0700	C	6.8	25	1.7	6	700	1	0.396	0.357	0.159	0.277	0.250	0.111
TPSB106*025#1800	B	10	25	2.5	6	1800	1	0.217	0.196	0.087	0.391	0.352	0.156

<sup>1)</sup> 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.

For AEC-Q200 availability, please contact AVX.

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 126.

**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
TPSC106*025#0300	C	10	25	2.5	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSC106*025#0500	C	10	25	2.5	6	500	1	0.469	0.422	0.188	0.235	0.211	0.094
TPSD106*025#0500	D	10	25	2.5	6	500	1	0.548	0.493	0.219	0.274	0.246	0.110
TPSC156*025#0220	C	15	25	3.8	6	220	1	0.707	0.636	0.283	0.156	0.140	0.062
TPSC156*025#0300	C	15	25	3.8	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSD156*025#0100	D	15	25	3.8	6	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD156*025#0300	D	15	25	3.8	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSC226*025#0275	C	22	25	5.5	6	275	1	0.632	0.569	0.253	0.174	0.157	0.070
TPSC226*025#0400	C	22	25	5.5	6	400	1	0.524	0.472	0.210	0.210	0.189	0.084
TPSD226*025#0100	D	22	25	5.5	6	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD226*025#0200	D	22	25	5.5	6	200	1	0.866	0.779	0.346	0.173	0.156	0.069
TPSD226*025#0300	D	22	25	5.5	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSD336*025#0100	D	33	25	8.3	6	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD336*025#0200	D	33	25	8.3	6	200	1	0.866	0.779	0.346	0.173	0.156	0.069
TPSD336*025#0300	D	33	25	8.3	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSE336*025#0100	E	33	25	8.3	6	100	1 <sup>1)</sup>	1.285	1.156	0.514	0.128	0.116	0.051
TPSE336*025#0175	E	33	25	8.3	6	175	1 <sup>1)</sup>	0.971	0.874	0.388	0.170	0.153	0.068
TPSE336*025#0200	E	33	25	8.3	6	200	1 <sup>1)</sup>	0.908	0.817	0.363	0.182	0.163	0.073
TPSE336*025#0300	E	33	25	8.3	6	300	1 <sup>1)</sup>	0.742	0.667	0.297	0.222	0.200	0.089
TPSY336*025#0200	Y	33	25	8.3	6	200	1 <sup>1)</sup>	0.791	0.712	0.316	0.158	0.142	0.063
TPSD476*025#0125	D	47	25	11.8	6	125	1	1.095	0.986	0.438	0.137	0.123	0.055
TPSD476*025#0150	D	47	25	11.8	6	150	1	1.000	0.900	0.400	0.150	0.135	0.060
TPSD476*025#0250	D	47	25	11.8	6	250	1	0.775	0.697	0.310	0.194	0.174	0.077
TPSE476*025#0080	E	47	25	11.8	6	80	1 <sup>1)</sup>	1.436	1.293	0.574	0.115	0.103	0.046
TPSE476*025#0100	E	47	25	11.8	6	100	1 <sup>1)</sup>	1.285	1.156	0.514	0.128	0.116	0.051
TPSE476*025#0125	E	47	25	11.8	6	125	1 <sup>1)</sup>	1.149	1.034	0.460	0.144	0.129	0.057
TPSE686*025#0125	E	68	25	17	6	125	1 <sup>1)</sup>	1.149	1.034	0.460	0.144	0.129	0.057
TPSE686*025#0200	E	68	25	17	6	200	1 <sup>1)</sup>	0.908	0.817	0.363	0.182	0.163	0.073
TPSV686*025#0080	V	68	25	17	6	80	1 <sup>1)</sup>	1.768	1.591	0.707	0.141	0.127	0.057
TPSV686*025#0095	V	68	25	17	6	95	1 <sup>1)</sup>	1.622	1.460	0.649	0.154	0.139	0.062
TPSV686*025#0150	V	68	25	17	6	150	1 <sup>1)</sup>	1.291	1.162	0.516	0.194	0.174	0.077
TPSV686*025#0200	V	68	25	17	6	200	1 <sup>1)</sup>	1.118	1.006	0.447	0.224	0.201	0.089
TPSE107M*025#0150	E	100	25	25	10	150	1 <sup>1)</sup>	1.049	0.944	0.420	0.157	0.142	0.063
TPSV107*025#0100	V	100	25	25	8	100	1 <sup>1)</sup>	1.581	1.423	0.632	0.158	0.142	0.063
TPSV157M*025#0150	V	150	25	37.5	10	150	1 <sup>1)</sup>	1.291	1.162	0.516	0.194	0.174	0.077
<b>35 Volt @ 85°C (23 Volt @ 125°C)</b>													
TPSA224*035#6000	A	0.22	35	0.5	4	6000	1	0.112	0.101	0.045	0.671	0.604	0.268
TPSA334*035#6000	A	0.33	35	0.5	4	6000	1	0.112	0.101	0.045	0.671	0.604	0.268
TPSA474*035#6000	A	0.47	35	0.5	4	6000	1	0.112	0.101	0.045	0.671	0.604	0.268
TPSB474*035#4000	B	0.47	35	0.5	4	4000	1	0.146	0.131	0.058	0.583	0.525	0.233
TPSA684*035#6000	A	0.68	35	0.5	4	6000	1	0.112	0.101	0.045	0.671	0.604	0.268
TPSA105*035#3000	A	1	35	0.5	4	3000	1	0.158	0.142	0.063	0.474	0.427	0.190
TPSB105*035#2000	B	1	35	0.5	4	2000	1	0.206	0.186	0.082	0.412	0.371	0.165
TPSA155*035#3000	A	1.5	35	0.5	6	3000	1	0.158	0.142	0.063	0.474	0.427	0.190
TPSB155*035#2500	B	1.5	35	0.5	6	2500	1	0.184	0.166	0.074	0.461	0.415	0.184
TPSA225*035#1500	A	2.2	35	0.8	6	1500	1	0.224	0.201	0.089	0.335	0.302	0.134
TPSB225*035#0750	B	2.2	35	0.8	6	750	1	0.337	0.303	0.135	0.252	0.227	0.101
TPSB225*035#1500	B	2.2	35	0.8	6	1500	1	0.238	0.214	0.095	0.357	0.321	0.143
TPSB225*035#2000	B	2.2	35	0.8	6	2000	1	0.206	0.186	0.082	0.412	0.371	0.165
TPSC225*035#1000	C	2.2	35	0.8	6	1000	1	0.332	0.298	0.133	0.332	0.298	0.133
TPSB335*035#1000	B	3.3	35	1.2	6	1000	1	0.292	0.262	0.117	0.292	0.262	0.117
TPSC335*035#0700	C	3.3	35	1.2	6	700	1	0.396	0.357	0.159	0.277	0.250	0.111
TPSB475*035#0700	B	4.7	35	1.6	6	700	1	0.348	0.314	0.139	0.244	0.220	0.098
TPSB475*035#1500	B	4.7	35	1.6	6	1500	1	0.238	0.214	0.095	0.357	0.321	0.143
TPSC475*035#0600	C	4.7	35	1.6	6	600	1	0.428	0.385	0.171	0.257	0.231	0.103
TPSD475*035#0700	D	4.7	35	1.6	6	700	1	0.463	0.417	0.185	0.324	0.292	0.130
TPSC685*035#0350	C	6.8	35	2.4	6	350	1	0.561	0.505	0.224	0.196	0.177	0.078
TPSD685*035#0150	D	6.8	35	2.4	6	150	1	1.000	0.900	0.400	0.150	0.135	0.060
TPSD685*035#0400	D	6.8	35	2.4	6	400	1	0.612	0.551	0.245	0.245	0.220	0.098
TPSD685*035#0500	D	6.8	35	2.4	6	500	1	0.548	0.493	0.219	0.274	0.246	0.110
TPSC106*035#0600	C	10	35	3.5	6	600	1	0.428	0.385	0.171	0.257	0.231	0.103
TPSD106*035#0125	D	10	35	3.5	6	125	1	1.095	0.986	0.438	0.137	0.123	0.055
TPSD106*035#0300	D	10	35	3.5	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSE106*035#0200	E	10	35	3.5	6	200	1 <sup>1)</sup>	0.908	0.817	0.363	0.182	0.163	0.073
TPSY106*035#0250	Y	10	35	3.5	6	250	1 <sup>1)</sup>	0.707	0.636	0.283	0.177	0.159	0.071
TPSC156*035#0350	C	15	35	5.3	6	350	1	0.561	0.505	0.224	0.196	0.177	0.078
TPSC156*035#0450	C	15	35	5.3	6	450	1	0.494	0.445	0.198	0.222	0.200	0.089

<sup>1)</sup> 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.

For AEC-Q200 availability, please contact AVX.

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 126.

**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
TPSD156*035#0100	D	15	35	5.3	6	100	1	1.225	1.102	0.490	0.122	0.110	0.049
TPSD156*035#0300	D	15	35	5.3	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSY156*035#0250	Y	15	35	5.3	6	250	1 <sup>1)</sup>	0.707	0.636	0.283	0.177	0.159	0.071
TPSD226*035#0125	D	22	35	7.7	6	125	1	1.095	0.986	0.438	0.137	0.123	0.055
TPSD226*035#0200	D	22	35	7.7	6	200	1	0.866	0.779	0.346	0.173	0.156	0.069
TPSD226*035#0300	D	22	35	7.7	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSD226*035#0400	D	22	35	7.7	6	400	1	0.612	0.551	0.245	0.245	0.220	0.098
TPSE226*035#0125	E	22	35	7.7	6	125	1 <sup>1)</sup>	1.149	1.034	0.460	0.144	0.129	0.057
TPSE226*035#0200	E	22	35	7.7	6	200	1 <sup>1)</sup>	0.908	0.817	0.363	0.182	0.163	0.073
TPSE226*035#0300	E	22	35	7.7	6	300	1 <sup>1)</sup>	0.742	0.667	0.297	0.222	0.200	0.089
TPSY226*035#0200	Y	22	35	7.7	6	200	1 <sup>1)</sup>	0.791	0.712	0.316	0.158	0.142	0.063
TPSD336*035#0200	D	33	35	11.6	6	200	1	0.866	0.779	0.346	0.173	0.156	0.069
TPSD336*035#0300	D	33	35	11.6	6	300	1	0.707	0.636	0.283	0.212	0.191	0.085
TPSE336*035#0100	E	33	35	11.6	6	100	1 <sup>1)</sup>	1.285	1.156	0.514	0.128	0.116	0.051
TPSE336*035#0250	E	33	35	11.6	6	250	1 <sup>1)</sup>	0.812	0.731	0.325	0.203	0.183	0.081
TPSE336*035#0300	E	33	35	11.6	6	300	1 <sup>1)</sup>	0.742	0.667	0.297	0.222	0.200	0.089
TPSV336*035#0200	V	33	35	11.6	6	200	1 <sup>1)</sup>	1.118	1.006	0.447	0.224	0.201	0.089
TPSE476*035#0200	E	47	35	16.5	6	200	1 <sup>1)</sup>	0.908	0.817	0.363	0.182	0.163	0.073
TPSE476*035#0250	E	47	35	16.5	6	250	1 <sup>1)</sup>	0.812	0.731	0.325	0.203	0.183	0.081
TPSV476*035#0150	V	47	35	16.5	6	150	1 <sup>1)</sup>	1.291	1.162	0.516	0.194	0.174	0.077
TPSV476*035#0200	V	47	35	16.5	6	200	1 <sup>1)</sup>	1.118	1.006	0.447	0.224	0.201	0.089
TPSV686*035#0150	V	68	35	23.8	6	150	1 <sup>1)</sup>	1.291	1.162	0.516	0.194	0.174	0.077
TPSV686*035#0200	V	68	35	23.8	6	200	1 <sup>1)</sup>	1.118	1.006	0.447	0.224	0.201	0.089
<b>50 Volt @ 85°C (33 Volt @ 125°C)</b>													
TPSA154*050#9000	A	0.15	50	0.5	4	9000	1	0.091	0.082	0.037	0.822	0.739	0.329
TPSA224*050#7000	A	0.22	50	0.5	4	7000	1	0.104	0.093	0.041	0.725	0.652	0.290
TPSA334*050#7000	A	0.33	50	0.5	4	7000	1	0.104	0.093	0.041	0.725	0.652	0.290
TPSA474*050#6500	A	0.47	50	0.5	4	6500	1	0.107	0.097	0.043	0.698	0.628	0.279
TPSB474*050#6000	B	0.47	50	0.5	4	6000	1	0.119	0.107	0.048	0.714	0.643	0.286
TPSC474*050#2300	C	0.47	50	0.5	4	2300	1	0.219	0.197	0.087	0.503	0.453	0.201
TPSB684*050#4000	B	0.68	50	0.5	4	4000	1	0.146	0.131	0.058	0.583	0.525	0.233
TPSB105*050#3000	B	1	50	0.5	6	3000	1	0.168	0.151	0.067	0.505	0.454	0.202
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
TPSC225*050#1500	C	2.2	50	1.1	8	1500	1	0.271	0.244	0.108	0.406	0.366	0.162
TPSD225*050#1200	D	2.2	50	1.1	6	1200	1	0.354	0.318	0.141	0.424	0.382	0.170
TPSC335*050#1000	C	3.3	50	1.6	6	1000	1	0.332	0.298	0.133	0.332	0.298	0.133
TPSD335*050#0800	D	3.3	50	1.7	6	800	1	0.433	0.390	0.173	0.346	0.312	0.139
TPSC475*050#0800	C	4.7	50	2.4	6	800	1	0.371	0.334	0.148	0.297	0.267	0.119
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
TPSD106*050#0500	D	10	50	5	6	500	1	0.548	0.493	0.219	0.274	0.246	0.110
TPSE106*050#0250	E	10	50	5	6	250	1 <sup>1)</sup>	0.812	0.731	0.325	0.203	0.183	0.081
TPSE106*050#0300	E	10	50	5	6	300	1 <sup>1)</sup>	0.742	0.667	0.297	0.222	0.200	0.089
TPSE106*050#0400	E	10	50	5	6	400	1 <sup>1)</sup>	0.642	0.578	0.257	0.257	0.231	0.103
TPSE106*050#0500	E	10	50	5	6	500	1 <sup>1)</sup>	0.574	0.517	0.230	0.287	0.259	0.115
TPSE156*050#0250	E	15	50	7.5	6	250	1 <sup>1)</sup>	0.812	0.731	0.325	0.203	0.183	0.081
TPSV156*050#0250	V	15	50	7.5	6	250	1 <sup>1)</sup>	1.000	0.900	0.400	0.250	0.225	0.100

<sup>1)</sup> 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.

For AEC-Q200 availability, please contact AVX.

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 126.

**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.**

# TPS Automotive Range



## Low ESR - Automotive Product Range

### TPS AUTOMOTIVE RANGE CAPACITANCE AND RATED VOLTAGE, $V_R$ (VOLTAGE CODE) RANGE (LETTER DENOTES CASE SIZE)

Capacitance		Rated Voltage DC ( $V_R$ ) to 85°C						
$\mu\text{F}$	Code	6.3V (J)	10V (A)	16V (C)	20V (D)	25V (E)	35V (V)	50V (T)
0.15	154							
0.22	224							A(7000)
0.33	334						A(6000)	A(7000)
0.47	474					A(7000)	A(6000)	A(6500), B(6000)
0.68	684					A(6000)	A(6000)	B(4000)
1.0	105			A(6200)	A(3000)	A(4000)	A(3000), B(2000)	B(3000), C(2500)
1.5	155				A(3000)	A(3000)	A(3000), B(2500)	C(1500,2000)
2.2	225		A(1800)	A(1800,3500)	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)		A(3500), B(2500)	A(2500), B(1300)	B(750,1500,2000)	B(1000), C(700)	C(1000), D(800)
4.7	475		A(1400), B(1400)	A(2000), B(800,1500)	A(1800), B(750,1000)	B(700,900), C(700)	B(700,1500), C(600), D(700)	C(800), D(500,700)
6.8	685		A(1800), B(1300)	A(1500), B(600,1200)	B(600,1000), C(700)	B(700), C(500,600,700)	C(350), D(400,500)	D(500,600)
10	106	A(1500), B(1500)	A(900,1800), B(1000)	A(1000), B(500,800), C(500)	B(500,1000), C(500,700)	C(300,500), D(500)	C(600), D(300)	D(500), E(250,300,400,500)
15	156	A(700,1500)	A(1000), B(450,600), C(700)	B(500,800), C(700)	B(500), C(400,450)	C(220,300), D(300)	D(300)	
22	226	A(500,900), B(375,600), C(500)	A(900), B(400,500,700), C(300)	B(400,600), C(300,375), D(700)	C(400), D(200,300)	C(275,400), D(200,300)	D(200,300,400), E(200,300)	
33	336	A(600), B(250,350,450,600)	B(250,425,500,650), C(375,500)	C(225,300), D(200)	C(300), D(200)	D(200,300)	E(250,300)	
47	476	B(250,350,500), C(300)	B(250,350,500,650), C(200,350), D(300)	C(350), D(200)	D(200)	D(125,150,250), E(125)		
68	686	B(250,350,500), C(150,200)	C(200,300), D(150)	C(200), D(150)	D(150,200,300), E(125,150,200)			
100	107	C(150), D(300)	C(150,200), D(100,125,150)	D(100,125,150), E(100,125,150)	E(100,150,200)			
150	157	C(150,200,250), D(125)	D(85,100), E(100)	E(100)				
220	227	D(100,125)	D(100,150), E(70,100,125,150)					
330	337	D(70,100), E(100,125,150)	E(50,60,100)					
470	477	D(45,60,100,200), E(45,50,60,100,200)						
680	687	E(45,60,100)						

Not recommended for new designs, higher voltage or smaller case size substitution are offered.

Released codes

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

## HOW TO ORDER

<b>TPS</b>	<b>C</b>	<b>107</b>	<b>M</b>	<b>010</b>	<b>T</b>	<b>0150</b>
<b>Type</b>	<b>Case Size</b> See table above	<b>Capacitance Code</b> pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)	<b>Tolerance</b> K = $\pm 10\%$ M = $\pm 20\%$	<b>Rated DC Voltage</b> 006 = 6.3Vdc 010 = 10Vdc 016 = 16Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc	<b>Packaging</b> T = Automotive Lead Free 7" Reel U = Automotive Lead Free 13" Reel	<b>ESR in m<math>\Omega</math></b>

## TECHNICAL SPECIFICATIONS

Technical Data:

All technical data relate to an ambient temperature of +25°C

Capacitance Range:	0.22 $\mu\text{F}$ to 680 $\mu\text{F}$								
Capacitance Tolerance:	$\pm 10\%$ ; $\pm 20\%$								
Rated Voltage ( $V_R$ )	$\leq +85^\circ\text{C}$ :	6.3	10	16	20	25	35	50	
Category Voltage ( $V_C$ )	$\leq +125^\circ\text{C}$ :	4	7	10	13	17	23	33	
Surge Voltage ( $V_S$ )	$\leq +85^\circ\text{C}$ :	8	13	20	26	32	46	65	
Surge Voltage ( $V_S$ )	$\leq +125^\circ\text{C}$ :	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 0.1 $\Omega$ /V series impedance, 60% confidence level								
Termination Finished:	Sn Plating (standard), Gold and SnPb Plating upon request								
	Meets requirements of AEC-Q200								



# TPS Automotive Range

## Low ESR - Automotive Product Range



### 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
<b>6.3 Volt @ 85°C (4 Volt @ 125°C)</b>													
TPSA335*006T2100	A	3.3	6.3	0.5	6	2100	1		0.170	0.076	0.397	0.357	0.159
TPSA106*006T1500	A	10	6.3	0.6	6	1500	1	0.224	0.201	0.089	0.335	0.302	0.134
TPSB106*006T1500	B	10	6.3	0.6	6	1500	1	0.238	0.214	0.095	0.357	0.321	0.143
TPSA156*006T0700	A	15	6.3	0.9	6	700	1	0.327	0.295	0.131	0.229	0.206	0.092
TPSA156*006T1500	A	15	6.3	0.9	6	1500	1	0.224	0.201	0.089	0.335	0.302	0.134
TPSA226*006T0500	A	22	6.3	1.4	6	500	1	0.387	0.349	0.155	0.194	0.174	0.077
TPSA226*006T0900	A	22	6.3	1.4	6	900	1	0.289	0.260	0.115	0.260	0.234	0.104
TPSB226*006T0375	B	22	6.3	1.4	6	375	1	0.476	0.428	0.190	0.179	0.161	0.071
TPSB226*006T0600	B	22	6.3	1.4	6	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPSC226*006T0500	C	22	6.3	1.4	6	500	1	0.469	0.422	0.188	0.235	0.211	0.094
TPSA336*006T0600	A	33	6.3	2.1	8	600	1	0.354	0.318	0.141	0.212	0.191	0.085
TPSB336*006T0250	B	33	6.3	2.1	6	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB336*006T0350	B	33	6.3	2.1	6	350	1	0.493	0.444	0.197	0.172	0.155	0.069
TPSB336*006T0450	B	33	6.3	2.1	6	450	1	0.435	0.391	0.174	0.196	0.176	0.078
TPSB336*006T0600	B	33	6.3	2.1	6	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPSB476*006T0250	B	47	6.3	3	6	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB476*006T0350	B	47	6.3	3	6	350	1	0.493	0.444	0.197	0.172	0.155	0.069
TPSB476*006T0500	B	47	6.3	3	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSC476*006T0300	C	47	6.3	3	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSB686*006T0250	B	68	6.3	4	8	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB686*006T0350	B	68	6.3	4	8	350	1	0.493	0.444	0.197	0.172	0.155	0.069
TPSB686*006T0500	B	68	6.3	4	8	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSC686*006T0150	C	68	6.3	4.3	6	150	1	0.856	0.771	0.343	0.128	0.116	0.051
TPSC686*006T0200	C	68	6.3	4.3	6	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSC107*006T0150	C	100	6.3	6.3	6	150	1	0.856	0.771	0.343	0.128	0.116	0.051
TPSD107*006T0300	D	100	6.3	6.3	6	300	3	0.707	0.636	0.283	0.212	0.191	0.085
TPSC157*006T0150	C	150	6.3	9.5	6	150	1	0.856	0.771	0.343	0.128	0.116	0.051
TPSC157*006T0200	C	150	6.3	9.5	6	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSC157*006T0250	C	150	6.3	9.5	6	250	1	0.663	0.597	0.265	0.166	0.149	0.066
TPSD157*006T0125	D	150	6.3	9.5	6	125	3	1.095	0.986	0.438	0.137	0.123	0.055
TPSD227*006T0100	D	220	6.3	13.9	8	100	3	1.225	1.102	0.490	0.122	0.110	0.049
TPSD227*006T0125	D	220	6.3	13.9	8	125	3	1.095	0.986	0.438	0.137	0.123	0.055
TPSD337*006T0070	D	330	6.3	20.8	8	70	3	1.464	1.317	0.586	0.102	0.092	0.041
TPSD337*006T0100	D	330	6.3	20.8	8	100	3	1.225	1.102	0.490	0.122	0.110	0.049
TPSE337*006T0100	E	330	6.3	20.8	8	100	3	1.285	1.156	0.514	0.128	0.116	0.051
TPSE337*006T0125	E	330	6.3	20.8	8	125	3	1.149	1.034	0.460	0.144	0.129	0.057
TPSE337*006T0150	E	330	6.3	20.8	8	150	3	1.049	0.944	0.420	0.157	0.142	0.063
TPSD477*006T0045	D	470	6.3	28	12	45	3	1.826	1.643	0.730	0.082	0.074	0.033
TPSD477*006T0060	D	470	6.3	28	12	60	3	1.581	1.423	0.632	0.095	0.085	0.038
TPSD477*006T0100	D	470	6.3	28	12	100	3	1.225	1.102	0.490	0.122	0.110	0.049
TPSD477*006T0200	D	470	6.3	28	12	200	3	0.866	0.779	0.346	0.173	0.156	0.069
TPSE477*006T0045	E	470	6.3	28	10	45	3	1.915	1.723	0.766	0.086	0.078	0.034
TPSE477*006T0050	E	470	6.3	28	10	50	3	1.817	1.635	0.727	0.091	0.082	0.036
TPSE477*006T0060	E	470	6.3	28	10	60	3	1.658	1.492	0.663	0.099	0.090	0.040
TPSE477*006T0100	E	470	6.3	28	10	100	3	1.285	1.156	0.514	0.128	0.116	0.051
TPSE477*006T0200	E	470	6.3	28	10	200	3	0.908	0.817	0.363	0.182	0.163	0.073
TPSE687*006T0045	E	680	6.3	42.8	10	45	3	1.915	1.723	0.766	0.086	0.078	0.034
TPSE687*006T0060	E	680	6.3	42.8	10	60	3	1.658	1.492	0.663	0.099	0.090	0.040
TPSE687*006T0100	E	680	6.3	42.8	10	100	3	1.285	1.156	0.514	0.128	0.116	0.051
<b>10 Volt @ 85°C (7 Volt @ 125°C)</b>													
TPSA225*010T1800	A	2.2	10	0.5	6	1800	1	0.204	0.184	0.082	0.367	0.331	0.147
TPSA475*010T1400	A	4.7	10	0.5	6	1400	1	0.231	0.208	0.093	0.324	0.292	0.130
TPSB475*010T1400	B	4.7	10	0.5	6	1400	1	0.246	0.222	0.099	0.345	0.310	0.138
TPSA685*010T1800	A	6.8	10	0.7	6	1800	1	0.204	0.184	0.082	0.367	0.331	0.147
TPSB685*010T1300	B	6.8	10	0.7	6	1300	1	0.256	0.230	0.102	0.332	0.299	0.133
TPSA106*010T0900	A	10	10	1	6	900	1	0.289	0.260	0.115	0.260	0.234	0.104
TPSA106*010T1800	A	10	10	1	6	1800	1	0.204	0.184	0.082	0.367	0.331	0.147
TPSB106*010T1000	B	10	10	1	6	1000	1	0.292	0.262	0.117	0.292	0.262	0.117
TPSA156*010T1000	A	15	10	1.5	6	1000	1	0.274	0.246	0.110	0.274	0.246	0.110
TPSB156*010T0450	B	15	10	1.5	6	450	1	0.435	0.391	0.174	0.196	0.176	0.078
TPSB156*010T0600	B	15	10	1.5	6	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPSC156*010T0700	C	15	10	1.5	6	700	1	0.396	0.357	0.159	0.277	0.250	0.111
TPSA226*010T0900	A	22	10	2.2	8	900	1	0.289	0.260	0.115	0.260	0.234	0.104
TPSB226*010T0400	B	22	10	2.2	6	400	1	0.461	0.415	0.184	0.184	0.166	0.074
TPSB226*010T0500	B	22	10	2.2	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSB226*010T0700	B	22	10	2.2	6	700	1	0.348	0.314	0.139	0.244	0.220	0.098

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

\*Please use "U" instead of "T" in the suffix letter for 13" reel packaging

Please use specific PN for automotive version - see "HOW TO ORDER".

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 126.

**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.**



# TPS Automotive Range



## Low ESR - Automotive Product Range

### 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
TPSC226*010T0300	C	22	10	2.2	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSB336*010T0250	B	33	10	3.3	6	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB336*010T0425	B	33	10	3.3	6	425	1	0.447	0.402	0.179	0.190	0.171	0.076
TPSB336*010T0500	B	33	10	3.3	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSB336*010T0650	B	33	10	3.3	6	650	1	0.362	0.325	0.145	0.235	0.212	0.094
TPSC336*010T0375	C	33	10	3.3	6	375	1	0.542	0.487	0.217	0.203	0.183	0.081
TPSC336*010T0500	C	33	10	3.3	6	500	1	0.469	0.422	0.188	0.235	0.211	0.094
TPSB476*010T0250	B	47	10	4.7	8	250	1	0.583	0.525	0.233	0.146	0.131	0.058
TPSB476*010T0350	B	47	10	4.7	8	350	1	0.493	0.444	0.197	0.172	0.155	0.069
TPSB476*010T0500	B	47	10	4.7	8	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSB476*010T0650	B	47	10	4.7	8	650	1	0.362	0.325	0.145	0.235	0.212	0.094
TPSC476*010T0200	C	47	10	4.7	6	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSC476*010T0350	C	47	10	4.7	6	350	1	0.561	0.505	0.224	0.196	0.177	0.078
TPSD476*010T0300	D	47	10	4.7	6	300	3	0.707	0.636	0.283	0.212	0.191	0.085
TPSC686*010T0200	C	68	10	6.8	6	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSC686*010T0300	C	68	10	6.8	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSD686*010T0150	D	68	10	6.8	6	150	3	1.000	0.900	0.400	0.150	0.135	0.060
TPSC107*010T0150	C	100	10	10	8	150	1	0.856	0.771	0.343	0.128	0.116	0.051
TPSC107*010T0200	C	100	10	10	8	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSD107*010T0100	D	100	10	10	6	100	3	1.225	1.102	0.490	0.122	0.110	0.049
TPSD107*010T0125	D	100	10	10	6	125	3	1.095	0.986	0.438	0.137	0.123	0.055
TPSD107*010T0150	D	100	10	10	6	150	3	1.000	0.900	0.400	0.150	0.135	0.060
TPSD157*010T0085	D	150	10	15	8	85	3	1.328	1.196	0.531	0.113	0.102	0.045
TPSD157*010T0100	D	150	10	15	8	100	3	1.225	1.102	0.490	0.122	0.110	0.049
TPSE157*010T0100	E	150	10	15	8	100	3	1.285	1.156	0.514	0.128	0.116	0.051
TPSD227*010T0100	D	220	10	22	8	100	3	1.225	1.102	0.490	0.122	0.110	0.049
TPSD227*010T0150	D	220	10	22	8	150	3	1.000	0.900	0.400	0.150	0.135	0.060
TPSE227*010T0070	E	220	10	22	8	70	3	1.535	1.382	0.614	0.107	0.097	0.043
TPSE227*010T0100	E	220	10	22	8	100	3	1.285	1.156	0.514	0.128	0.116	0.051
TPSD227*010T0125	D	220	10	22	8	125	3	1.149	1.034	0.460	0.144	0.129	0.057
TPSE227*010T0150	E	220	10	22	8	150	3	1.049	0.944	0.420	0.157	0.142	0.063
TPSE337*010T0050	E	330	10	33	8	50	3	1.817	1.635	0.727	0.091	0.082	0.036
TPSE337*010T0060	E	330	10	33	8	60	3	1.658	1.492	0.663	0.099	0.090	0.040
TPSE337*010T0100	E	330	10	33	8	100	3	1.285	1.156	0.514	0.128	0.116	0.051
<b>16 Volt @ 85°C (10 Volt @ 25°C)</b>													
TPSA105*016T6200	A	1.0	16	0.5	4	6200	1	0.110	0.099	0.044	0.682	0.614	0.273
TPSA225*016T1800	A	2.2	16	0.5	6	1800	1	0.204	0.184	0.082	0.367	0.331	0.147
TPSA225*016T3500	A	2.2	16	0.5	6	3500	1	0.146	0.132	0.059	0.512	0.461	0.205
TPSA335*016T3500	A	3.3	16	0.5	6	3500	1	0.146	0.132	0.059	0.512	0.461	0.205
TPSB335*016T2500	B	3.3	16	0.5	6	2500	1	0.184	0.166	0.074	0.461	0.415	0.184
TPSA475*016T2000	A	4.7	16	0.8	6	2000	1	0.194	0.174	0.077	0.387	0.349	0.155
TPSB475*016T0800	B	4.7	16	0.8	6	800	1	0.326	0.293	0.130	0.261	0.235	0.104
TPSB475*016T1500	B	4.7	16	0.8	6	1500	1	0.238	0.214	0.095	0.357	0.321	0.143
TPSA685*016T1500	A	6.8	16	1.1	6	1500	1	0.224	0.201	0.089	0.335	0.302	0.134
TPSB685*016T0600	B	6.8	16	1.1	6	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPSB685*016T1200	B	6.8	16	1.1	6	1200	1	0.266	0.240	0.106	0.319	0.287	0.128
TPSA106*016T1000	A	10	16	1.6	6	1000	1	0.274	0.246	0.110	0.274	0.246	0.110
TPSB106*016T0500	B	10	16	1.6	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSB106*016T0800	B	10	16	1.6	6	800	1	0.326	0.293	0.130	0.261	0.235	0.104
TPSC106*016T0500	C	10	16	1.6	6	500	1	0.469	0.422	0.188	0.235	0.211	0.094
TPSB156*016T0500	B	15	16	2.4	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSB156*016T0800	B	15	16	2.4	6	800	1	0.326	0.293	0.130	0.261	0.235	0.104
TPSC156*016T0700	C	15	16	2.4	6	700	1	0.396	0.357	0.159	0.277	0.250	0.111
TPSB226*016T0400	B	22	16	3.5	6	400	1	0.461	0.415	0.184	0.184	0.166	0.074
TPSB226*016T0600	B	22	16	3.5	6	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPSC226*016T0300	C	22	16	3.5	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSC226*016T0375	C	22	16	3.5	6	375	1	0.542	0.487	0.217	0.203	0.183	0.081
TPSD226*016T0700	D	22	16	3.5	6	700	3	0.463	0.417	0.185	0.324	0.292	0.130
TPSC336*016T0225	C	33	16	5.3	6	225	1	0.699	0.629	0.280	0.157	0.142	0.063
TPSC336*016T0300	C	33	16	5.3	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSD336*016T0200	D	33	16	5.3	6	200	3	0.866	0.779	0.346	0.173	0.156	0.069
TPSC476*016T0350	C	47	16	7.5	6	350	1	0.561	0.505	0.224	0.196	0.177	0.078
TPSD476*016T0200	D	47	16	7.5	6	200	3	0.866	0.779	0.346	0.173	0.156	0.069
TPSC686*016T0200	C	68	16	10.9	6	200	1	0.742	0.667	0.297	0.148	0.133	0.059
TPSD686*016T0150	D	68	16	10.9	6	150	3	1.000	0.900	0.400	0.150	0.135	0.060
TPSD107*016T0100	D	100	16	16	6	100	3	1.225	1.102	0.490	0.122	0.110	0.049
TPSD107*016T0125	D	100	16	16	6	125	3	1.095	0.986	0.438	0.137	0.123	0.055

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

\*Please use "U" instead of "T" in the suffix letter for 13" reel packaging

Please use specific PN for automotive version - see "HOW TO ORDER".

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 126.

**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.**



# TPS Automotive Range

## Low ESR - Automotive Product Range



### 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
TPSD107*016T0150	D	100	16	16	6	150	3	1.000	0.900	0.400	0.150	0.135	0.060
TPSE107*016T0100	E	100	16	16	6	100	3	1.285	1.156	0.514	0.128	0.116	0.051
TPSE107*016T0125	E	100	16	16	6	125	3	1.149	1.034	0.460	0.144	0.129	0.057
TPSE107*016T0150	E	100	16	16	6	150	3	1.049	0.944	0.420	0.157	0.142	0.063
TPSE157*016T0100	E	150	16	23	8	100	3	1.285	1.156	0.514	0.128	0.116	0.051
<b>20 Volt @ 85°C (13 Volt @ 125°C)</b>													
TPSA105*020T3000	A	1	20	0.5	4	3000	1	0.158	0.142	0.063	0.474	0.427	0.190
TPSA155*020T3000	A	1.5	20	0.5	6	3000	1	0.158	0.142	0.063	0.474	0.427	0.190
TPSA225*020T3000	A	2.2	20	0.5	6	3000	1	0.158	0.142	0.063	0.474	0.427	0.190
TPSB225*020T1700	B	2.2	20	0.5	6	1700	1	0.224	0.201	0.089	0.380	0.342	0.152
TPSA335*020T2500	A	3.3	20	0.7	6	2500	1	0.173	0.156	0.069	0.433	0.390	0.173
TPSB335*020T1300	B	3.3	20	0.7	6	1300	1	0.256	0.230	0.102	0.332	0.299	0.133
TPSA475*020T1800	A	4.7	20	0.9	6	1800	1	0.204	0.184	0.082	0.367	0.331	0.147
TPSB475*020T0750	B	4.7	20	0.9	6	750	1	0.337	0.303	0.135	0.252	0.227	0.101
TPSB475*020T1000	B	4.7	20	0.9	6	1000	1	0.292	0.262	0.117	0.292	0.262	0.117
TPSB685*020T0600	B	6.8	20	1.4	6	600	1	0.376	0.339	0.151	0.226	0.203	0.090
TPSB685*020T1000	B	6.8	20	1.4	6	1000	1	0.292	0.262	0.117	0.292	0.262	0.117
TPSC685*020T0700	C	6.8	20	1.4	6	700	1	0.396	0.357	0.159	0.277	0.250	0.111
TPSB106*020T0500	B	10	20	2	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSB106*020T1000	B	10	20	2	6	1000	1	0.292	0.262	0.117	0.292	0.262	0.117
TPSC106*020T0500	C	10	20	2	6	500	1	0.469	0.422	0.188	0.235	0.211	0.094
TPSC106*020T0700	C	10	20	2	6	700	1	0.396	0.357	0.159	0.277	0.250	0.111
TPSB156*020T0500	B	15	20	3	6	500	1	0.412	0.371	0.165	0.206	0.186	0.082
TPSC156*020T0400	C	15	20	3	6	400	1	0.524	0.472	0.210	0.210	0.189	0.084
TPSC156*020T0450	C	15	20	3	6	450	1	0.494	0.445	0.198	0.222	0.200	0.089
TPSC226*020T0400	C	22	20	4.4	6	400	1	0.524	0.472	0.210	0.210	0.189	0.084
TPSD226*020T0200	D	22	20	4.4	6	200	3	0.866	0.779	0.346	0.173	0.156	0.069
TPSD226*020T0300	D	22	20	4.4	6	300	3	0.707	0.636	0.283	0.212	0.191	0.085
TPSC336*020T0300	C	33	20	6.6	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSD336*020T0200	D	33	20	6.6	6	200	3	0.866	0.779	0.346	0.173	0.156	0.069
TPSD476*020T0200	D	47	20	9.4	6	200	3	0.866	0.779	0.346	0.173	0.156	0.069
TPSD686*020T0150	D	68	20	13.6	6	150	3	1.000	0.900	0.400	0.150	0.135	0.060
TPSD686*020T0200	D	68	20	13.6	6	200	3	0.866	0.779	0.346	0.173	0.156	0.069
TPSD686*020T0300	D	68	20	13.6	6	300	3	0.707	0.636	0.283	0.212	0.191	0.085
TPSE686*020T0125	E	68	20	13.6	6	125	3	1.149	1.034	0.460	0.144	0.129	0.057
TPSE686*020T0150	E	68	20	13.6	6	150	3	1.049	0.944	0.420	0.157	0.142	0.063
TPSE686*020T0200	E	68	20	13.6	6	200	3	0.908	0.817	0.363	0.182	0.163	0.073
TPSE107*020T0100	E	100	20	20	6	100	3	1.285	1.156	0.514	0.128	0.116	0.051
TPSE107*020T0150	E	100	20	20	6	150	3	1.049	0.944	0.420	0.157	0.142	0.063
TPSE107*020T0200	E	100	20	20	6	200	3	0.908	0.817	0.363	0.182	0.163	0.073
<b>25 Volt @ 85°C (17 Volt @ 125°C)</b>													
TPSA474*025T7000	A	0.47	25	0.5	4	7000	1	0.104	0.093	0.041	0.725	0.652	0.290
TPSA684*025T6000	A	0.68	25	0.5	4	6000	1	0.112	0.101	0.045	0.671	0.604	0.268
TPSA105*025T4000	A	1.0	25	0.5	4	4000	1	0.137	0.123	0.055	0.548	0.493	0.219
TPSA155*025T3000	A	1.5	25	0.5	6	3000	1	0.158	0.142	0.063	0.474	0.427	0.190
TPSA225*025T2500	A	2.2	25	0.6	6	2500	1	0.173	0.156	0.069	0.433	0.390	0.173
TPSB225*025T0900	B	2.2	25	0.6	6	900	1	0.307	0.277	0.123	0.277	0.249	0.111
TPSB225*025T1200	B	2.2	25	0.6	6	1200	1	0.266	0.240	0.106	0.319	0.287	0.128
TPSB225*025T2500	B	2.2	25	0.6	6	2500	1	0.184	0.166	0.074	0.461	0.415	0.184
TPSB335*025T0750	B	3.3	25	0.8	6	750	1	0.337	0.303	0.135	0.252	0.227	0.101
TPSB335*025T1500	B	3.3	25	0.8	6	1500	1	0.238	0.214	0.095	0.357	0.321	0.143
TPSB335*025T2000	B	3.3	25	0.8	6	2000	1	0.206	0.186	0.082	0.412	0.371	0.165
TPSB475*025T0700	B	4.7	25	1.2	6	700	1	0.348	0.314	0.139	0.244	0.220	0.098
TPSB475*025T0900	B	4.7	25	1.2	6	900	1	0.307	0.277	0.123	0.277	0.249	0.111
TPSC475*025T0700	C	4.7	25	1.2	6	700	1	0.396	0.357	0.159	0.277	0.250	0.111
TPSB685*025T0700	B	6.8	25	1.7	6	700	1	0.348	0.314	0.139	0.244	0.220	0.098
TPSC685*025T0500	C	6.8	25	1.7	6	500	1	0.469	0.422	0.188	0.235	0.211	0.094
TPSC685*025T0600	C	6.8	25	1.7	6	600	1	0.428	0.385	0.171	0.257	0.231	0.103
TPSC685*025T0700	C	6.8	25	1.7	6	700	1	0.396	0.357	0.159	0.277	0.250	0.111
TPSC106*025T0300	C	10	25	2.5	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSC106*025T0500	C	10	25	2.5	6	500	1	0.469	0.422	0.188	0.235	0.211	0.094
TPSD106*025T0500	D	10	25	2.5	6	500	3	0.548	0.493	0.219	0.274	0.246	0.110
TPSC156*025T0220	C	15	25	3.8	6	220	1	0.707	0.636	0.283	0.156	0.140	0.062
TPSC156*025T0300	C	15	25	3.8	6	300	1	0.606	0.545	0.242	0.182	0.163	0.073
TPSD156*025T0300	D	15	25	3.8	6	300	3	0.707	0.636	0.283	0.212	0.191	0.085
TPSC226*025T0275	C	22	25	5.5	6	275	1	0.632	0.569	0.253	0.174	0.157	0.070
TPSC226*025T0400	C	22	25	5.5	6	400	1	0.524	0.472	0.210	0.210	0.189	0.084

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

\*Please use "U" instead of "T" in the suffix letter for 13" reel packaging

Please use specific PN for automotive version - see "HOW TO ORDER".

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 126.

**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.**



# TPS Automotive Range



## Low ESR - Automotive Product Range

### 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
TPSD226*025T0200	D	22	25	5.5	6	200	3	0.866	0.779	0.346	0.173	0.156	0.069
TPSD226*025T0300	D	22	25	5.5	6	300	3	0.707	0.636	0.283	0.212	0.191	0.085
TPSD336*025T0200	D	33	25	8.3	6	200	3	0.866	0.779	0.346	0.173	0.156	0.069
TPSD336*025T0300	D	33	25	8.3	6	300	3	0.707	0.636	0.283	0.212	0.191	0.085
TPSD476*025T0125	D	47	25	11.8	6	125	3	1.095	0.986	0.438	0.137	0.123	0.055
TPSD476*025T0150	D	47	25	11.8	6	150	3	1.000	0.900	0.400	0.150	0.135	0.060
TPSD476*025T0250	D	47	25	11.8	6	250	3	0.775	0.697	0.310	0.194	0.174	0.077
TPSE476*025T0125	E	47	25	11.8	6	125	3	1.149	1.034	0.460	0.144	0.129	0.057
<b>35 Volt @ 85°C (23 Volt @ 125°C)</b>													
TPSA334*035T6000	A	0.33	35	0.5	4	6000	1	0.112	0.101	0.045	0.671	0.604	0.268
TPSA474*035T6000	A	0.47	35	0.5	4	6000	1	0.112	0.101	0.045	0.671	0.604	0.268
TPSA684*035T6000	A	0.68	35	0.5	4	6000	1	0.112	0.101	0.045	0.671	0.604	0.268
TPSA105*035T3000	A	1	35	0.5	4	3000	1	0.158	0.142	0.063	0.474	0.427	0.190
TPSB105*035T2000	B	1	35	0.5	4	2000	1	0.206	0.186	0.082	0.412	0.371	0.165
TPSA155*035T3000	A	1.5	35	0.5	6	3000	1	0.158	0.142	0.063	0.474	0.427	0.190
TPSB155*035T2500	B	1.5	35	0.5	6	2500	1	0.184	0.166	0.074	0.461	0.415	0.184
TPSB225*035T0750	B	2.2	35	0.8	6	750	1	0.337	0.303	0.135	0.252	0.227	0.101
TPSB225*035T1500	B	2.2	35	0.8	6	1500	1	0.238	0.214	0.095	0.357	0.321	0.143
TPSB225*035T2000	B	2.2	35	0.8	6	2000	1	0.206	0.186	0.082	0.412	0.371	0.165
TPSC225*035T1000	C	2.2	35	0.8	6	1000	1	0.332	0.298	0.133	0.332	0.298	0.133
TPSB335*035T1000	B	3.3	35	1.2	6	1000	1	0.292	0.262	0.117	0.292	0.262	0.117
TPSC335*035T0700	C	3.3	35	1.2	6	700	1	0.396	0.357	0.159	0.277	0.250	0.111
TPSB475*035T0700	B	4.7	35	1.6	6	700	1	0.348	0.314	0.139	0.244	0.220	0.098
TPSB475*035T1500	B	4.7	35	1.6	6	1500	1	0.238	0.214	0.095	0.357	0.321	0.143
TPSC475*035T0600	C	4.7	35	1.6	6	600	1	0.428	0.385	0.171	0.257	0.231	0.103
TPSD475*035T0700	D	4.7	35	1.6	6	700	3	0.463	0.417	0.185	0.324	0.292	0.130
TPSC685*035T0350	C	6.8	35	2.4	6	350	1	0.561	0.505	0.224	0.196	0.177	0.078
TPSD685*035T0400	D	6.8	35	2.4	6	400	3	0.612	0.551	0.245	0.245	0.220	0.098
TPSD685*035T0500	D	6.8	35	2.4	6	500	3	0.548	0.493	0.219	0.274	0.246	0.110
TPSC106*035T0600	C	10	35	3.5	6	600	1	0.428	0.385	0.171	0.257	0.231	0.103
TPSD106*035T0300	D	10	35	3.5	6	300	3	0.707	0.636	0.283	0.212	0.191	0.085
TPSD156*035T0300	D	15	35	5.3	6	300	3	0.707	0.636	0.283	0.212	0.191	0.085
TPSD226*035T0200	D	22	35	7.7	6	200	3	0.866	0.779	0.346	0.173	0.156	0.069
TPSD226*035T0300	D	22	35	7.7	6	300	3	0.707	0.636	0.283	0.212	0.191	0.085
TPSD226*035T0400	D	22	35	7.7	6	400	3	0.612	0.551	0.245	0.245	0.220	0.098
TPSE226*035T0200	E	22	35	7.7	6	200	3	0.908	0.817	0.363	0.182	0.163	0.073
TPSE226*035T0300	E	22	35	7.7	6	300	3	0.742	0.667	0.297	0.222	0.200	0.089
TPSE336*035T0250	E	33	35	11.6	6	250	3	0.812	0.731	0.325	0.203	0.183	0.081
TPSE336*035T0300	E	33	35	11.6	6	300	3	0.742	0.667	0.297	0.222	0.200	0.089
<b>50 Volt @ 85°C (33 Volt @ 125°C)</b>													
TPSA224*050T7000	A	0.22	50	0.5	4	7000	1	0.104	0.093	0.041	0.725	0.652	0.290
TPSA334*050T7000	A	0.33	50	0.5	4	7000	1	0.104	0.093	0.041	0.725	0.652	0.290
TPSA474*050T6500	A	0.47	50	0.5	4	6500	1	0.107	0.097	0.043	0.698	0.628	0.279
TPSB474*050T6000	B	0.47	50	0.5	4	6000	1	0.119	0.107	0.048	0.714	0.643	0.286
TPSB684*050T4000	B	0.68	50	0.5	4	4000	1	0.146	0.131	0.058	0.583	0.525	0.233
TPSB105*050T3000	B	1	50	0.5	6	3000	1	0.168	0.151	0.067	0.505	0.454	0.202
TPSC105*050T2500	C	1	50	0.5	4	2500	1	0.210	0.189	0.084	0.524	0.472	0.210
TPSC155*050T1500	C	1.5	50	0.8	6	1500	1	0.271	0.244	0.108	0.406	0.366	0.162
TPSC155*050T2000	C	1.5	50	0.8	6	2000	1	0.235	0.211	0.094	0.469	0.422	0.188
TPSC225*050T1500	C	2.2	50	1.1	8	1500	1	0.271	0.244	0.108	0.406	0.366	0.162
TPSD225*050T1200	D	2.2	50	1.1	6	1200	3	0.354	0.318	0.141	0.424	0.382	0.170
TPSC335*050T1000	C	3.3	50	1.6	6	1000	1	0.332	0.298	0.133	0.332	0.298	0.133
TPSD335*050T0800	D	3.3	50	1.7	6	800	3	0.433	0.390	0.173	0.346	0.312	0.139
TPSC475*050T0800	C	4.7	50	2.4	6	800	1	0.371	0.334	0.148	0.297	0.267	0.119
TPSD475*050T0500	D	4.7	50	2.4	6	500	3	0.548	0.493	0.219	0.274	0.246	0.110
TPSD475*050T0700	D	4.7	50	2.4	6	700	3	0.463	0.417	0.185	0.324	0.292	0.130
TPSD685*050T0500	D	6.8	50	3.4	6	500	3	0.548	0.493	0.219	0.274	0.246	0.110
TPSD685*050T0600	D	6.8	50	3.4	6	600	3	0.500	0.450	0.200	0.300	0.270	0.120
TPSD106*050T0500	D	10	50	5	6	500	3	0.548	0.493	0.219	0.274	0.246	0.110
TPSE106*050T0250	E	10	50	5	6	250	3	0.812	0.731	0.325	0.203	0.183	0.081
TPSE106*050T0300	E	10	50	5	6	300	3	0.742	0.667	0.297	0.222	0.200	0.089
TPSE106*050T0400	E	10	50	5	6	400	3	0.642	0.578	0.257	0.257	0.231	0.103
TPSE106*050T0500	E	10	50	5	6	500	3	0.574	0.517	0.230	0.287	0.259	0.115

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

\*Please use "U" instead of "T" in the suffix letter for 13" reel packaging

Please use specific PN for automotive version – see "HOW TO ORDER".

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 126.

**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.**







Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

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