#### Low ESR



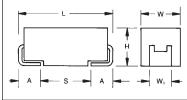


TPS surface mount products have inherently low ESR (equivalent series resistance) and are capable of higher ripple current handling, producing lower ripple voltages, less power and heat dissipation than standard product for the most efficient use of circuit power. TPS has been designed, manufactured,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

#### CASE DIMENSIONS: millimeters (inches) FIA Dimension I +0.20 W+0.20 (0.008) H+0.20 (0.008) W.+0.20 A+0.30 (0.012)

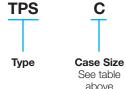
	Code	Code	Low Profile	(0.008)	-0.10 (0.004)	-0.10 (0.004)	(0.008)	-0.20 (0.012)	S Min.
	Α	3216-18	-	3.20 (0.126)	1.60 (0.063)	1.60 (0.063)	1.20 (0.047)	0.80 (0.031)	1.80 (0.071)
_	В	3528-21	-	3.50 (0.138)	2.80 (0.110)	1.90 (0.075)	2.20 (0.087)	0.80 (0.031)	1.40 (0.055)
	С	6032-28	-	6.00 (0.236)	3.20 (0.126)	2.6 (0.102)	2.20 (0.087)	1.30 (0.051)	2.90 (0.114)
	D	7343-31	1	7.30 (0.287)	4.30 (0.169)	2.90 (0.114)	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
	Е	7343-43	1	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**	6032-20	C Case (2.00)	6.00 (0.236)	3.20 (0.126)	2.00 (0.079)	2.20 (0.087)	1.30 (0.051)	2.90 (0.114)
	P*	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*	2012-12	R Case (1.20)	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)	0.70 (0.028)
	S**	3216-12	A Case (1.20)	3.20 (0.126)	1.60 (0.063)	1.20 (0.047) max.	1.20 (0.047)	0.80 (0.031)	1.10 (0.043)
	T**	3528-12	B Case (1.20)	3.50 (0.138)	2.80 (0.110)	1.20 (0.047) max.	2.20 (0.087)	0.80 (0.031)	2.00 (0.079)
	٧	7361-38	1	7.30 (0.287)	6.10 (0.240)	3.45 ±0.30 (0.136 ±0.012)	3.10 (0.120)	1.40 (0.055)	1.80 (0.071)
	W**	6032-15	C Case (1.50)	6.00 (0.236)	3.20 (0.126)	1.50 (0.059) max.	2.20 (0.087)	1.30 (0.051)	2.90 (0.114)
	X**	7343-15	D Case (1.50)	7.30 (0.287)	4.30 (0.169)	1.50 (0.059) max.	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
	Y**	7343-20	D Case (2.00)	7.30 (0.287)	4.30 (0.169)	2.00 (0.079) max.	2.40 (0.094)	1.30 (0.051)	4.40 (0.173)
	14/								

W<sub>1</sub> dimension applies to the termination width for A dimensional area only.



For part marking see page 164

#### **HOW TO ORDER**



NOTE: The EIA & CECC standards for low ESR Solid Tantalum Capacitors

allow an ESR movement to 1.25 times catalog limit post mounting.

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**Capacitor Code** pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow)

M

**Tolerance** 

 $K = \pm 10\%$  $M = \pm 20\%$  **Rated DC Voltage** 002 = 2.5Vdc 004 = 4Vdc 006 = 6.3 Vdc

010

010 = 10 Vdc016 = 16 Vdc020 = 20 Vdc025 = 25 Vdc025 = 25 Vdc035 = 35 Vdc050 = 50 Vdc R

**Packaging** R = 7" T/R (Lead Free since production date 1/1/04)

S = 13" T/R (Lead Free since production date 1/1/04) A = Gold Plating 7" Reel

B = Gold Plating 13" Reel H = Tin Lead 7" Reel (Contact Manufacturer)

K = Tin Lead 13" Reel (Contact Manufacturer)



Maximum ESR in Milliohms See note below

#### **TECHNICAL SPECIFICATIONS**

					DIOITE COITE	porataro	of +25°C		
	0.15	μF to 150	)0 μF						
	±10%	%; ±20%							
≤ +85°C:	2.5	4	6.3	10	16	20	25	35	50
≤ +125°C:	1.7	2.7	4	7	10	13	17	23	33
≤ +85°C:	3.3	5.2	8	13	20	26	32	46	65
≤ +125°C:	2.2	3.4	5	8	13	16	20	28	40
	-55°C	C to +125	5°C						
	55/12	25/56 (IEC	C 68-2)						
	1% p	er 1000 h	nours at 8	5°C, V <sub>R</sub> v	with $0.1\Omega$	V series	impedano	ce,	
	60%	confidence	ce level						
	Meet	s requirer	nents of A	AEC-Q20	0				
<	≤ +125°C: ≤ +85°C:	±10% ≤ +85°C: 2.5 ≤ +125°C: 1.7 ≤ +85°C: 3.3 ≤ +125°C: 2.2 -55°C 55/12 1% p 60%	±10%; ±20% ≤ +85°C: 2.5 4 ≤ +125°C: 1.7 2.7 ≤ +85°C: 3.3 5.2 ≤ +125°C: 2.2 3.4  -55°C to +125 55/125/56 (IEC 1% per 1000 k 60% confidence	±10%; ±20% ≤ +85°C: 2.5 4 6.3 ≤ +125°C: 1.7 2.7 4 ≤ +85°C: 3.3 5.2 8 ≤ +125°C: 2.2 3.4 5  -55°C to +125°C  55/125/56 (IEC 68-2)  1% per 1000 hours at 8 60% confidence level	±10%; ±20% ≤ +85°C: 2.5 4 6.3 10 ≤ +125°C: 1.7 2.7 4 7 ≤ +85°C: 3.3 5.2 8 13 ≤ +125°C: 2.2 3.4 5 8  -55°C to +125°C  55/125/56 (IEC 68-2)  1% per 1000 hours at 85°C, V <sub>R</sub> v 60% confidence level	±10%; ±20% ≤ +85°C: 2.5 4 6.3 10 16 ≤ +125°C: 1.7 2.7 4 7 10 ≤ +85°C: 3.3 5.2 8 13 20 ≤ +125°C: 2.2 3.4 5 8 13 -55°C to +125°C 55/125/56 (IEC 68-2) 1% per 1000 hours at 85°C, V <sub>R</sub> with 0.1Ω,	±10%; ±20% ≤ +85°C: 2.5 4 6.3 10 16 20 ≤ +125°C: 1.7 2.7 4 7 10 13 ≤ +85°C: 3.3 5.2 8 13 20 26 ≤ +125°C: 2.2 3.4 5 8 13 16  -55°C to +125°C  55/125/56 (IEC 68-2)  1% per 1000 hours at 85°C, V <sub>R</sub> with 0.1Ω/V series 60% confidence level	±10%; ±20% ≤ +85°C: 2.5 4 6.3 10 16 20 25 ≤ +125°C: 1.7 2.7 4 7 10 13 17 ≤ +85°C: 3.3 5.2 8 13 20 26 32 ≤ +125°C: 2.2 3.4 5 8 13 16 20  -55°C to +125°C  55/125/56 (IEC 68-2)  1% per 1000 hours at 85°C, V <sub>R</sub> with 0.1Ω/V series impedance 60% confidence level	$\pm 10\%$ ; $\pm 20\%$ $\leq +85^{\circ}\text{C}$ : 2.5 4 6.3 10 16 20 25 35 $\leq +125^{\circ}\text{C}$ : 1.7 2.7 4 7 10 13 17 23 $\leq +85^{\circ}\text{C}$ : 3.3 5.2 8 13 20 26 32 46 $\leq +125^{\circ}\text{C}$ : 2.2 3.4 5 8 13 16 20 28 $-55^{\circ}\text{C}$ to $+125^{\circ}\text{C}$ 55/125/56 (IEC 68-2) 1% per 1000 hours at 85°C, V <sub>R</sub> with 0.1Ω/V series impedance, 60% confidence level



<sup>\* 0805</sup> Footprint Compatible \*\* Low Profile Versions of A & B & C & D Case





# CAPACITANCE AND RATED VOLTAGE, $V_{\rm R}$ (VOLTAGE CODE) RANGE (LETTER DENOTES CASE SIZE)

Capa	citance				Rated	Voltage DC (V <sub>R</sub> ) to	s 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)	
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(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)	A(900,1800) P(2000) <sup>M</sup> T(1000,2000)	B(500,800), C(500) T(800,1000) W(500,600)	B(500,1000) C(500,700)	C(300,500)	D(125,300) E(200)	E(400,500)
15	156			A(700,1500)	A(1000) B(450,600)	B(500,800)	B(500) C(400,450)	C(220,300) D(100,300)	C(350,450) D(100,300) Y(250)	E(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)	B(250,350,500,650) C(200,350) D(100) W(125,150,250)	C(110,350) D(80,100, 150,200) W(200) Y(250), X(180)	D(75,100,200) E(70,125,150, 200,250)	D(125,150,250) E(80,100,125)	E(200,250) 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), Y(100,200) W(100,150)	F(200) C(125,200) D(70,100,150) Y(150,200,250), X(150)	D(70,150, 200,300) E(125,150,200)	E(125,200) V(80,95,150,200)	V(150,200) <sup>M</sup>	
100	107	B(200)	B(200,250, 350,500) W(100)	B(250,400) C(75,150) Y(100) W(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)	F(150,200)M D(60,100,125,150) E(55,100,125,150) Y(100,150,200)	D(85,100,150) E(100,150,200) V(60,85,100,200)	V(100)		
150	157	B(150)	B(250) C(70,80)	C(50,90,150,200,250) D(50,125), Y(40)	F(200), D(50,85,100) E(100), 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)			
220	227	B(150, 200,600) D(45)	D(40,50,100) Y(40)	F(200) C(70,100,125,250) D(50,100,125) E(100), Y(100,150)	D(40,50,100,150) E(50,60,70,100, 125,150) Y(150,200)	E(100,150) V(50,75, 100,150)				
330	337	Y(40)	F(200), C(100) D(35,45,100) X(100)	D(45,50,70,100) E(50,100,125,150) V(100), Y(150)	D(50,65,100,150) E(40,50,60,100) V(40,60,100)					
470	477	F(200) D(35) Y(100)	D(45,100) E(35,45,100)	D(45,60,100,200) E(45,50,60,100,200) V(40,55,100)	E(45,50,60,100,200) V(40,60,100)					
680	687	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(60) V(25,35,40,50)	V(40,50) <sup>M</sup>						
1500	158	D(100) E(50) V(30,40)	E(50,75) V(50,75) <sup>M</sup>							

For C, D and E case ratings in TPS Series, ESR ratings are printed on capacitor side in the following format:

T x x x -where x x x is ESR limit in milliohms i.e. T100 represents max. ESR of 100 milliohms.

ESR limits quoted in brackets (milliohms)

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



Released codes (M tolerance only)

### **Low ESR**



### **RATINGS & PART NUMBER REFERENCE**

SESION-DEFINED   100   2.5   5   6   220   0.652   0.587   0.261   0.190   0.117   0.58815700200165   B   100   2.5   3   10   150   0.755   0.677   0.301   0.113   0.102   0.588227002002005   B   220   2.5   4.4   16   150   0.755   0.677   0.301   0.113   0.102   0.588227002002005   B   220   2.5   4.4   16   150   0.755   0.677   0.301   0.113   0.102   0.588227002002005   B   220   2.5   4.4   16   150   0.755   0.677   0.301   0.113   0.102   0.588227002002005   B   220   2.5   4.4   16   150   0.575   0.5877   0.301   0.113   0.102   0.117   0.588227002003005   B   220   2.5   4.4   16   150   0.576   0.389   0.151   0.222   0.224   0.241   0.102   0.102	AVX	Case	Capacitance		DCL (μA)	DF %	ESR Max. (mΩ)		ipple Current			ople Voltage I	125°C
SBH5PYCQC040150 B 160 2.5 3 10 150 160 0.789 0.677 0.301 0.113 0.102 0 SBH2PYCQC040150 B 220 2.5 4.4 16 50 0.789 0.677 0.301 0.113 0.102 0 SBH2PYCQC040150 B 220 2.5 4.4 16 50 0.789 0.677 0.301 0.113 0.102 0 SBH2PYCQC04000 B 220 2.5 4.4 16 50 0.689 0.889 0.887 0.281 0.100 0.117 0.002 0 SBH2PYCQC04000 B 220 2.5 4.4 16 500 0.8876 0.389 0.151 0.222 0.203 0 SBH2PYCQC04000 B 2.20 2.5 4.4 16 500 0.8876 0.389 0.389 0.151 0.222 0.203 0 SBH2PYCQC04000 B 2.5 4.4 16 500 0.8876 0.389 0.389 0.151 0.222 0.203 0 SH4PYCQC04000 V 500 2.5 4.2 8 4.0 1.889 1.581 0.072 0.071 0.084 0.085 0.08													
\$8822700240150 B 220 2.5 4.4 16 150 0.758 0.677 0.301 0.113 0.102 0.5822700240000 B 220 2.5 4.4 16 500 0.655 0.557 0.251 0.130 0.102 0.5822700240000 B 220 2.5 4.4 16 500 0.655 0.376 0.339 0.151 0.225 0.203 0.582270024015 0 220 2.5 4.4 16 500 0.655 0.376 0.339 0.151 0.225 0.203 0.582270024015 0 220 2.5 4.4 18 6 500 0.376 0.376 1.033 0.052 0.074 0.052 0.													0.052
S8822**CO26**CO00***D8**													0.045
\$8822700240600 B 220 2.5 4.4 16 800 0.376 0.339 0.151 0.226 0.203 0 \$702270024000 D 220 2.5 4.4 8 45 1.826 1.643 0.730 0.082 0.074 0.075 0													0.048
\$2022700240040													0.052
\$\text{\$SY3270240005} \tag{Y} \tag{Y} \tag{390} \tag{2.5} \tag{8.2} \tag{8.2} \tag{40} \tag{1.768} \tag{1.768} \tag{1.991} \tag{0.707} \tag{0.071} \tag{0.064} \tag{0.085} \ta													
SDATPTOCQ-00035 D 470 2.5 11.8 12 200 0.707 0.836 0.288 0.072 0.066 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5													0.033
SFATTOQ240200 F													0.029
SYMPTOCQ#01005 V 470 2.5 11 12 100 1.118 1.006 0.447 0.112 0.101 0 SD68TYOCQ#0050 D 680 2.5 17 16 35 2.070 1.863 0.828 0.072 0.065 0 SD68TYOCQ#0050 D 680 2.5 17 16 35 2.070 1.863 0.828 0.072 0.065 0 SD68TYOCQ#0050 E 680 2.5 17 10 35 2.171 1.954 0.868 0.076 0.068 0 SEG8TYOCQ#0050 E 680 2.5 17 10 35 2.171 1.954 0.868 0.076 0.068 0 SEG8TYOCQ#0050 E 680 2.5 17 10 35 2.171 1.954 0.868 0.076 0.068 0 SEG8TYOCQ#0050 V 680 2.5 17 12 100 1.118 1.006 0.447 0.112 0.101 0 SEG8TYOCQ#0050 E 600 2.5 17 12 100 1.118 1.006 0.447 0.112 0.101 0 SEG8TYOCQ#0050 E 1000 2.5 2.5 17 12 100 1.118 1.006 0.447 0.112 0.101 0 SEG8TYOCQ#0050 E 1000 2.5 2.5 20 14 3 30 2.345 2.111 0.933 0.070 0.083 0 SEG8TYOCQ#0050 E 1000 2.5 2.5 30 100 0.118 1.006 0.447 0.112 0.101 0 SEG8TYOCQ#0050 E 1500 2.5 37.5 20 50 1.817 1.835 0.727 0.001 0.082 0 SYL58TOCQ#0050 V 1500 2.5 37.5 20 50 1.817 1.835 0.727 0.001 0.082 0 SYL58TOCQ#0040 V 1500 2.5 37.5 20 40 2.500 2.500 0.000 0.122 0.110 0 SYL58TOCQ#0040 V 1500 2.5 30 20 30 2.887 2.598 1.155 0.087 0.078 0 SYL58TOCQ#0050 A 47 4 1.9 8 500 0.387 0.349 0.155 0.087 0.078 0 SYL58TOCQ#0050 A 47 4 1.9 8 500 0.387 0.349 0.165 0.094 0.147 0.100 0.381 0.000 0													0.028
SD68PT/002P0050													0.037
SD68F700240050													0.048
\$E68PTO(2000305) E 680 2.5 17 10 35 2.171 1.954 0.868 0.076 0.068													0.023
SERBFYCOQ240050   E   680													0.030
\$\frac{\text{SY687002\text{POID}}{\text{00}}\$\text{00}\$ \begin{array}{c} \text{1.10}{\text{0}} \text{0.25}{\text{0.25}} \text{0.27}{\text{1.10}} \text{0.27}{\text{0.25}} \text{0.25}{\text{0.25}} \text{0.25}{\text{0.25}} \text{0.25}{\text{0.25}} \text{0.25}{\text{0.25}} \text{0.25}{\text{0.25}} \text{0.25}{\text{0.25}} \text{0.25}{\text{0.25}} \text{0.25}{\text{0.25}} \text{0.27}{\text{0.25}} \text{0.25}{\text{0.25}} \text{0.25}{													0.036
SEIOBYOQZ#QO30   E   1000   2.5   20   14   30   2.345   2.111   0.938   0.070   0.063   0.573   0.57108M00240100   Y   1000   2.5   20   14   40   2.031   1.182   0.811   0.081   0.073   0.073   0.57108M00240100   Y   1000   2.5   2.5   30   100   1.118   1.006   0.447   0.112   0.101   0.05   0.57158002000   E   1500   2.5   37.5   80   100   1.118   1.006   0.447   0.112   0.101   0.05   0.57158002000   E   1500   2.5   37.5   80   100   1.125   1.102   0.490   0.122   0.110   0.05   0.57158002000   V   1500   2.5   37.5   80   100   1.125   1.102   0.490   0.122   0.110   0.05   0.05   0.05   0.05   0.05   0.05   0.05   0.05   0.05   0.078   0.078   0.078   0.05   0.													0.045
SEIDBYOQEMOUND   E   1000   2.5   20   14   40   2.031   1.828   0.812   0.081   0.073   0.081   0.073   0.081   0.081   0.073   0.081   0.081   0.073   0.081   0.													0.028
SY108M002e0100 V V 1000 2.5 25 30 100 1.118 1.006 0.447 0.112 0.101 0 SE158Y002e0100 D 1500 2.5 37.5 80 100 1.817 1.635 0.727 0.001 0.082 0 SD158Y002e0100 D 1500 2.5 37.5 80 100 1.125 1.102 0.490 0.122 0.110 0 SV158Y002e0030 V 1500 2.5 30 20 30 2.887 2.598 1.155 0.087 0.078 0.078 0 SV158Y002e00400 V 1500 2.5 30 20 30 2.887 2.598 1.155 0.087 0.078 0.078 0 SV158Y002e00400 V 1500 2.5 30 20 30 2.887 2.598 1.155 0.087 0.078 0 SV158Y002e00400 V 1500 2.5 30 20 40 2.500 2.250 1.000 0.100 0.090 0 SV158Y002e00400 N 1500 2.5 30 20 40 2.500 2.250 1.000 0.100 0.090 0 SV158Y002e00400 N 4 5 0.0 4 0.5 6 3000 0.135 0.122 0.054 0.406 0.368 0 0.368 1 0.0 4 4 0.5 6 3000 0.135 0.122 0.054 0.406 0.368 0 0.3													0.032
SEISB*002#0050   E   1500   2.5   37.5   20   50   1.817   1.635   0.727   0.001   0.082   0.50158*002#0030   V   1500   2.5   37.5   80   100   1.125   1.102   0.490   0.122   0.160   0.987   0.078   0.58158*002#0030   V   1500   2.5   30   20   30   2.887   2.588   1.155   0.087   0.078   0.58158*002#0030   V   1500   2.5   30   20   40   2.500   2.250   1.000   0.100   0.090   0.990   0.58168*002#0000   R   10   4   0.5   6   3000   0.135   0.122   0.054   0.406   0.386   0.5816*004#3000   R   10   4   0.5   6   3000   0.135   0.122   0.054   0.406   0.386   0.5816*004#3000   R   10   4   4   8   200   0.652   0.587   0.261   0.130   0.117   0.58107*004#0250   B   100   4   4   8   250   0.652   0.587   0.261   0.130   0.117   0.58107*004#0250   B   100   4   4   8   250   0.683   0.525   0.233   0.146   0.131   0.58107*004#0350   B   100   4   4   8   350   0.493   0.444   0.197   0.172   0.155   0.58107*004#0350   B   100   4   4   8   500   0.412   0.371   0.165   0.206   0.186   0.58107*004#0350   B   100   4   4   8   500   0.493   0.444   0.197   0.172   0.155   0.5815*0*004#000   W   100   4   4   6   100   0.949   0.854   0.379   0.095   0.085   0.5815*0*004#000   W   100   4   6   6   0.250   0.583   0.525   0.233   0.146   0.131   0.5515*004#0070   C   150   4   6   6   70   1.254   1.128   0.501   0.088   0.079   0.5015*004#0070   C   150   4   6   6   6   70   1.254   1.128   0.501   0.088   0.077   0.5015*004#0040   D   220   4   8.8   8   40   1.936   1.743   0.775   0.077   0.070   0.50227*004#0040   D   220   4   8.8   8   40   1.936   1.743   0.775   0.077   0.070   0.50227*004#0040   D   220   4   8.8   8   40   1.936   1.743   0.775   0.077   0.070   0.50337*004#0040   D   220   4   8.8   8   40   1.936   1.743   0.775   0.077   0.070   0.50337*004#0040   D   220   4   8.8   8   40   1.936   1.743   0.775   0.077   0.070   0.50337*004#0040   D   220   4   8.8   8   40   1.786   1.163   0.939   0.085   0.085   0.085   0.085   0.085   0.085   0.085   0.085   0.085   0.085   0.085   0.085													0.045
SD158*002#0100													0.036
\$\f\sep{500}\$\f\sep\$0.0260030\$\$\$\f\struct{V}\$\$\f\sumsymbol{1500}\$\$\f\sumsymbol{2.55}\$\$\tag{30}\$\$\tag{20}\$\$\tag{30}\$\$\tag{2.887}\$\$\tag{2.598}\$\$\tag{1.155}\$\$\tag{0.087}\$\$\tag{0.078}\$\$\tag{0.090}\$\$0													0.049
\$\frac{\text{SY158}\text{POO}_2\text{POO}_4\text{Q}_0.040 \ \ \text{V} \ \ \text{1500} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \													0.035
SRIGEO-0448000   R						_							0.040
SAF16**004#0500 A 47 4 1.9 8 500 0.387 0.349 0.155 0.194 0.174 0 0.58107**004#0200 B 100 4 4 8 250 0.685 0.587 0.293 0.146 0.131 0 0.58107**004#0250 B 100 4 4 8 8 250 0.583 0.525 0.233 0.146 0.131 0 0.58107**004#0250 B 100 4 4 8 8 350 0.493 0.444 0.197 0.172 0.155 0.58107**004#0350 B 100 4 4 8 8 350 0.493 0.444 0.197 0.172 0.155 0.58107**004#0350 B 100 4 4 8 8 500 0.412 0.371 0.165 0.206 0.186 0.58107**004#0350 B 100 4 4 8 8 500 0.412 0.371 0.165 0.206 0.186 0.5815**004#0310 W 100 4 4 6 6 10 0.540 0.949 0.884 0.379 0.095 0.085 0.58157**004#0070 C 150 4 6 6 70 1.254 1.128 0.501 0.088 0.079 0.58157**004#0080 C 150 4 6 6 8 0 1.173 1.055 0.499 0.094 0.084 0.58227**004#0080 C 150 4 6 6 8 0 1.173 1.055 0.499 0.094 0.084 0.58227**004#0040 D 220 4 8.8 8 40 1.936 1.743 0.775 0.077 0.070 0.580227**004#0040 D 220 4 8.8 8 50 1.752 1.1559 0.693 0.097 0.078 0.580227**004#0040 D 220 4 8.8 8 100 1.225 1.102 0.490 0.122 0.110 0.580237**004#0100 D 220 4 8.8 8 100 1.225 1.102 0.490 0.122 0.110 0.580337**004#0100 C 330 4 13.2 8 100 1.049 0.944 0.420 0.102 0.110 0.580337**004#0100 C 330 4 13.2 8 100 1.049 0.944 0.420 0.105 0.094 0.58337**004#0100 C 330 4 13.2 8 100 1.049 0.944 0.420 0.105 0.094 0.58337**004#0100 D 330 4 13.2 8 100 1.049 0.944 0.420 0.105 0.094 0.58337**004#0100 C 330 4 13.2 8 100 1.049 0.944 0.420 0.105 0.094 0.58337**004#0100 C 330 4 13.2 8 100 1.049 0.944 0.420 0.105 0.094 0.58337**004#0005 D 330 4 13.2 8 100 1.049 0.944 0.420 0.105 0.094 0.58337**004#0005 D 330 4 13.2 8 100 1.049 0.944 0.420 0.105 0.094 0.58337**004#0005 D 330 4 13.2 8 100 1.049 0.944 0.420 0.105 0.094 0													0.162
SB107***OQ4#0250						_							0.077
SBI07***OQ440050													0.052
SB107***OQ4#0C50***D   B				_	-								0.058
SB107*004H0500   B   100   4   4   8   500   0.412   0.371   0.165   0.206   0.186   0.8740**   SW107*004H0100   W   100   4   4   6   100   0.949   0.854   0.379   0.995   0.085   0.851   0.797   0.995   0.985   0.883   0.525   0.233   0.146   0.131   0.955   0.985   0.883   0.525   0.233   0.146   0.131   0.955   0.985   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.885   0.895					4								0.069
SWH07*1004#0100   W   100   4   4   6   100   0.949   0.854   0.379   0.095   0.085   0.58157*004#0250   B   150   4   6   6   70   1.254   1.128   0.501   0.098   0.072   0.055   0.58157*004#0070   C   150   4   6   6   70   1.254   1.128   0.501   0.098   0.072   0.055   0.58157*004#0080   C   150   4   6   6   80   1.173   1.055   0.469   0.094   0.08227*004#0080   D   220   4   8.8   8   40   1.936   1.743   0.775   0.693   0.087   0.076   0.070   0.07				4	4								0.082
SB157*004#00250   B   150   4   6   10   250   0.583   0.525   0.233   0.146   0.131   0   0.5015**********************************	SW107*004#0100	W		4	4	6		0.949					0.038
SC157*004#0040	SB157*004#0250	В	150	4	6	10	250	0.583	0.525	0.233	0.146	0.131	0.058
SD227***O04#0050	SC157*004#0070	С	150	4	6	6		1.254	1.128	0.501	0.088	0.079	0.035
SD227*004#0100	SC157*004#0080	С		4		6	80	1.173	1.055	0.469	0.094	0.084	0.038
SD227*004#0100	SD227*004#0040	D	220	4	8.8	8	40	1.936	1.743	0.775	0.077	0.070	0.03
SY227'004#0040 Y 220 4 8.8 8 40 1.768 1.591 0.707 0.071 0.064 0   SC337'004#0100 C 330 4 13.2 8 100 1.049 0.944 0.420 0.105 0.094 0   SD337'004#0035 D 330 4 13.2 8 35 2.070 1.863 0.828 0.072 0.065 0   SD337'004#0045 D 330 4 13.2 8 45 1.826 1.643 0.730 0.082 0.074 0   SD337'004#0100 D 330 4 13.2 8 100 1.225 1.102 0.490 0.122 0.110 0   SF337'004#0100 D 330 4 13.2 8 100 1.225 1.000 0.0000 0.0000 0.0000 0.000 0.000 0.0000 0.0000 0.0	SD227*004#0050	D		4	8.8	8	50	1.732	1.559	0.693	0.087	0.078	0.035
\$\text{SC337}^{\cond*\text{PO04}*\text{PO035}\$ D \$\text{330}\$ 4 \$\text{13.2}\$ 8 \$\text{100}\$ 1.049 \$\text{0.944}\$ 0.420 \$\text{0.105}\$ 0.094 \$\text{0.8537}^{\cond*\text{PO04}*\text{PO035}\$ D \$\text{330}\$ 4 \$\text{13.2}\$ 8 \$\text{45}\$ 1.826 \$\text{1.863}\$ 0.828 \$\text{0.072}\$ 0.065 \$\text{0.065}\$ 0.50337^{\cond*\text{PO04}*\text{PO04}*\text{0.005}\$ 0.082 \$\text{0.074}\$ 0.50337^{\cond*\text{0.04}*\text{0.005}\$ 0.9330 \$\text{4}\$ 13.2 \$\text{8}\$ 150 \$\text{0.125}\$ 1.102 \$\text{0.490}\$ 0.122 \$\text{0.110}\$ 0.50337^{\cond*\text{0.04}*\text{0.005}\$ 0.833 \$\text{0.411}\$ 1.0127 \$\text{0.05}\$ \$\text{S337}^{\cond*\text{0.04}*\text{0.005}\$ 0.330 \$\text{4}\$ 13.2 \$\text{8}\$ 100 \$\text{0.00}\$ 0.707 \$\text{0.636}\$ 0.283 \$\text{0.141}\$ 1.0127 \$\text{0.05}\$ \$\text{S337}^{\cond*\text{0.04}*\text{0.005}\$ 0.330 \$\text{4}\$ 13.2 \$\text{8}\$ 100 \$\text{1.000}\$ 0.900 \$\text{0.400}\$ 0.100 \$\text{0.090}\$ 0.50477^{\cond*\text{0.04}*\text{0.045}\$ 0.440 \$\text{0.100}\$ 0.090 \$\text{0.005}\$ 0.50477^{\cond*\text{0.04}*\text{0.045}\$ 0.440 \$\text{0.052}\$ 0.074 \$\text{0.055}\$ 0.5050 \$\text{0.047}\$ 0.04040100 \$\text{0.05}\$ 0.470 \$\text{4}\$ 18.8 \$\text{12}\$ 10 0.1225 \$\text{1.102}\$ 0.490 \$\text{0.122}\$ 0.110 \$\text{0.055}\$ 0.5477^{\cond*\text{0.04}*\text{0.035}\$ 0.85 \$\text{0.076}\$ 0.088 \$\text{0.076}\$ 0.088 \$\text{0.076}\$ 0.088 \$\text{0.076}\$ 0.088 \$\text{0.078}\$ 0.085 \$\text{0.078}\$ 0.085 \$\text{0.078}\$ 0.085 \$\text{0.0490}\$ 0.085 \$\text{0.086}\$ 0.078 \$\text{0.055}\$ 0.085 \$\text{0.0490}\$ 0.085 \$\text{0.076}\$ 0.086 \$\text{0.078}\$ 0.085 \$\text{0.078}\$ 0.0	SD227*004#0100	D	220	4	8.8	8	100	1.225	1.102	0.490	0.122	0.110	0.049
SD337*004#0045   D   330	SY227*004#0040	Υ		4	8.8	8	40	1.768	1.591	0.707	0.071	0.064	0.028
SD337*004#0100	SC337*004#0100	С		4	13.2	8		1.049	0.944		0.105	0.094	0.042
SB337*004#0100   D   330   4   13.2   8   100   1.225   1.102   0.490   0.122   0.110   0   0.5737*004#0200   F   330   4   13.2   10   200   0.707   0.636   0.283   0.141   0.127   0   0.5337*004#0100   X   330   4   13.2   8   100   1.000   0.900   0.400   0.100   0.090   0   0.5047*004#0100   D   470   4   18.8   12   45   1.826   1.643   0.730   0.082   0.074   0   0.5047*004#0100   D   470   4   18.8   12   100   1.225   1.102   0.490   0.122   0.110   0   0.547*004#0100   D   470   4   18.8   12   100   1.225   1.102   0.490   0.122   0.110   0   0.547*004#035   E   470   4   18.8   12   35   2.171   1.954   0.868   0.076   0.068   0   0.547*004#0100   E   470   4   18.8   12   45   1.915   1.723   0.766   0.086   0.078   0.085   0.074   0   0.547*004#0100   E   470   4   18.8   12   45   1.915   1.723   0.766   0.086   0.078   0.085   0.074   0   0.5687*004#0100   E   470   4   18.8   12   100   1.285   1.156   0.514   0.128   0.116   0   0.5087*004#04045   D   680   4   27.2   14   45   1.915   1.643   0.730   0.082   0.074   0   0.5087*004#0045   D   680   4   27.2   14   45   1.915   1.643   0.730   0.082   0.074   0   0.5087*004#0040   D   680   4   27.2   14   60   1.581   1.423   0.632   0.095   0.085	SD337*004#0035	D		4			35		1.863	0.828	0.072	0.065	0.029
SF337*004#0200   F   330	SD337*004#0045	D	330	4		8	45		1.643	0.730	0.082	0.074	0.033
\$\text{SX37}^{\cupage}\tag{04}\tag{010} & \text{X} & 330 & 4 & 13.2 & 8 & 100 & 1.000 & 0.900 & 0.400 & 0.100 & 0.090 & 0 \text{SD47}^{\cupage}\tag{04}\tag{04} & 0.45 & 1.826 & 1.826 & 1.643 & 0.730 & 0.082 & 0.074 & 0 \text{SD47}^{\cupage}\tag{04}\tag{04}\tag{04} & 0.470 & 4 & 18.8 & 12 & 45 & 1.826 & 1.643 & 0.730 & 0.082 & 0.074 & 0 \text{SD47}^{\cupage}\tag{04}\tag{04}\tag{04} & 0.470 & 4 & 18.8 & 12 & 100 & 1.225 & 1.102 & 0.490 & 0.122 & 0.110 & 0 \text{SE47}^{\cupage}\tag{04}\tag{04}\tag{04} & 0.490 & 0.122 & 0.110 & 0 \text{SE47}^{\cupage}\tag{04}\tag{04}\tag{04} & 0.4 & 18.8 & 12 & 35 & 2.171 & 1.954 & 0.868 & 0.076 & 0.068 & 0.085 & 0.0													0.049
SD477*004#0045				-									0.057
SD477*004#0100   D				_									0.040
SE477*004#0035				_									0.033
SE477*004#0045   E   470   4   18.8   12   45   1.915   1.723   0.766   0.086   0.078   0				-									0.049
SE477*004#0100													0.030
SD687*004#0045   D   680   4   27.2   14   45   1.915   1.643   0.730   0.082   0.074   0													0.034
SD687*004#0060   D   680   4   27.2   14   60   1.581   1.423   0.632   0.095   0.085   0.005				-									0.05
SD687*004#0100   D   680   4   27.2   14   100   1.225   1.102   0.490   0.122   0.110   0				_									0.033
SE687*004#0040         E         680         4         27.2         10         40         2.031         1.828         0.812         0.081         0.073         0           SE687*004#0060         E         680         4         27.2         10         60         1.658         1.492         0.663         0.099         0.090         0           SE108*004#0060         E         680         4         27.2         10         100         1.285         1.156         0.514         0.128         0.116         0           SE108*004#0060         E         1000         4         40         14         60         1.658         1.492         0.663         0.099         0.090         0           SV108*004#0025         V         1000         4         40         16         25         3.162         2.846         1.265         0.071         0           SV108*004#0035         V         1000         4         40         16         35         2.673         2.405         1.069         0.094         0.084           SV108*004#0040         V         1000         4         40         16         50         2.236         2.012         0.894         0.112				-									0.038
SE687*004#0060         E         680         4         27.2         10         60         1.658         1.492         0.663         0.099         0.090         0           SE687*004#0100         E         680         4         27.2         10         100         1.285         1.156         0.514         0.128         0.116         0           SE108*004#0060         E         1000         4         40         14         60         1.658         1.492         0.663         0.099         0.090         0           SV108*004#0025         V         1000         4         40         16         25         3.162         2.846         1.265         0.079         0.071         0           SV108*004#0040         V         1000         4         40         16         35         2.673         2.405         1.069         0.094         0.084         0           SV108*004#0040         V         1000         4         40         16         50         2.236         2.012         0.894         0.112         0.101         0           SE158*004#0050         V         1000         4         60         30         50         1.817         1.635													0.049
SE687*004#0100         E         680         4         27.2         10         100         1.285         1.156         0.514         0.128         0.116         0           SE108*004#0060         E         1000         4         40         14         60         1.658         1.492         0.663         0.099         0.090         0           SV108*004#0025         V         1000         4         40         16         25         3.162         2.846         1.265         0.079         0.071         0           SV108*004#0035         V         1000         4         40         16         35         2.673         2.405         1.069         0.094         0.084         0           SV108*004#0040         V         1000         4         40         16         40         2.500         2.250         1.000         0.100         0.084         0           SV108*004#0050         V         1000         4         40         16         50         2.236         2.012         0.894         0.112         0.101         0           SE158*004#0075         E         1500         4         60         30         50         1.817         1.635				-									0.032
SE108*004#0060         E         1000         4         40         14         60         1.658         1.492         0.663         0.099         0.090         0           SV108*004#0025         V         1000         4         40         16         25         3.162         2.846         1.265         0.079         0.071         0           SV108*004#0035         V         1000         4         40         16         35         2.673         2.405         1.069         0.094         0.084         0           SV108*004#0040         V         1000         4         40         16         40         2.500         2.250         1.000         0.100         0.099         0           SV108*004#0050         V         1000         4         40         16         50         2.236         2.012         0.894         0.112         0.101         0           SE158*004#0075         E         1500         4         60         30         75         1.483         1.335         0.593         0.111         0.100         0           SV158M004#0075         V         1500         4         60         30         75         1.826         1.643	SE697*004#0100												0.040
SV108*004#0025         V         1000         4         40         16         25         3.162         2.846         1.265         0.079         0.071         0           SV108*004#0035         V         1000         4         40         16         35         2.673         2.405         1.069         0.094         0.084         0           SV108*004#0040         V         1000         4         40         16         40         2.500         2.250         1.000         0.100         0.090         0           SV108*004#0050         V         1000         4         40         16         50         2.236         2.012         0.894         0.112         0.101         0           SE158*004#0050         E         1500         4         60         30         50         1.817         1.635         0.727         0.091         0.082         0           SE158*004#0050         E         1500         4         60         30         75         1.483         1.335         0.593         0.111         0.100         0         0         0         0         0         0         0         0         0         0         0         0         0 </td <td></td> <td>0.05</td>													0.05
SV108*004#0035         V         1000         4         40         16         35         2.673         2.405         1.069         0.094         0.084         0           SV108*004#0040         V         1000         4         40         16         40         2.500         2.250         1.000         0.100         0.090         0           SV108*004#0050         V         1000         4         40         16         50         2.236         2.012         0.894         0.112         0.101         0           SE158*004#0050         E         1500         4         60         30         50         1.817         1.635         0.727         0.091         0.082         0           SE158*004#0075         E         1500         4         60         30         75         1.483         1.335         0.593         0.111         0.100         0           SV158M004#0075         V         1500         4         60         30         75         1.483         1.335         0.593         0.111         0.100         0           SV158M004#0075         V         1500         4         60         30         75         1.826         1.643													0.040
SV108*004#0040         V         1000         4         40         16         40         2.500         2.250         1.000         0.100         0.090         0           SV108*004#0050         V         1000         4         40         16         50         2.236         2.012         0.894         0.112         0.101         0           SE158*004#0050         E         1500         4         60         30         50         1.817         1.635         0.727         0.091         0.082         0           SV158*004#0075         E         1500         4         60         30         75         1.483         1.335         0.593         0.111         0.100         0           SV158*M004#0075         V         1500         4         60         30         75         1.826         1.643         0.730         0.137         0.123         0           SV158*M004#0075         V         1500         4         60         30         75         1.826         1.643         0.730         0.137         0.123         0           SR225*006#7000         R         2.22         6.3         0.5         6         7000         0.089         0.080													0.032
SV108*004#0050         V         1000         4         40         16         50         2.236         2.012         0.894         0.112         0.101         0           SE158*004#0050         E         1500         4         60         30         50         1.817         1.635         0.727         0.091         0.082         0           SE158*004#0075         E         1500         4         60         30         75         1.483         1.335         0.593         0.111         0.100         0           SV158M004#0050         V         1500         4         60         30         50         2.236         2.012         0.894         0.112         0.101         0           SV158M004#0075         V         1500         4         60         30         75         1.826         1.643         0.730         0.137         0.123         0           SR225*006#7000         R         2.2         6.3         0.5         6         7000         0.089         0.080         0.035         0.620         0.558         0           SR475*006#4000         S         4.7         6.3         0.5         6         4000         0.127         0.115					_								0.03
SE158*004#0050         E         1500         4         60         30         50         1.817         1.635         0.727         0.091         0.082         0           SE158*004#0075         E         1500         4         60         30         75         1.483         1.335         0.593         0.111         0.100         0           SV158M004#0050         V         1500         4         60         30         50         2.236         2.012         0.894         0.112         0.101         0           SV158M004#0075         V         1500         4         60         30         75         1.826         1.643         0.730         0.137         0.123         0           SR225*006#7000         R         2.2         6.3         0.5         6         7000         0.089         0.080         0.035         0.620         0.558         0           SA685*006#4000         S         4.7         6.3         0.5         6         4000         0.127         0.115         0.051         0.510         0.459         0           SA685*006#1800         A         6.8         6.3         0.5         6         1800         0.204         0.184 <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.040</td>						_							0.040
SE158*004#0075         E         1500         4         60         30         75         1.483         1.335         0.593         0.111         0.100         0.           SV158M004#0050         V         1500         4         60         30         50         2.236         2.012         0.894         0.112         0.101         0.           SV158M004#0075         V         1500         4         60         30         75         1.826         1.643         0.730         0.137         0.123         0.           SR225*006#7000         R         2.2         6.3         0.5         6         7000         0.089         0.080         0.035         0.620         0.558         0           SS475*006#4000         S         4.7         6.3         0.5         6         4000         0.127         0.115         0.051         0.510         0.459         0           SA685*006#1800         A         6.8         6.3         0.5         6         1800         0.204         0.184         0.082         0.367         0.331         0           SA106*006#1500         A         10         6.3         0.6         6         1500         0.224         0.20													0.048
SV158M004#0050         V         1500         4         60         30         50         2.236         2.012         0.894         0.112         0.101         0           SV158M004#0075         V         1500         4         60         30         75         1.826         1.643         0.730         0.137         0.123         0           SR225*006#7000         R         2.2         6.3         0.5         6         7000         0.089         0.080         0.035         0.620         0.558         0           SS475*006#4000         S         4.7         6.3         0.5         6         4000         0.127         0.115         0.051         0.510         0.459         0           SA685*006#1800         A         6.8         6.3         0.5         6         1800         0.204         0.184         0.082         0.367         0.331         0           SA106*006#1500         A         10         6.3         0.6         6         1500         0.224         0.201         0.089         0.335         0.211         0           SR106*006#1500         R         10         6.3         0.6         8         1000         0.235         0.211													0.030
SV158M004#0075         V         1500         4         60         30         75         1.826         1.643         0.730         0.137         0.123         0           SR225*006#7000         R         2.2         6.3         0.5         6         7000         0.089         0.080         0.035         0.620         0.558         0           SS475*006#4000         S         4.7         6.3         0.5         6         4000         0.127         0.115         0.051         0.510         0.459         0           SA685*006#1800         A         6.8         6.3         0.5         6         1800         0.204         0.184         0.082         0.367         0.331         0           SA106*006#1500         A         10         6.3         0.6         6         1500         0.224         0.201         0.089         0.335         0.302         0           SR106*006#1500         R         10         6.3         0.6         8         1000         0.235         0.211         0.094         0.235         0.211         0           SR106*006#1500         R         10         6.3         0.6         8         1500         0.191         0.1													0.04
\$\text{SR225*006#7000} \text{ R} \tag{2.2} \tag{6.3} \tag{0.5} \tag{6} \tag{7000} \tag{0.089} \tag{0.080} \tag{0.035} \tag{0.620} \tag{0.558} \tag{0} \text{SS475*006#4000} \text{S} \tag{4.7} \tag{6.3} \tag{0.5} \tag{6} \tag{4000} \tag{0.127} \tag{0.115} \tag{0.051} \tag{0.051} \tag{0.510} \tag{0.459} \tag{0} \tag{0.886*006#1800} \tag{A} \tag{6.8} \tag{6.8} \tag{6.3} \tag{0.5} \tag{6} \tag{1800} \tag{0.204} \tag{0.184} \tag{0.082} \tag{0.367} \tag{0.331} \tag{0.331} \tag{0.867006#1500} \tag{0.870} \tag{0.335} \tag{0.302} \tag{0.88706*006#1500} \tag{0.88106*006#1500} \tag{0.88} \tag{0.6} \tag{0.6} \tag{8} \tag{1000} \tag{0.224} \tag{0.201} \tag{0.094} \tag{0.235} \tag{0.211} \tag{0.294} \tag{0.205} \tag{0.211} \tag{0.94} \tag{0.235} \tag{0.211} \tag{0.259} \tag{0.88106*006#1500} \tag{0.88106*006#1500} \tag{0.88106*006#1500} \tag{0.88106*006#1500} \tag{0.88106*006#1500} \tag{0.88106*006#1500} \tag{0.88106*006#1500} \tag{0.88106*006#1500} \tag{0.991}				_									0.04
SS475*006#4000     S     4.7     6.3     0.5     6     4000     0.127     0.115     0.051     0.510     0.459     0       SA685*006#1800     A     6.8     6.3     0.5     6     1800     0.204     0.184     0.082     0.367     0.331     0       SA106*006#1500     A     10     6.3     0.6     6     1500     0.224     0.201     0.089     0.335     0.302     0       SR106*006#1000     R     10     6.3     0.6     8     1000     0.235     0.211     0.094     0.235     0.211     0       SR106*006#1500     R     10     6.3     0.6     8     1500     0.191     0.172     0.077     0.287     0.259     0													0.248
SA685*006#1800     A     6.8     6.3     0.5     6     1800     0.204     0.184     0.082     0.367     0.331     0       SA106*006#1500     A     10     6.3     0.6     6     1500     0.224     0.201     0.089     0.335     0.302     0       SR106*006#1000     R     10     6.3     0.6     8     1000     0.235     0.211     0.094     0.235     0.211     0       SR106*006#1500     R     10     6.3     0.6     8     1500     0.191     0.172     0.077     0.287     0.259     0													0.204
SA106*006#1500 A 10 6.3 0.6 6 1500 0.224 0.201 0.089 0.335 0.302 0 SR106*006#1000 R 10 6.3 0.6 8 1000 0.235 0.211 0.094													0.202
SR106*006#1000 R 10 6.3 0.6 8 1000 0.235 0.211 0.094 0.235 0.211 0 SR106*006#1500 R 10 6.3 0.6 8 1500 0.191 0.172 0.077 0.287 0.259 0.000 0.191 0.172 0.077 0.287 0.259 0.000 0.191 0.172 0.000 0.200													0.134
SR106*006#1500 R 10 6.3 0.6 8 1500 0.191 0.172 0.077 0.287 0.259 0.													0.094
													0.035
aniuo vuotavuu 1 B 1 - 10 - 1 p.a. 1 U.b.   8   3000   - 0.135   0.122   0.054   0.406   0.366   0.	SR106*006#3000	R	10	6.3	0.6	8	3000	0.135	0.122	0.054	0.406	0.366	0.162
													0.092
echnical data relates to an ambient temperature of +25°C.  acitance and DF are measured at 120Hz, 0.5V RMS with a maximum oias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.  # Standard Plating - Insert A for 7" reel and B for 13" reconstance and Plating - Insert H for 7" reel (contact manufacture)  # Tin Lead Plating - Insert H for 7" reel (contact manufacture)	echnical data relates acitance and DF are	to an an measure	nbient temperated at 120Hz, 0.5	ture of +25	5°C. ith a ma	ximum		0.021	# Standard F # Gold Platir	Plating – Ins	sert R for 7" resert A for 7" re	eel and S for eel and B for	13" reel 13" reel

DC bias of 2.2 volts. DCL is measured at rated voltage after 5 minutes.

\* Insert K for ±10% and M for ±20% Capacitance Tolerance



### **Low ESR**



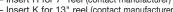
### **RATINGS & PART NUMBER REFERENCE**

			Rated	DCL	DF	ESR	100kHz Ri	pple Current I	Ratings (A)	100kHz Rii	pple Voltage	Ratings (V)
AVX Part No.	Case Size	Capacitance (µF)	Voltage (V)	(μA) Max.	% Max.	Max. (mΩ) @100kHz	25°C	85°C	125°C	25°C	85°C	125°C
TPSA156*006#1500	A	15	6.3	0.9	6	1500	0.224	0.201	0.089	0.335	0.302	0.134
TPSA226*006#0500	Α	22	6.3	1.4	6	500	0.387	0.349	0.155	0.194	0.174	0.077
TPSA226*006#0900	Α	22	6.3	1.4	6	900	0.289	0.260	0.115	0.260	0.234	0.104
TPSB226*006#0375	В	22	6.3	1.4	6	375	0.476	0.428	0.190	0.179	0.161	0.071
TPSB226*006#0600	В	22	6.3	1.4	6	600	0.376	0.339	0.151	0.226	0.203	0.090
TPSS226*006#0900	S	22	6.3	1.4	8	900	0.269	0.242	0.107	0.242	0.218	0.097
TPSA336*006#0600	A	33	6.3	2.1	8	600	0.354	0.318	0.141	0.212	0.191	0.085
TPSB336*006#0250 TPSB336*006#0350	B	33 33	6.3 6.3	2.1	6	250 350	0.583 0.493	0.525 0.444	0.233 0.197	0.146 0.172	0.131 0.155	0.058
TPSB336*006#0450	В	33	6.3	2.1	6	450	0.435	0.391	0.197	0.172	0.133	0.009
TPSB336*006#0600	В	33	6.3	2.1	6	600	0.376	0.339	0.174	0.136	0.203	0.090
TPST336*006#0800	T	33	6.3	2.1	10	800	0.316	0.285	0.126	0.253	0.228	0.101
TPSA476*006#0800	A	47	6.3	2.8	10	800	0.306	0.276	0.122	0.245	0.220	0.098
TPSB476*006#0250	В	47	6.3	3	6	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSB476*006#0350	В	47	6.3	3	6	350	0.493	0.444	0.197	0.172	0.155	0.069
TPSB476*006#0500	В	47	6.3	3	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSC476*006#0300	С	47	6.3	3	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSB686*006#0250	В	68	6.3	4.3	8	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSB686*006#0350	В	68	6.3	4.3	8	350	0.493	0.444	0.197	0.172	0.155	0.069
TPSB686*006#0500	В	68	6.3	4.3	8	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSC686*006#0150	C	68 68	6.3 6.3	4.3	6	150 200	0.856 0.742	0.771 0.667	0.343	0.128 0.148	0.116 0.133	0.051
TPSC686*006#0200 TPSW686*006#0110	W	68	6.3	4.3	6	110	0.742	0.814	0.362	0.148	0.133	0.059
TPSW686*006#0110	W	68	6.3	4.3	6	125	0.849	0.764	0.339	0.106	0.090	0.040
TPSW686*006#0250	W	68	6.3	4.3	6	250	0.600	0.540	0.240	0.150	0.135	0.060
TPSB107*006#0250	В	100	6.3	6.3	10	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSB107*006#0400	В	100	6.3	6.3	10	400	0.461	0.415	0.184	0.184	0.166	0.074
TPSC107*006#0075	С	100	6.3	6.3	6	75	1.211	1.090	0.484	0.091	0.082	0.036
TPSC107*006#0150	С	100	6.3	6.3	6	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSY107*006#0100	Υ	100	6.3	6.3	6	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSW107*006#0100	W	100	6.3	6.3	6	100	0.949	0.854	0.379	0.095	0.085	0.038
TPSC157*006#0050	C	150	6.3	9.5	6	50	1.483	1.335	0.593	0.074	0.067	0.030
TPSC157*006#0090	C	150 150	6.3	9.5 9.5	6	90	1.106	0.995	0.442	0.099	0.090	0.040
TPSC157*006#0150 TPSC157*006#0200	C	150	6.3 6.3	9.5	6	150 200	0.856 0.742	0.771 0.667	0.343	0.128 0.148	0.116 0.133	0.051
TPSC157 000#0200 TPSC157*006#0250	C	150	6.3	9.5	6	250	0.742	0.597	0.265	0.146	0.133	0.059
TPSD157*006#0050	D	150	6.3	9.5	6	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSD157*006#0125	D	150	6.3	9.5	6	125	1.095	0.986	0.438	0.137	0.123	0.055
TPSY157*006#0040	Υ	150	6.3	9.5	6	40	1.768	1.591	0.707	0.071	0.064	0.028
TPSC227*006#0070	С	220	6.3	13.9	8	70	1.254	1.128	0.501	0.088	0.079	0.035
TPSC227*006#0100	С	220	6.3	13.9	8	100	1.049	0.944	0.420	0.105	0.094	0.042
TPSC227*006#0125	С	220	6.3	13.9	8	125	0.938	0.844	0.375	0.117	0.106	0.047
TPSC227*006#0250	C	220	6.3	13.9	8	250	0.663	0.597	0.265	0.166	0.149	0.066
TPSD227*006#0050	D	220	6.3	13.9	8	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSD227*006#0100 TPSD227*006#0125	D	220 220	6.3	13.2 13.9	8	100 125	1.225	1.102	0.490	0.122	0.110	0.049
TPSE227*006#0125	E	220	6.3 6.3	13.9	8	100	1.095 1.285	0.986 1.156	0.438 0.514	0.137 0.128	0.123 0.116	0.055 0.051
TPSF227*006#0100	F	220	6.3	13.2	10	200	0.707	0.636	0.283	0.128	0.110	0.057
TPSY227*006#0100	Y	220	6.3	13.9	10	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSY227*006#0150	Y	220	6.3	13.9	10	150	0.913	0.822	0.365	0.137	0.123	0.055
TPSD337*006#0045	Ď	330	6.3	20.8	8	45	1.826	1.643	0.730	0.082	0.074	0.033
TPSD337*006#0050	D	330	6.3	20.8	8	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSD337*006#0070	D	330	6.3	20.8	8	70	1.464	1.317	0.586	0.102	0.092	0.041
TPSD337*006#0100	D	330	6.3	20.8	8	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSE337*006#0050	E	330	6.3	20.8	8	50	1.817	1.635	0.727	0.091	0.082	0.036
TPSE337*006#0100	E	330	6.3	20.8	8	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSE337*006#0125	E	330	6.3	20.8	8	125	1.149	1.034	0.460	0.144	0.129	0.057
TPSE337*006#0150 TPSV337*006#0100	E V	330 330	6.3 6.3	20.8	8	150 100	1.049 1.581	0.944 1.423	0.420 0.632	0.157 0.158	0.142 0.142	0.063
TPSY337*006#0100	Y	330	6.3	20.8	12	150	0.913	0.822	0.832	0.137	0.142	0.063
TPSD477*006#0045	D	470	6.3	29.6	12	45	1.826	1.643	0.303	0.137	0.123	0.033
TPSD477*006#0060	D	470	6.3	29.6	12	60	1.581	1.423	0.632	0.002	0.085	0.038
TPSD477*006#0100	D	470	6.3	29.6	12	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD477*006#0200	D	470	6.3	29.6	12	200	0.866	0.779	0.346	0.173	0.156	0.069
TPSE477*006#0045	Е	470	6.3	29.6	10	45	1.915	1.723	0.766	0.086	0.078	0.034
TPSE477*006#0050	E	470	6.3	29.6	10	50	1.817	1.635	0.727	0.091	0.082	0.036
TPSE477*006#0060	E	470	6.3	29.6	10	60	1.658	1.492	0.663	0.099	0.090	0.040
TPSE477*006#0100	E	470	6.3	29.6	10	100	1.285	1.156	0.514	0.128	0.116	0.051

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

\* Insert K for ±10% and M for ±20% Capacitance Tolerance





### **Low ESR**



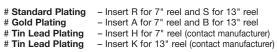
#### **RATINGS & PART NUMBER REFERENCE**

			Rated	DCL	DF	ESR	100kHz Rij	pple Current	Ratings (A)	100kHz Rij	pple Voltage	Ratings (V)
AVX Part No.	Case Size	Capacitance (µF)	Voltage (V)	(µA) Max.	% Max.	Max. (mΩ) @100kHz	25°C	85°C	125°C	25°C	85°C	125°C
TPSE477*006#0200	E	470	6.3	29.6	10	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSV477*006#0040	V	470	6.3	29.6	10	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSV477*006#0055	V	470	6.3	29.6	10	55	2.132	1.919	0.853	0.117	0.106	0.047
TPSV477*006#0100 TPSE687*006#0045	V	470 680	6.3 6.3	29.6 42.8	10	100 45	1.581 1.915	1.423 1.723	0.632 0.766	0.158 0.086	0.142 0.078	0.063
TPSE687*006#0045	E	680	6.3	42.8	10	60	1.658	1.723	0.766	0.086	0.078	0.034
TPSE687*006#0100	Ē	680	6.3	42.8	10	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSV687*006#0035	V	680	6.3	42.8	14	35	2.673	2.405	1.069	0.094	0.084	0.037
TPSV687*006#0040	V	680	6.3	42.8	10	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSV687*006#0050	V	680	6.3	42.8	10	50	2.236	2.012	0.894	0.112	0.101	0.045
TPSV108M006#0040 TPSV108M006#0050	V	1000 1000	6.3 6.3	60 60	16 16	40 50	2.500 2.236	2.250 2.012	1.000 0.894	0.100 0.112	0.090	0.040
TPSR105*010#9000	R	1	10	0.5	4	9000	0.078	0.070	0.031	0.704	0.633	0.043
TPSA225*010#1800	A	2.2	10	0.5	6	1800	0.204	0.184	0.082	0.367	0.331	0.147
TPST335*010#1500	Т	3.3	10	0.5	6	1500	0.231	0.208	0.092	0.346	0.312	0.139
TPSA475*010#1400	Α	4.7	10	0.5	6	1400	0.231	0.208	0.093	0.324	0.292	0.130
TPSR475*010#3000	R	4.7	10	0.5	6	3000	0.135	0.122	0.054	0.406	0.366	0.162
TPSR475*010#5000	R	4.7 6.8	10	0.5	6	5000	0.105	0.094 0.184	0.042	0.524	0.472	0.210
TPSA685*010#1800 TPST685*010#1800	T	6.8	10	0.7	6	1800 1800	0.204 0.211	0.184	0.082	0.367 0.379	0.331	0.147 0.152
TPSA106*010#10900	A	10	10	1	6	900	0.289	0.190	0.004	0.260	0.234	0.104
TPSA106*010#1800	Α	10	10	1	6	1800	0.204	0.184	0.082	0.367	0.331	0.147
TPSP106M010#2000	Р	10	10	1	8	2000	0.173	0.156	0.069	0.346	0.312	0.139
TPST106*010#1000	T	10	10	1	6	1000	0.283	0.255	0.113	0.283	0.255	0.113
TPST106*010#2000	T	10	10	1	6	2000	0.200	0.180	0.080	0.400	0.360	0.160
TPSA156*010#1000 TPSB156*010#0450	A B	15 15	10 10	1.5 1.5	6	1000 450	0.274 0.435	0.246 0.391	0.110 0.174	0.274 0.196	0.246 0.176	0.110
TPSB156*010#0600	В	15	10	1.5	6	600	0.433	0.339	0.174	0.130	0.203	0.070
TPSB226*010#0400	В	22	10	2.2	6	400	0.461	0.415	0.184	0.184	0.166	0.074
TPSB226*010#0500	В	22	10	2.2	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB226*010#0700	В	22	10	2.2	6	700	0.348	0.314	0.139	0.244	0.220	0.098
TPSC226*010#0300	C	22	10	2.2	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPST226*010#0800 TPSA336*010#0700	A	22 33	10 10	2.2 3.3	8	800 700	0.316 0.327	0.285 0.295	0.126 0.131	0.253 0.229	0.228	0.101
TPSB336*010#0250	В	33	10	3.3	6	250	0.583	0.525	0.131	0.229	0.131	0.058
TPSB336*010#0425	В	33	10	3.3	6	425	0.447	0.402	0.179	0.190	0.171	0.076
TPSB336*010#0500	В	33	10	3.3	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB336*010#0650	В	33	10	3.3	6	650	0.362	0.325	0.145	0.235	0.212	0.094
TPSC336*010#0150	C	33	10 10	3.3	6	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSC336*010#0375 TPSC336*010#0500	C	33 33	10	3.3	6	375 500	0.542 0.469	0.487 0.422	0.217 0.188	0.203 0.235	0.183 0.211	0.081
TPSW336*010#0350	W	33	10	3.3	6	350	0.507	0.422	0.188	0.233	0.160	0.094
TPSB476*010#0250	В	47	10	4.7	8	250	0.583	0.525	0.233	0.146	0.131	0.058
TPSB476*010#0350	В	47	10	4.7	8	350	0.493	0.444	0.197	0.172	0.155	0.069
TPSB476*010#0500	В	47	10	4.7	8	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB476*010#0650	В	47	10	4.7	8	650	0.362	0.325	0.145	0.235	0.212	0.094
TPSC476*010#0200 TPSC476*010#0350	C	47 47	10	4.7 4.7	6	200 350	0.742 0.561	0.667 0.505	0.297 0.224	0.148 0.196	0.133 0.177	0.059
TPSD476*010#0100	D	47	10	4.7	6	100	1.225	1.102	0.490	0.190	0.110	0.078
TPSW476*010#0125	W	47	10	4.7	6	125	0.849	0.764	0.339	0.106	0.095	0.042
TPSW476*010#0150	W	47	10	4.7	6	150	0.775	0.697	0.310	0.116	0.105	0.046
TPSW476*010#0250	W	47	10	4.7	6	250	0.600	0.540	0.240	0.150	0.135	0.060
TPSB686*010#0600 TPSC686*010#0080	В	68 68	10 10	6.8 6.8	8	600 80	0.376 1.173	0.339 1.055	0.151 0.469	0.226 0.094	0.203 0.084	0.090
TPSC686*010#0100	C	68	10	6.8	6	100	1.049	0.944	0.469	0.105	0.084	0.038
TPSC686*010#0200	C	68	10	6.8	6	200	0.742	0.667	0.420	0.103	0.133	0.059
TPSC686*010#0300	С	68	10	6.8	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSD686*010#0100	D	68	10	6.8	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD686*010#0150	D	68	10	6.8	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSY686*010#0100 TPSY686*010#0200	Y	68 68	10	6.8	6	100 200	1.118 0.791	1.006 0.712	0.447 0.316	0.112 0.158	0.101	0.045
TPSW686*010#0200	W	68	10	6.8	6	100	0.791	0.712	0.379	0.158	0.142 0.085	0.063
TPSW686*010#0150	W	68	10	6.8	6	150	0.343	0.697	0.310	0.033	0.105	0.036
TPSB107M010#0400	В	100	10	10	8	400	0.461	0.415	0.184	0.184	0.166	0.074
TPSC107*010#0075	С	100	10	10	8	75	1.211	1.090	0.484	0.091	0.082	0.036
TPSC107*010#0100	C	100	10	10	8	100	1.049	0.944	0.420	0.105	0.094	0.042
TPSC107*010#0150	C	100	10	10	8	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSC107*010#0200	С	100	10	10	8	200	0.742	0.667	0.297	0.148	0.133	0.059

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

\* Insert K for ±10% and M for ±20% Capacitance Tolerance







### **Low ESR**



### **RATINGS & PART NUMBER REFERENCE**

			Rated	DCL	DF	ESR	100kHz Rij	ople Current I	Ratings (A)	100kHz Rij	pple Voltage	Ratings (V)
AVX Part No.	Case Size	Capacitance (µF)	Voltage (V)	(μΑ) Max.	% Max.	Max. (mΩ) @100kHz	25°C	85°C	125°C	25°C	85°C	125°C
TPSD107*010#0050	D	100	10	10	6	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSD107*010#0065	D	100	10	10	6	65	1.519	1.367	0.608	0.099	0.089	0.039
TPSD107*010#0080	D	100	10	10	6	80	1.369	1.232	0.548	0.110	0.099	0.044
TPSD107*010#0100	D	100	10	10	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD107*010#0125 TPSD107*010#0150	D	100	10 10	10 10	6	125 150	1.095 1.000	0.986 0.900	0.438	0.137 0.150	0.123	0.055
TPSE107*010#0125	E	100	10	10	6	125	1.149	1.034	0.460	0.130	0.135 0.129	0.060
TPSY107*010#0120	Ϋ́	100	10	10	6	100	1.118	1.006	0.447	0.112	0.123	0.037
TPSY107*010#0150	Y	100	10	10	6	150	0.913	0.822	0.365	0.137	0.123	0.055
TPSY107*010#0200	Υ	100	10	10	6	200	0.791	0.712	0.316	0.158	0.142	0.063
TPSX107*010#0085	X	100	10	10	8	85	1.085	0.976	0.434	0.092	0.083	0.037
TPSX107*010#0150	X	100	10	10	8	150	0.816	0.735	0.327	0.122	0.110	0.049
TPSX107*010#0200 TPSW107*010#0150	X W	100	10 10	10 10	8	200 150	0.707 0.775	0.636 0.697	0.283 0.310	0.141 0.116	0.127 0.105	0.057
TPSD157*010#0050	D	150	10	15	6	50	1.732	1.559	0.693	0.116	0.103	0.046
TPSD157*010#0085	D	150	10	15	8	85	1.328	1.196	0.531	0.007	0.102	0.035
TPSD157*010#0100	D	150	10	15	8	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSE157*010#0100	Е	150	10	15	8	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSF157*010#0200	F	150	10	15	10	200	0.707	0.636	0.283	0.141	0.127	0.057
TPSX157M010#0100	X	150	10	15	6	100	1.000	0.900	0.400	0.100	0.090	0.040
TPSY157*010#0100	Y	150	10	15	6	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSY157*010#0150 TPSY157*010#0200	Y	150 150	10 10	15 15	6	150 200	0.913 0.791	0.822 0.712	0.365 0.316	0.137 0.158	0.123 0.142	0.055
TPSD227*010#0200	D	220	10	22	8	50	1.732	1.559	0.693	0.136	0.142	0.003
TPSD227*010#0100	D	220	10	22	8	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD227*010#0150	D	220	10	22	8	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSE227*010#0050	Е	220	10	22	8	50	1.817	1.635	0.727	0.091	0.082	0.036
TPSE227*010#0060	E	220	10	22	8	60	1.658	1.492	0.663	0.099	0.090	0.040
TPSE227*010#0070	E	220	10	22	8	70	1.535	1.382	0.614	0.107	0.097	0.043
TPSE227*010#0100	E	220	10	22	8	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSE227*010#0125 TPSE227*010#0150	E	220 220	10 10	22 22	8	125 150	1.149 1.049	1.034 0.944	0.460 0.420	0.144 0.157	0.129 0.142	0.057
TPSY227*010#0150	Y	220	10	22	10	150	0.913	0.822	0.420	0.137	0.142	0.055
TPSY227*010#0200	Ϋ́	220	10	22	10	200	0.791	0.712	0.316	0.158	0.142	0.063
TPSD337*010#0050	D	330	10	33	8	50	1.732	1.559	0.693	0.087	0.078	0.035
TPSD337*010#0065	D	330	10	33	8	65	1.519	1.367	0.608	0.099	0.089	0.039
TPSD337*010#0100	D	330	10	33	8	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD337*010#0150	D	330	10	33	8	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSE337*010#0040 TPSE337*010#0050	E	330 330	10 10	33 33	8	40 50	2.031 1.817	1.828 1.635	0.812 0.727	0.081	0.073	0.032
TPSE337*010#0060	E	330	10	33	8	60	1.658	1.492	0.663	0.091	0.090	0.030
TPSE337*010#0100	Ē	330	10	33	8	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSV337*010#0040	V	330	10	33	10	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSV337*010#0060	V	330	10	33	10	60	2.041	1.837	0.816	0.122	0.110	0.049
TPSV337*010#0100	V	330	10	33	10	100	1.581	1.423	0.632	0.158	0.142	0.063
TPSE477*010#0045	E	470 470	10	47 47	10	45 50	1.915	1.723	0.766	0.086	0.078	0.034
TPSE477*010#0050 TPSE477*010#0060	E	470	10	47	10	60	1.817 1.658	1.635 1.492	0.727 0.663	0.091	0.082	0.036
TPSE477*010#0000	E	470	10	47	10	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSE477*010#0200	Ē	470	10	47	10	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSV477*010#0040	V	470	10	47	10	40	2.500	2.250	1.000	0.100	0.090	0.040
TPSV477*010#0060	V	470	10	47	10	60	2.041	1.837	0.816	0.122	0.110	0.049
TPSV477*010#0100	V	470	10	47	10	100	1.581	1.423	0.632	0.158	0.142	0.063
TPSA225*016#1800	A	2.2	16 16	0.5	6	1800	0.204	0.184 0.132	0.082	0.367	0.331	0.147
TPSA225*016#3500 TPST225*016#2000	A T	2.2 2.2	16	0.5 0.5	6	3500 2000	0.146 0.200	0.132	0.059	0.512 0.400	0.461 0.360	0.205
TPSA335*016#3500	A	3.3	16	0.5	6	3500	0.200	0.132	0.059	0.400	0.461	0.100
TPSA475*016#2000	A	4.7	16	0.8	6	2000	0.194	0.174	0.077	0.387	0.349	0.155
TPSB475*016#0800	В	4.7	16	0.8	6	800	0.326	0.293	0.130	0.261	0.235	0.104
TPSB475*016#1500	В	4.7	16	0.8	6	1500	0.238	0.214	0.095	0.357	0.321	0.143
TPSA685*016#1500	Α	6.8	16	1.1	6	1500	0.224	0.201	0.089	0.335	0.302	0.134
TPSB685*016#0600	В	6.8	16	1.1	6	600	0.376	0.339	0.151	0.226	0.203	0.090
TPSB685*016#1200	В	6.8	16	1.1	6	1200	0.266	0.240	0.106	0.319	0.287	0.128
TPSB106*016#0500 TPSB106*016#0800	B	10 10	16 16	1.6 1.6	6	500 800	0.412 0.326	0.371 0.293	0.165 0.130	0.206 0.261	0.186 0.235	0.082
TPSC106*016#0500	C	10	16	1.6	6	500	0.320	0.422	0.130	0.235	0.233	0.104
TPST106*016#0800	T	10	16	1.6	8	800	0.403	0.422	0.126	0.253	0.211	0.101
TPST106*016#1000	ΤĖ	10	16	1.6	8	1000	0.283	0.255	0.113	0.283	0.255	0.113

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.

<sup>\*</sup> Insert K for ±10% and M for ±20% Capacitance Tolerance



<sup>#</sup> Gold Plating

<sup>#</sup> Tin Lead Plating

Insert R for 7" reel and S for 13" reel
 Insert A for 7" reel and B for 13" reel
 Insert H for 7" reel (contact manufacturer)

<sup>#</sup> Tin Lead Plating

<sup>-</sup> Insert K for 13" reel (contact manufacturer)

### **Low ESR**



### **RATINGS & PART NUMBER REFERENCE**

			Rated	DCL	DF	ESR	100kHz Rij	pple Current	Ratings (A)	100kHz Ri	pple Voltage	Ratings (V)
AVX Part No.	Case Size	Capacitance (µF)	Voltage (V)	(μΑ) Max.	% Max.	Max. (mΩ) @100kHz	25°C	85°C	125°C	25°C	85°C	125°C
TPSW106*016#0500	W	10	16	1.6	6	500	0.424	0.382	0.170	0.212	0.191	0.085
TPSW106*016#0600	W	10	16	1.6	6	600	0.387	0.349	0.155	0.232	0.209	0.093
TPSB156*016#0500	В	15	16	2.4	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB156*016#0800	В	15	16	2.4	6	800	0.326	0.293	0.130	0.261	0.235	0.104
TPSB226*016#0400	В	22	16	3.5	6	400	0.461	0.415	0.184	0.184	0.166	0.074
TPSB226*016#0600	В	22	16	3.5	6	600	0.376	0.339	0.151	0.226	0.203	0.090
TPSC226*016#0150	С	22	16	3.5	6	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSC226*016#0250	С	22	16	3.5	6	250	0.663	0.597	0.265	0.166	0.149	0.066
TPSC226*016#0300	С	22	16	3.5	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSC226*016#0375	С	22	16	3.5	6	375	0.542	0.487	0.217	0.203	0.183	0.081
TPSW226*016#0500	W	22	16	3.5	6	500	0.424	0.382	0.170	0.212	0.191	0.085
TPSB336*016#0350	В	33	16	5.3	8	350	0.493	0.444	0.197	0.172	0.155	0.069
TPSB336*016#0500	В	33	16	5.3	8	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSC336*016#0100	C	33	16	5.3	6	100	1.049	0.944	0.420	0.105	0.094	0.042
TPSC336*016#0150	С	33	16	5.3	6	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSC336*016#0225	С	33	16	5.3	6	225	0.699	0.629	0.280	0.157	0.142	0.063
TPSC336*016#0300	С	33	16	5.3	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSD336*016#0200	D	33	16	5.3	6	200	0.866	0.779	0.346	0.173	0.156	0.069
TPSW336*016#0140	W	33	16	5.3	6	140	0.802	0.722	0.321	0.112	0.101	0.045
TPSW336*016#0175	W	33	16	5.3	6	175	0.717	0.645	0.287	0.125	0.113	0.050
TPSW336*016#0250	W	33	16	5.3	6	250	0.600	0.540	0.240	0.150	0.135	0.060
TPSW336*016#0400	W	33	16	5.3	6	400	0.474	0.427	0.190	0.190	0.171	0.076
TPSW336*016#0500	W	33	16	5.3	6	500	0.424	0.382	0.170	0.212	0.191	0.085
TPSY336*016#0300	Y	33	16	5.3	6	300	0.645	0.581	0.258	0.194	0.174	0.077
TPSY336*016#0400	Y	33	16	5.3	6	400	0.559	0.503	0.224	0.224	0.201	0.089
TPSC476*016#0110	С	47	16	7.5	6	110	1.000	0.900	0.400	0.110	0.099	0.044
TPSC476*016#0350	C	47	16	7.5	6	350	0.561	0.505	0.224	0.196	0.177	0.078
TPSD476*016#0080	D	47	16	7.5	6	80	1.369	1.232	0.548	0.110	0.099	0.044
TPSD476*016#0100	D	47 47	16	7.5	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD476*016#0150	D		16	7.5	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSD476*016#0200 TPSW476*016#0200	W	47 47	16 16	7.5 7.5	6	200 200	0.866	0.779 0.604	0.346 0.268	0.173 0.134	0.156	0.069 0.054
TPSY476*016#0250	Y	47	16	7.5	6	250	0.671 0.707	0.636	0.283	0.134	0.121 0.159	0.034
TPSX476*016#0250	X	47	16	7.5	6	180	0.707	0.636	0.283	0.176	0.139	0.071
TPSC686*016#0125	Ĉ	68	16	10.9	6	125	0.743	0.844	0.296	0.134	0.121	0.034
TPSC686*016#0200	C	68	16	10.9	6	200	0.938	0.667	0.373	0.117	0.100	0.059
TPSD686*016#0070	D	68	16	10.8	6	70	1.464	1.317	0.586	0.140	0.133	0.039
TPSD686*016#0100	D	68	16	10.8	6	100	1.225	1.102	0.490	0.102	0.092	0.041
TPSD686*016#0150	D	68	16	10.9	6	150	1.000	0.900	0.490	0.122	0.110	0.049
TPSF686*016#0200	F	68	16	10.9	10	200	0.707	0.636	0.400	0.130	0.133	0.057
TPSY686*016#0150	Y	68	16	10.9	6	150	0.707	0.822	0.265	0.141	0.123	0.055
TPSY686*016#0200	Ϋ́	68	16	10.9	6	200	0.791	0.712	0.316	0.157	0.120	0.063
TPSY686*016#0250	Y	68	16	10.9	6	250	0.707	0.636	0.283	0.177	0.159	0.071
TPSX686*016#0150	X	68	16	10.9	8	150	0.816	0.735	0.327	0.122	0.110	0.049
TPSD107*016#0060	D	100	16	16	6	60	1.581	1.423	0.632	0.095	0.085	0.038
TPSD107*016#0100	D	100	16	16	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD107*016#0125	D	100	16	16	6	125	1.095	0.986	0.438	0.137	0.123	0.055
TPSD107*016#0150	D	100	16	16	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSE107*016#0055	E	100	16	16	6	55	1.732	1.559	0.693	0.095	0.086	0.038
TPSE107*016#0100	Ē	100	16	16	6	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSE107*016#0125	E	100	16	16	6	125	1.149	1.034	0.460	0.144	0.129	0.057
TPSE107*016#0150	Е	100	16	16	6	150	1.049	0.944	0.420	0.157	0.142	0.063
TPSF107M016#0150	F	100	16	16	10	150	0.816	0.735	0.327	0.122	0.110	0.049
TPSF107M016#0200	F	100	16	16	10	200	0.707	0.636	0.283	0.141	0.127	0.057
TPSY107*016#0100	Υ	100	16	24	6	100	1.118	1.006	0.447	0.112	0.101	0.045
TPSY107*016#0150	Υ	100	16	16	8	150	0.913	0.822	0.365	0.137	0.123	0.055
TPSY107*016#0200	Υ	100	16	16	8	200	0.791	0.712	0.316	0.158	0.142	0.063
TPSD157*016#0060	D	150	16	24	6	60	1.581	1.423	0.632	0.095	0.085	0.038
TPSD157*016#0085	D	150	16	24	6	85	1.328	1.196	0.531	0.113	0.102	0.045
TPSD157*016#0100	D	150	16	24	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD157*016#0125	D	150	16	24	6	125	1.095	0.986	0.438	0.137	0.123	0.055
TPSD157*016#0150	D	150	16	24	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSE157*016#0100	Е	150	16	24	6	100	1.285	1.156	0.514	0.128	0.116	0.051
		150	16	24	8	45	2.357	2.121	0.943	0.106	0.095	0.042
TPSV157*016#0045	V											
TPSV157*016#0045 TPSV157*016#0075	V	150	16	24	8	75	1.826	1.643	0.730	0.137	0.123	0.055
TPSV157*016#0045 TPSV157*016#0075 TPSY157M016#0200	V	150 150	16 16	24 24	8 15	75 200	1.826 0.791	1.643 0.712	0.730 0.316	0.137 0.158		0.063
TPSV157*016#0045 TPSV157*016#0075	V	150	16	24	8	75	1.826	1.643	0.730	0.137	0.123	

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.

<sup>\*</sup> Insert K for ±10% and M for ±20% Capacitance Tolerance



- # Gold Plating
- # Tin Lead Plating
- Insert R for 7" reel and S for 13" reel
   Insert A for 7" reel and B for 13" reel
   Insert H for 7" reel (contact manufacturer)
- # Tin Lead Plating - Insert K for 13" reel (contact manufacturer)

### **Low ESR**



### **RATINGS & PART NUMBER REFERENCE**

			Rated	DCL	DF	ESR	100kHz Ri	pple Current	Ratings (A)	100kHz Ri	pple Voltage	Ratings (V)
AVX Part No.	Case Size	Capacitance (µF)	Voltage (V)	(μΑ) Max.	% Max.	Max. (mΩ) @100kHz	25°C	85°C	125°C	25°C	85°C	125°C
TPSV227*016#0050	V	220	16	35.2	8	50	2.236	2.012	0.894	0.112	0.101	0.045
TPSV227*016#0075	V	220	16	35.2	8	75	1.826	1.643	0.730	0.137	0.123	0.055
TPSV227*016#0100	V	220	16	35.2	8	100	1.581	1.423	0.632	0.158	0.142	0.063
TPSV227*016#0150	V	220	16	35.2	8	150	1.291	1.162	0.516	0.194	0.174	0.077
TPSA105*020#3000	A	1	20	0.5	4	3000	0.158	0.142	0.063	0.474	0.427	0.190
TPSS105*020#6000	S	1	20	0.5	4	6000	0.104	0.094	0.042	0.624	0.562	0.250
TPSR105*020#6000	R	1	20	0.5	4	6000	0.096	0.086	0.038	0.574	0.517	0.230
TPST105*020#2000 TPSA225*020#3000	T A	2.2	20 20	0.5	6	2000 3000	0.200	0.180	0.080	0.400	0.360 0.427	0.160
TPSA225 020#3000 TPSA335*020#2500	A	3.3	20	0.5	6	2500	0.158 0.173	0.142 0.156	0.063	0.474	0.427	0.190 0.173
TPSB335*020#1300	В	3.3	20	0.7	6	1300	0.173	0.130	0.102	0.433	0.390	0.173
TPSA475*020#1800	A	4.7	20	0.9	6	1800	0.204	0.184	0.082	0.367	0.233	0.147
TPSB475*020#0750	В	4.7	20	0.9	6	750	0.337	0.303	0.135	0.252	0.227	0.101
TPSB475*020#1000	В	4.7	20	0.9	6	1000	0.292	0.262	0.117	0.292	0.262	0.117
TPSA685*020#1000	A	6.8	20	1.4	6	1000	0.274	0.246	0.110	0.274	0.246	0.110
TPSB685*020#0600	В	6.8	20	1.4	6	600	0.376	0.339	0.151	0.226	0.203	0.090
TPSB685*020#1000	В	6.8	20	1.4	6	1000	0.292	0.262	0.117	0.292	0.262	0.117
TPSC685*020#0700	С	6.8	20	1.4	6	700	0.396	0.357	0.159	0.277	0.250	0.111
TPSB106*020#0500	В	10	20	2	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSB106*020#1000	В	10	20	2	6	1000	0.292	0.262	0.117	0.292	0.262	0.117
TPSC106*020#0500	С	10	20	2	6	500	0.469	0.422	0.188	0.235	0.211	0.094
TPSC106*020#0700	C	10	20	2	6	700	0.396	0.357	0.159	0.277	0.250	0.111
TPSB156*020#0500	В	15	20	3	6	500	0.412	0.371	0.165	0.206	0.186	0.082
TPSC156*020#0400 TPSC156*020#0450	C	15 15	20 20	3	6	400 450	0.524 0.494	0.472 0.445	0.210 0.198	0.210 0.222	0.189	0.084
TPSB226*020#0400	В	22	20	4.4	6	400	0.494	0.445	0.196	0.222	0.200	0.069
TPSB226*020#0600	В	22	20	4.4	6	600	0.401	0.339	0.151	0.104	0.203	0.090
TPSC226*020#0100	C	22	20	4.4	6	100	1.049	0.944	0.420	0.105	0.094	0.042
TPSC226*020#0150	Č	22	20	4.4	6	150	0.856	0.771	0.343	0.128	0.116	0.051
TPSC226*020#0400	С	22	20	4.4	6	400	0.524	0.472	0.210	0.210	0.189	0.084
TPSD226*020#0200	D	22	20	4.4	6	200	0.866	0.779	0.346	0.173	0.156	0.069
TPSD226*020#0300	D	22	20	4.4	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSC336*020#0300	С	33	20	6.6	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSD336*020#0100	D	33	20	6.6	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD336*020#0200	D	33	20	6.6	6	200	0.866	0.779	0.346	0.173	0.155	0.069
TPSD476*020#0075	D	47	20	9.4	6	75	1.414	1.273	0.566	0.106	0.095	0.042
TPSD476*020#0100	D	47	20	9.4	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD476*020#0200	D E	47 47	20 20	9.4	6	200 70	0.866	0.779 1.382	0.346	0.173	0.156	0.069
TPSE476*020#0070 TPSE476*020#0125	E	47	20	9.4	6	125	1.535 1.149	1.034	0.614 0.460	0.107 0.144	0.097 0.129	0.043
TPSE476*020#0125	E	47	20	9.4	6	150	1.049	0.944	0.400	0.144	0.129	0.063
TPSE476*020#0200	E	47	20	9.4	6	200	0.908	0.817	0.420	0.137	0.142	0.003
TPSE476*020#0250	E	47	20	9.4	6	250	0.812	0.731	0.325	0.203	0.183	0.070
TPSD686*020#0070	D	68	20	13.6	6	70	1.464	1.317	0.586	0.102	0.092	0.041
TPSD686*020#0150	D	68	20	13.6	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSD686*020#0200	D	68	20	13.6	6	200	0.866	0.779	0.346	0.173	0.156	0.069
TPSD686*020#0300	D	68	20	13.6	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSE686*020#0125	E	68	20	13.6	6	125	1.149	1.034	0.460	0.144	0.129	0.057
TPSE686*020#0150	E	68	20	13.6	6	150	1.049	0.944	0.420	0.157	0.142	0.063
TPSE686*020#0200	E	68	20	13.6	6	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSD107*020#0085	D	100	20	20	6	85	1.328	1.196	0.531	0.113	0.102	0.045
TPSD107*020#0100	D	100	20	20	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD107*020#0150	D	100	20	20	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSE107*020#0100 TPSE107*020#0150	E	100	20 20	20	6	100 150	1.285	1.156 0.944	0.514	0.128	0.116	0.051
TPSE107*020#0150	E	100	20	20	6	200	1.049 0.908	0.944	0.420 0.363	0.157 0.182	0.142 0.163	0.063
TPSV107*020#0200	V	100	20	20	8	60	2.041	1.837	0.816	0.102	0.103	0.073
TPSV107 020#0000 TPSV107*020#0085	V	100	20	20	8	85	1.715	1.543	0.686	0.122	0.110	0.049
TPSV107 020#0003	V	100	20	20	8	100	1.581	1.423	0.632	0.158	0.142	0.063
TPSV107*020#0200	V	100	20	20	8	200	1.118	1.006	0.447	0.224	0.201	0.089
TPSV157*020#0080	V	150	20	30	8	80	1.768	1.591	0.707	0.141	0.127	0.057
TPSA474*025#7000	Å	0.47	25	0.5	4	7000	0.104	0.093	0.041	0.725	0.652	0.290
TPSA684*025#6000	Α	0.68	25	0.5	4	6000	0.112	0.101	0.045	0.671	0.604	0.268
TPSR105*025#2500	R	1	25	0.5	4	2500	0.148	0.133	0.059	0.371	0.334	0.148
TPSR105*025#4000	R	1	25	0.5	4	4000	0.117	0.106	0.047	0.469	0.422	0.188
TPSA155*025#3000	Α	1.5	25	0.5	6	3000	0.158	0.142	0.063	0.474	0.427	0.190
TPSB155*025#1800	В	1.5	25	0.5	6	1800	0.217	0.196	0.087	0.391	0.352	0.156
TPSB225*025#0900	В	2.2	25	0.6	6	900	0.307	0.277	0.123	0.277	0.249	0.111

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

\* Insert K for ±10% and M for ±20% Capacitance Tolerance



<sup>#</sup> Standard Plating

<sup>Insert R for 7" reel and S for 13" reel
Insert A for 7" reel and B for 13" reel
Insert H for 7" reel (contact manufacturer)
Insert K for 13" reel (contact manufacturer)</sup> 

<sup>#</sup> Gold Plating
# Tin Lead Plating
# Tin Lead Plating

### **Low ESR**



### **RATINGS & PART NUMBER REFERENCE**

			Rated	DCL	DF	ESR	100kHz Rip	ople Current I	Ratings (A)	100kHz Ri	pple Voltage	Ratings (V)
AVX Part No.	Case Size	Capacitance (µF)	Voltage (V)	(μA) Max.	% Max.	Max. (mΩ) 000000000000000000000000000000000000	25°C	85°C	125°C	25°C	85°C	125°C
TPSB225*025#1200	В	2.2	25	0.6	6	1200	0.266	0.240	0.106	0.319	0.287	0.128
TPSB225*025#2500	В	2.2	25	0.6	6	2500	0.184	0.166	0.074	0.461	0.415	0.184
TPSA335*025#1000	Α	3.3	25	0.8	6	1000	0.274	0.246	0.110	0.274	0.246	0.110
TPSA335*025#1500	A	3.3	25	0.8	6	1500	0.224	0.201	0.089	0.335	0.302	0.134
TPSB335*025#0750	В	3.3	25	0.8	6	750	0.337	0.303	0.135	0.252	0.227	0.101
TPSB335*025#1500	B B	3.3	25	0.8	6	1500 2000	0.238	0.214 0.186	0.095	0.357 0.412	0.321	0.143 0.165
TPSB335*025#2000 TPSB475*025#0700	В	3.3 4.7	25 25	1.2	6	700	0.206 0.348	0.186	0.082 0.139	0.412	0.220	0.103
TPSB475*025#0900	В	4.7	25	1.2	6	900	0.307	0.277	0.123	0.277	0.249	0.030
TPSB475*025#1500	В	4.7	25	1.2	6	1500	0.238	0.214	0.095	0.357	0.321	0.143
TPSB685*025#0700	В	6.8	25	1.7	6	700	0.348	0.314	0.139	0.244	0.220	0.098
TPSC685*025#0500	С	6.8	25	1.7	6	500	0.469	0.422	0.188	0.235	0.211	0.094
TPSC685*025#0600	С	6.8	25	1.7	6	600	0.428	0.385	0.171	0.257	0.231	0.103
TPSC685*025#0700	С	6.8	25	1.7	6	700	0.396	0.357	0.159	0.277	0.250	0.111
TPSC106*025#0300	С	10	25	2.5	6	300	0.606	0.545	0.242	0.182	0.163	0.073
TPSC106*025#0500	C	10	25	2.5	6	500	0.469	0.422	0.188	0.235	0.211	0.094
TPSC156*025#0220	C	15	25	3.8	6	220	0.707	0.636	0.283	0.156	0.140	0.062
TPSC156*025#0300 TPSD156*025#0100	C	15 15	25	3.8	6	300 100	0.606 1.225	0.545 1.102	0.242	0.182	0.163	0.073
TPSD156*025#0100 TPSD156*025#0300	D D	15	25 25	3.8	6	300	0.707	0.636	0.490	0.122 0.212	0.110 0.191	0.049
TPSC226*025#0275	C	22	25	5.5	6	275	0.707	0.569	0.253	0.212	0.191	0.000
TPSC226*025#0400	C	22	25	5.5	6	400	0.524	0.472	0.233	0.174	0.137	0.070
TPSD226*025#0100	D	22	25	5.5	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD226*025#0200	D	22	25	5.5	6	200	0.866	0.779	0.346	0.173	0.156	0.069
TPSD226*025#0300	D	22	25	5.5	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSD336*025#0100	D	33	25	8.3	6	100	1.225	1.102	0.490	0.122	0.110	0.049
TPSD336*025#0200	D	33	25	8.3	6	200	0.866	0.779	0.346	0.173	0.156	0.069
TPSD336*025#0300	D	33	25	8.3	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSE336*025#0100	E	33	25	8.3	6	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSE336*025#0175	E	33	25	8.3	6	175	0.971	0.874	0.388	0.170	0.153	0.068
TPSE336*025#0200 TPSE336*025#0300	E E	33 33	25 25	8.3 8.3	6	200 300	0.908 0.742	0.817 0.667	0.363 0.297	0.182 0.222	0.163 0.200	0.073
TPSY336*025#0200	Y	33	25	8.3	6	200	0.742	0.712	0.297	0.158	0.200	0.063
TPSD476*025#0125	D	47	25	11.8	6	125	1.095	0.986	0.438	0.137	0.142	0.055
TPSD476*025#0150	D	47	25	11.8	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSD476*025#0250	D	47	25	11.8	6	250	0.775	0.697	0.310	0.194	0.174	0.077
TPSE476*025#0080	Е	47	25	8.3	6	80	1.436	1.293	0.574	0.115	0.103	0.046
TPSE476*025#0100	E	47	25	8.3	6	100	1.285	1.156	0.514	0.128	0.116	0.051
TPSE476*025#0125	Е	47	25	8.3	6	125	1.149	1.034	0.460	0.144	0.129	0.057
TPSE686*025#0125	E	68	25	17	6	125	1.149	1.034	0.460	0.144	0.129	0.057
TPSE686*025#0200	E	68	25	17	6	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSV686*025#0080 TPSV686*025#0095	V	68 68	25 25	17 17	6	80 95	1.768 1.622	1.591 1.460	0.707 0.649	0.141 0.154	0.127 0.139	0.057
TPSV686*025#0150	V	68	25	17	6	150	1.022	1.162	0.549	0.194	0.139	0.062
TPSV686*025#0200	V	68	25	17	6	200	1.118	1.006	0.447	0.134	0.201	0.089
TPSV107*025#0100	V	100	25	25	8	100	1.581	1.423	0.632	0.158	0.142	0.063
TPSA224*035#6000	Ā	0.22	35	0.5	4	6000	0.112	0.101	0.045	0.671	0.604	0.268
TPSA334*035#6000	Α	0.33	35	0.5	4	6000	0.112	0.101	0.045	0.671	0.604	0.268
TPSA474*035#6000	Α	0.47	35	0.5	4	6000	0.112	0.101	0.045	0.671	0.604	0.268
TPSB474*035#4000	В	0.47	35	0.5	4	4000	0.146	0.131	0.058	0.583	0.525	0.233
TPSA684*035#6000	A	0.68	35	0.5	4	6000	0.112	0.101	0.045	0.671	0.604	0.268
TPSA105*035#3000	A	1	35	0.5	4	3000	0.158	0.142	0.063	0.474	0.427	0.190
TPSB105*035#2000	B B	1.5	35 35	0.5	6	2000 2500	0.206	0.186	0.082	0.412 0.461	0.371	0.165 0.184
TPSB155*035#2500 TPSA225*035#1500	A	2.2	35	0.5	6	1500	0.184 0.224	0.166 0.201	0.074	0.461	0.415	0.184
TPSB225*035#1500 TPSB225*035#0750	В	2.2	35	0.8	6	750	0.224	0.201	0.089	0.335	0.302	0.134
TPSB225*035#1500	В	2.2	35	0.8	6	1500	0.238	0.214	0.100	0.252	0.321	0.143
TPSB225*035#2000	В	2.2	35	0.8	6	2000	0.206	0.186	0.082	0.412	0.371	0.145
TPSC225*035#1000	C	2.2	35	0.8	6	1000	0.332	0.298	0.133	0.332	0.298	0.133
TPSB335*035#1000	В	3.3	35	1.2	6	1000	0.292	0.262	0.117	0.292	0.262	0.117
TPSC335*035#0700	С	3.3	35	1.2	6	700	0.396	0.357	0.159	0.277	0.250	0.111
TPSB475*035#0700	В	4.7	35	1.2	6	700	0.348	0.314	0.139	0.244	0.220	0.098
TPSB475*035#1500	В	4.7	35	1.2	6	1500	0.238	0.214	0.095	0.357	0.321	0.143
TPSC475*035#0600	C	4.7	35	1.6	6	600	0.428	0.385	0.171	0.257	0.231	0.103
TPSC685*035#0350	C	6.8	35	2.4	6	350	0.561	0.505	0.224	0.196	0.177	0.078
TPSD685*035#0150	D	6.8	35	2.4	6	150	1.000	0.900	0.400	0.150	0.135	0.060
TPSD685*035#0400	D	6.8	35	2.4	6	400	0.612	0.551	0.245	0.245	0.220	0.098

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

\* Insert K for ±10% and M for ±20% Capacitance Tolerance



<sup>#</sup> Standard Plating

<sup>#</sup> Gold Plating
# Tin Lead Plating
# Tin Lead Plating

<sup>Insert R for 7" reel and S for 13" reel
Insert A for 7" reel and B for 13" reel
Insert H for 7" reel (contact manufacturer)
Insert K for 13" reel (contact manufacturer)</sup> 





### **RATINGS & PART NUMBER REFERENCE**

			Rated	DCL	DF	ESR	100kHz Ri	pple Current	Ratings (A)	100kHz Rip	ple Voltage I	Ratings (V)
AVX Part No.	Case Size	Capacitance (µF)	Voltage (V)	(μA) Max.	% Max.	Max. (mΩ) @100kHz	25°C	85°C	125°C	25°C	85°C	125°C
ΓPSD106*035#0125	D	10	35	3.5	6	125	1.095	0.986	0.438	0.137	0.123	0.055
FPSD106*035#0300	D	10	35	3.5	6	300	0.707	0.636	0.283	0.212	0.191	0.085
FPSE106*035#0200	E	10	35	3.5	6	200	0.908	0.817	0.363	0.182	0.163	0.073
PSC156*035#0350	С	15	35	5.3	6	350	0.561	0.505	0.224	0.196	0.177	0.078
PSC156*035#0450	С	15	35	5.3	6	450	0.494	0.445	0.198	0.222	0.200	0.089
PSD156*035#0100	D	15	35	5.3	6	100	1.225	1.102	0.490	0.122	0.110	0.049
PSD156*035#0300	D	15	35	5.3	6	300	0.707	0.636	0.283	0.212	0.191	0.085
PSY156*035#0250	Y	15	35	5.3	6	250	0.707	0.636	0.283	0.177	0.159	0.071
TPSD226*035#0125	D	22	35	7.7	6	125	1.095	0.986	0.438	0.137	0.123	0.055
TPSD226*035#0200	D	22	35	7.7	6	200	0.866	0.779	0.346	0.173	0.156	0.069
TPSD226*035#0300	D	22	35	7.7	6	300	0.707	0.636	0.283	0.212	0.191	0.085
TPSD226*035#0400	D	22	35	7.7	6	400	0.612	0.551	0.245	0.245	0.220	0.098
TPSE226*035#0125	Е	22	35	7.7	6	125	1.149	1.034	0.460	0.144	0.129	0.057
TPSE226*035#0200	E	22	35	7.7	6	200	0.908	0.817	0.363	0.182	0.163	0.073
TPSE226*035#0300	E	22	35	7.7	6	300	0.742	0.667	0.297	0.222	0.200	0.089
TPSY226*035#0200	Υ	22	35	7.7	6	200	0.791	0.712	0.316	0.158	0.142	0.063
TPSD336*035#0200	D	33	35	11.6	6	200	0.866	0.779	0.346	0.173	0.156	0.069
PSD336*035#0300	D	33	35	11.6	6	300	0.707	0.636	0.283	0.212	0.191	0.085
FPSE336*035#0100	E	33	35	11.6	6	100	1.285	1.156	0.514	0.128	0.116	0.051
ΓPSE336*035#0250	Ē	33	35	11.6	6	250	0.812	0.731	0.325	0.203	0.183	0.081
ГРSE336*035#0300	Ē	33	35	11.6	6	300	0.742	0.667	0.297	0.222	0.200	0.089
TPSV336*035#0200	V	33	35	11.6	6	200	1.118	1.006	0.447	0.224	0.201	0.089
TPSE476*035#0200	Ė	47	35	16.5	6	200	0.908	0.817	0.363	0.182	0.163	0.073
ΓPSE476*035#0250	Ē	47	35	16.5	6	250	0.812	0.731	0.325	0.203	0.183	0.081
FPSV476*035#0150	V	47	35	16.5	6	150	1.291	1.162	0.516	0.194	0.174	0.077
TPSV476*035#0200	V	47	35	16.5	6	200	1.118	1.006	0.447	0.224	0.201	0.089
TPSV686M035#0150	V	68	35	23.8	6	150	1.291	1.162	0.516	0.194	0.174	0.077
TPSV686M035#0200	V	68	35	23.8	6	200	1.118	1.006	0.447	0.224	0.201	0.089
TPSA154*050#9000	À	0.15	50	0.5	4	9000	0.091	0.082	0.037	0.822	0.739	0.329
TPSA224*050#7000	A	0.22	50	0.5	4	7000	0.104	0.093	0.041	0.725	0.652	0.290
TPSC105*050#2500	C	1	50	0.5	4	2500	0.210	0.189	0.084	0.524	0.472	0.210
TPSC155*050#1500	C	1.5	50	0.8	6	1500	0.271	0.103	0.108	0.406	0.366	0.162
TPSC155*050#1500	C	1.5	50	0.8	6	2000	0.235	0.211	0.100	0.469	0.422	0.102
TPSD225*050#1200	D	2.2	50	1.1	6	1200	0.255	0.211	0.034	0.424	0.422	0.170
TPSD335*050#0800	D	3.3	50	1.7	6	800	0.433	0.310	0.141	0.424	0.362	0.170
TPSD475*050#0300	D	4.7	50	2.4	6	300	0.433	0.636	0.173	0.212	0.512	0.139
TPSD475 050#0500	D	4.7	50	2.4	6	500	0.707	0.493	0.203	0.274	0.191	0.003
TPSD475 050#0500	D	4.7	50	2.4	6	700	0.463	0.493	0.219	0.274	0.240	0.110
TPSD475 050#0700 TPSD685*050#0200	D	6.8	50	3.4	6	200	0.465	0.417	0.165	0.324	0.292	0.130
TPSD665 050#0200	D	6.8	50	3.4	6	300	0.707	0.779	0.283	0.173	0.130	0.085
TPSD665 050#0500	D	6.8	50	3.4	6	500	0.707	0.030	0.203	0.212	0.191	0.065
TPSD665 050#0500	D	6.8	50	3.4	6	600	0.546	0.450	0.219	0.274	0.240	0.110
TPSE106*050#0600	E	10	50	5.4	6	400	0.500	0.450	0.200	0.300	0.270	0.120
TPSE106*050#0400 TPSE106*050#0500	E	10	50	5	6	500	0.642	0.578	0.237	0.257	0.231	0.103
	E	15	50	5	-							
TPSE156*050#0250		15	50	5	6	250	0.812	0.731	0.325	0.203	0.183	0.081

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