

TPS Series



Low ESR



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



LEAD-FREE
LEAD-FREE COMPATIBLE
COMPONENT

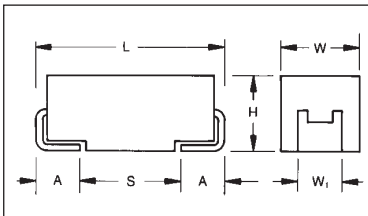


SnPb termination option is not
RoHS compliant.

CASE DIMENSIONS: millimeters (inches)

| Code | EIA Code | EIA Metric | L±0.20 (0.008) | W+0.20 (0.008) -0.10 (0.004) | H+0.20 (0.008) -0.10 (0.004) | W ₂ ±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.



For part marking see page 149

HOW TO ORDER

| | | | | | | | |
|-------------|-------------------------------------|---|--|---|--|------------------|---|
| TPS | C | 107 | M | 010 | R | 0100 | - |
| Type | Case Size See table above | Capacitance Code pF code: 1st two digits represent significant figures, 3rd digit represents multiplier (number of zeros to follow) | Tolerance K = ±10% M = ±20% | Rated DC Voltage 002 = 2.5Vdc 004 = 4Vdc 006 = 6.3Vdc 010 = 10Vdc 016 = 16Vdc 020 = 20Vdc 025 = 25Vdc 035 = 35Vdc 050 = 50Vdc | Packaging R = Pure Tin 7" Reel S = Pure Tin 13" Reel A = Gold Plating 7" Reel B = Gold Plating 13" Reel H = Tin Lead 7" Reel (Contact Manufacturer) K = Tin Lead 13" Reel (Contact Manufacturer) H, K = Non RoHS | ESR in mΩ | Additional characters may be added for special requirements V = Dry pack Option (selected codes only) |

TECHNICAL SPECIFICATIONS

| | | | | | | | | | | |
|------------------------------------|--|-----|-----|-----|----|----|----|----|----|----|
| Technical Data: | All technical data relate to an ambient temperature of +25°C | | | | | | | | | |
| Capacitance Range: | 0.15 µF to 1500 µF | | | | | | | | | |
| Capacitance Tolerance: | ±10%; ±20% | | | | | | | | | |
| Rated Voltage (V _R) | ≤ +85°C: | 2.5 | 4 | 6.3 | 10 | 16 | 20 | 25 | 35 | 50 |
| Category Voltage (V _C) | ≤ +125°C: | 1.7 | 2.7 | 4 | 7 | 10 | 13 | 17 | 23 | 33 |
| Surge Voltage (V _S) | ≤ +85°C: | 3.3 | 5.2 | 8 | 13 | 20 | 26 | 32 | 46 | 65 |
| Surge Voltage (V _S) | ≤ +125°C: | 2.2 | 3.4 | 5 | 8 | 13 | 16 | 20 | 28 | 40 |
| Temperature Range: | -55°C to +125°C | | | | | | | | | |
| Environmental Classification: | 55/125/56 (IEC 68-2) | | | | | | | | | |
| Reliability: | 1% per 1000 hours at 85°C, V _R with 0.1Ω/V series impedance, 60% confidence level | | | | | | | | | |
| Termination Finished: | Sn Plating (standard), Gold and SnPb Plating upon request | | | | | | | | | |
| | For AEC-Q200 availability, please contact AVX | | | | | | | | | |



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

| Capacitance | | Rated Voltage DC (V _R) to 85°C | | | | | | | | |
|-------------|------|--|--|---|---|---|--|--|--|----------------------------------|
| µF | Code | 2.5V (e) | 4V (G) | 6.3V (J) | 10V (A) | 16V (C) | 20V (D) | 25V (E) | 35V (V) | 50V (T) |
| 0.15 | 154 | | | | | | | | | A(9000) |
| 0.22 | 224 | | | | | | | | A(6000) | A(7000) |
| 0.33 | 334 | | | | | | | | A(6000) | 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) X(200) | D(125,150,250) E(80,100,125) Y(250) | E(200,250) V(150,200) | |
| 68 | 686 | | | B(250,350,500) C(150,200) W(110,125,250) | B(600) C(80,100,200,300) D(100,150), W(100,150) Y(100,200) | C(125,200) D(70,100,150) F(200), X(150) Y(150,200,250) | D(70,150, 200,300) E(125,150,200) Y(200) | 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) ^M C(75,100,150,200) D(50,65,80,100,125, 150), E(125) W(150) X(85,150,200) Y(100,150,200) | C(200) D(60,100,125,150) E(55,100,125,150) F(150,200) ^M Y(100,150,200) | D(85,100,150) E(100,150,200) V(60,85,100,200) | E(150) ^M , V(100) | | |
| 150 | 157 | B(150) | B(250) C(70,80) | C(50,90,150,200,250) D(50,125), Y(40,50) | C(150), D(50,85,100), E(100), F(200), X(100) ^M Y(100,150,200) | D(60,85,100,125,150) E(100), V(45,75) Y(200) ^M | V(80) | V(150) ^M | | |
| 220 | 227 | B(150, 200,600) D(45) | D(40,50,100) Y(40,50,75) | C(70,100,125,250) D(50,100,125) E(100), F(200) Y(100,150) | D(40,50,100,150) E(50,60,70,100, 125,150) Y(100,150,200) | 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) ^M | | | | |
| 470 | 477 | D(35) F(200) Y(100) | D(45,100) E(35,45,100) | D(45,60,100,200) E(45,50,60,100,200) V(40,55,100), Y(150) | E(45,50,60,100,200) V(40,60,100) | | | | | |
| 680 | 687 | D(35,50) E(35,50) Y(100) | D(45,60,100) E(40,60,100) | E(45,60,100) V(35,40,50) | | | | | | |
| 1000 | 108 | E(30,40) Y(100) ^M | E(40,60) V(25,35,40,50) | E(100) ^M , V(40,50) ^M | | | | | | |
| 1500 | 158 | D(100) E(50) V(30,40) ^M | E(50,75) V(50,75) ^M | | | | | | | |

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

Released codes ^(M tolerance only)

Engineering samples - please contact manufacturer

*Codes under development - subject to change

ESR limits quoted in brackets (milliohms)

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

RATINGS & PART NUMBER REFERENCE

| AVX Part No. | Case Size | Capacitance (µF) | Rated Voltage (V) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @100kHz | MSL | 100kHz RMS Current (A) | | | 100kHz RMS Voltage (V) | | |
|---|-----------|------------------|-------------------|---------------|-----------|-----------------------|-----------------|------------------------|-------|-------|------------------------|-------|-------|
| | | | | | | | | 25°C | 85°C | 125°C | 25°C | 85°C | 125°C |
| 2.5 Volt @ 85°C (1.7 Volt @ 125°C) | | | | | | | | | | | | | |
| TPSB107*002#0200 | B | 100 | 2.5 | 2.5 | 8 | 200 | 1 | 0.652 | 0.587 | 0.261 | 0.130 | 0.117 | 0.052 |
| TPSB157*002#0150 | B | 150 | 2.5 | 3 | 10 | 150 | 1 | 0.753 | 0.677 | 0.301 | 0.113 | 0.102 | 0.045 |
| TPSB227*002#0150 | B | 220 | 2.5 | 4.4 | 16 | 150 | 1 | 0.753 | 0.677 | 0.301 | 0.113 | 0.102 | 0.045 |
| TPSB227*002#0200 | B | 220 | 2.5 | 4.4 | 16 | 200 | 1 | 0.652 | 0.587 | 0.261 | 0.130 | 0.117 | 0.052 |
| TPSB227*002#0600 | B | 220 | 2.5 | 4.4 | 16 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 |
| TPSD227*002#0045 | D | 220 | 2.5 | 5.5 | 8 | 45 | 1 | 1.826 | 1.643 | 0.730 | 0.082 | 0.074 | 0.033 |
| TPSY337*002#0040 | Y | 330 | 2.5 | 8.2 | 8 | 40 | 1 ¹⁾ | 1.768 | 1.591 | 0.707 | 0.071 | 0.064 | 0.028 |
| TPSD477*002#0035 | D | 470 | 2.5 | 11.6 | 8 | 35 | 1 | 2.070 | 1.863 | 0.828 | 0.072 | 0.065 | 0.029 |
| TPSF477*002#0200 | F | 470 | 2.5 | 11.8 | 12 | 200 | 1 | 0.707 | 0.636 | 0.283 | 0.141 | 0.127 | 0.057 |
| TPSY477*002#0100 | Y | 470 | 2.5 | 11 | 12 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 |
| TPSD687*002#0035 | D | 680 | 2.5 | 17 | 16 | 35 | 1 | 2.070 | 1.863 | 0.828 | 0.072 | 0.065 | 0.029 |
| TPSD687*002#0050 | D | 680 | 2.5 | 17 | 16 | 50 | 1 | 1.732 | 1.559 | 0.693 | 0.087 | 0.078 | 0.035 |
| TPSE687*002#0035 | E | 680 | 2.5 | 17 | 10 | 35 | 1 ¹⁾ | 2.171 | 1.954 | 0.868 | 0.076 | 0.068 | 0.030 |
| TPSE687*002#0050 | E | 680 | 2.5 | 17 | 10 | 50 | 1 ¹⁾ | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSY687*002#0100 | Y | 680 | 2.5 | 17 | 12 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 |
| TPSE108*002#0030 | E | 1000 | 2.5 | 25 | 14 | 30 | 1 ¹⁾ | 2.345 | 2.111 | 0.938 | 0.070 | 0.063 | 0.028 |
| TPSE108*002#0040 | E | 1000 | 2.5 | 25 | 14 | 40 | 1 ¹⁾ | 2.031 | 1.828 | 0.812 | 0.081 | 0.073 | 0.032 |
| TPSY108M002#0100 | Y | 1000 | 2.5 | 25 | 30 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 |
| TPSD158*002#0100 | D | 1500 | 2.5 | 37.5 | 60 | 100 | 1 | 1.125 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSE158*002#0050 | E | 1500 | 2.5 | 37.5 | 20 | 50 | 1 ¹⁾ | 1.817 | 1.635 | 0.727 | 0.001 | 0.082 | 0.036 |
| TPSV158M002#0030 | V | 1500 | 2.5 | 30 | 20 | 30 | 1 ¹⁾ | 2.887 | 2.598 | 1.155 | 0.087 | 0.078 | 0.035 |
| TPSV158M002#0040 | V | 1500 | 2.5 | 30 | 20 | 40 | 1 ¹⁾ | 2.500 | 2.250 | 1.000 | 0.100 | 0.090 | 0.040 |
| 4 Volt @ 85°C (2.7 Volt @ 125°C) | | | | | | | | | | | | | |
| TPSR106*004#3000 | R | 10 | 4 | 0.5 | 6 | 3000 | 1 | 0.135 | 0.122 | 0.054 | 0.406 | 0.366 | 0.162 |
| TPSA476*004#0500 | A | 47 | 4 | 1.9 | 8 | 500 | 1 | 0.387 | 0.349 | 0.155 | 0.194 | 0.174 | 0.077 |
| TPSB107*004#0200 | B | 100 | 4 | 4 | 8 | 200 | 1 | 0.652 | 0.587 | 0.261 | 0.130 | 0.117 | 0.052 |
| TPSB107*004#0250 | B | 100 | 4 | 4 | 8 | 250 | 1 | 0.583 | 0.525 | 0.233 | 0.146 | 0.131 | 0.058 |
| TPSB107*004#0350 | B | 100 | 4 | 4 | 8 | 350 | 1 | 0.493 | 0.444 | 0.197 | 0.172 | 0.155 | 0.069 |
| TPSB107*004#0500 | B | 100 | 4 | 4 | 8 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSW107*004#0100 | W | 100 | 4 | 4 | 6 | 100 | 1 | 0.949 | 0.854 | 0.379 | 0.095 | 0.085 | 0.038 |
| TPSB157*004#0250 | B | 150 | 4 | 6 | 10 | 250 | 1 | 0.583 | 0.525 | 0.233 | 0.146 | 0.131 | 0.058 |
| TPSC157*004#0070 | C | 150 | 4 | 6 | 6 | 70 | 1 | 1.254 | 1.128 | 0.501 | 0.088 | 0.079 | 0.035 |
| TPSC157*004#0080 | C | 150 | 4 | 6 | 6 | 80 | 1 | 1.173 | 1.055 | 0.469 | 0.094 | 0.084 | 0.038 |
| TPSD227*004#0040 | D | 220 | 4 | 8.8 | 8 | 40 | 1 | 1.936 | 1.743 | 0.775 | 0.077 | 0.070 | 0.031 |
| TPSD227*004#0050 | D | 220 | 4 | 8.8 | 8 | 50 | 1 | 1.732 | 1.559 | 0.693 | 0.087 | 0.078 | 0.035 |
| TPSD227*004#0100 | D | 220 | 4 | 8.8 | 8 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSY227*004#0040 | Y | 220 | 4 | 8.8 | 8 | 40 | 1 ¹⁾ | 1.768 | 1.591 | 0.707 | 0.071 | 0.064 | 0.028 |
| TPSY227*004#0050 | Y | 220 | 4 | 8.8 | 8 | 50 | 1 ¹⁾ | 1.581 | 1.423 | 0.632 | 0.095 | 0.085 | 0.038 |
| TPSY227*004#0075 | Y | 220 | 4 | 8.8 | 8 | 75 | 1 ¹⁾ | 1.291 | 1.162 | 0.516 | 0.097 | 0.087 | 0.039 |
| TPSC337*004#0100 | C | 330 | 4 | 13.2 | 8 | 100 | 1 | 1.049 | 0.944 | 0.420 | 0.105 | 0.094 | 0.042 |
| TPSD337*004#0035 | D | 330 | 4 | 13.2 | 8 | 35 | 1 | 2.070 | 1.863 | 0.828 | 0.072 | 0.065 | 0.029 |
| TPSD337*004#0045 | D | 330 | 4 | 13.2 | 8 | 45 | 1 | 1.826 | 1.643 | 0.730 | 0.082 | 0.074 | 0.033 |
| TPSD337*004#0100 | D | 330 | 4 | 13.2 | 8 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSF337*004#0200 | F | 330 | 4 | 13.2 | 10 | 200 | 1 | 0.707 | 0.636 | 0.283 | 0.141 | 0.127 | 0.057 |
| TPSX337*004#0100 | X | 330 | 4 | 13.2 | 8 | 100 | 1 ¹⁾ | 1.000 | 0.900 | 0.400 | 0.100 | 0.090 | 0.040 |
| TPSD477*004#0045 | D | 470 | 4 | 18.8 | 12 | 45 | 1 | 1.826 | 1.643 | 0.730 | 0.082 | 0.074 | 0.033 |
| TPSD477*004#0100 | D | 470 | 4 | 18.8 | 12 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSE477*004#0035 | E | 470 | 4 | 18.8 | 10 | 35 | 1 ¹⁾ | 2.171 | 1.954 | 0.868 | 0.076 | 0.068 | 0.030 |
| TPSE477*004#0045 | E | 470 | 4 | 18.8 | 10 | 45 | 1 ¹⁾ | 1.915 | 1.723 | 0.766 | 0.086 | 0.078 | 0.034 |
| TPSE477*004#0100 | E | 470 | 4 | 18.8 | 10 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSD687*004#0045 | D | 680 | 4 | 27.2 | 14 | 45 | 1 | 1.915 | 1.643 | 0.730 | 0.082 | 0.074 | 0.033 |
| TPSD687*004#0060 | D | 680 | 4 | 27.2 | 14 | 60 | 1 | 1.581 | 1.423 | 0.632 | 0.095 | 0.085 | 0.038 |
| TPSD687*004#0100 | D | 680 | 4 | 27.2 | 14 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSE687*004#0040 | E | 680 | 4 | 27.2 | 10 | 40 | 1 ¹⁾ | 2.031 | 1.828 | 0.812 | 0.081 | 0.073 | 0.032 |
| TPSE687*004#0060 | E | 680 | 4 | 27.2 | 10 | 60 | 1 ¹⁾ | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE687*004#0100 | E | 680 | 4 | 27.2 | 10 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE108*004#0040 | E | 1000 | 4 | 40 | 14 | 40 | 1 ¹⁾ | 2.031 | 1.828 | 0.812 | 0.081 | 0.073 | 0.032 |
| TPSE108*004#0060 | E | 1000 | 4 | 40 | 14 | 60 | 1 ¹⁾ | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSV108*004#0025 | V | 1000 | 4 | 40 | 16 | 25 | 1 ¹⁾ | 3.162 | 2.846 | 1.265 | 0.079 | 0.071 | 0.032 |
| TPSV108*004#0035 | V | 1000 | 4 | 40 | 16 | 35 | 1 ¹⁾ | 2.673 | 2.405 | 1.069 | 0.094 | 0.084 | 0.037 |
| TPSV108*004#0040 | V | 1000 | 4 | 40 | 16 | 40 | 1 ¹⁾ | 2.500 | 2.250 | 1.000 | 0.100 | 0.090 | 0.040 |
| TPSV108*004#0050 | V | 1000 | 4 | 40 | 16 | 50 | 1 ¹⁾ | 2.236 | 2.012 | 0.894 | 0.112 | 0.101 | 0.045 |
| TPSE158*004#0050 | E | 1500 | 4 | 60 | 30 | 50 | 1 ¹⁾ | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSE158*004#0075 | E | 1500 | 4 | 60 | 30 | 75 | 1 ¹⁾ | 1.483 | 1.335 | 0.593 | 0.111 | 0.100 | 0.044 |
| TPSV158M004#0050 | V | 1500 | 4 | 60 | 30 | 50 | 1 ¹⁾ | 2.236 | 2.012 | 0.894 | 0.112 | 0.101 | 0.045 |
| TPSV158M004#0075 | V | 1500 | 4 | 60 | 30 | 75 | 1 ¹⁾ | 1.826 | 1.643 | 0.730 | 0.137 | 0.123 | 0.055 |

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

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

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 142.

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

RATINGS & PART NUMBER REFERENCE

| AVX Part No. | Case Size | Capacitance (µF) | Rated Voltage (V) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @100kHz | MSL | 100kHz RMS Current (A) | | | 100kHz RMS Voltage (V) | | | |
|---|-----------|------------------|-------------------|---------------|-----------|-----------------------|-----------------|------------------------|-------|-------|------------------------|-------|-------|-------|
| | | | | | | | | 25°C | 85°C | 125°C | 25°C | 85°C | 125°C | |
| 6.3 Volt @ 85°C (4 Volt @ 125°C) | | | | | | | | | | | | | | |
| TPSR225*006#7000 | R | 2.2 | 6.3 | 0.5 | 6 | 7000 | 1 | 0.089 | 0.170 | 0.080 | 0.035 | 0.620 | 0.558 | 0.248 |
| TPSA335*006#2100 | A | 3.3 | 6.3 | 0.5 | 6 | 2100 | 1 | 0.189 | 0.170 | 0.076 | 0.397 | 0.357 | 0.159 | |
| TPSS475*006#4000 | S | 4.7 | 6.3 | 0.5 | 6 | 4000 | 1 | 0.127 | 0.115 | 0.051 | 0.510 | 0.459 | 0.204 | |
| TPSA685*006#1800 | A | 6.8 | 6.3 | 0.5 | 6 | 1800 | 1 | 0.204 | 0.184 | 0.082 | 0.367 | 0.331 | 0.147 | |
| TPSA106*006#1500 | A | 10 | 6.3 | 0.6 | 6 | 1500 | 1 | 0.224 | 0.201 | 0.089 | 0.335 | 0.302 | 0.134 | |
| TPSB106*006#1500 | B | 10 | 6.3 | 0.6 | 6 | 1500 | 1 | 0.238 | 0.214 | 0.095 | 0.357 | 0.321 | 0.143 | |
| TPSR106*006#1000 | R | 10 | 6.3 | 0.6 | 8 | 1000 | 1 | 0.235 | 0.211 | 0.094 | 0.235 | 0.211 | 0.094 | |
| TPSR106*006#1500 | R | 10 | 6.3 | 0.6 | 8 | 1500 | 1 | 0.191 | 0.172 | 0.077 | 0.287 | 0.259 | 0.115 | |
| TPSR106*006#3000 | R | 10 | 6.3 | 0.6 | 8 | 3000 | 1 | 0.135 | 0.122 | 0.054 | 0.406 | 0.366 | 0.162 | |
| TPST106*006#1000 | T | 10 | 6.3 | 0.6 | 6 | 1000 | 1 | 0.283 | 0.255 | 0.113 | 0.283 | 0.255 | 0.113 | |
| TPSA156*006#0700 | A | 15 | 6.3 | 0.9 | 6 | 700 | 1 | 0.327 | 0.295 | 0.131 | 0.229 | 0.206 | 0.092 | |
| TPSA156*006#1500 | A | 15 | 6.3 | 0.9 | 6 | 1500 | 1 | 0.224 | 0.201 | 0.089 | 0.335 | 0.302 | 0.134 | |
| TPSA226*006#0500 | A | 22 | 6.3 | 1.4 | 6 | 500 | 1 | 0.387 | 0.349 | 0.155 | 0.194 | 0.174 | 0.077 | |
| TPSA226*006#0900 | A | 22 | 6.3 | 1.4 | 6 | 900 | 1 | 0.289 | 0.260 | 0.115 | 0.260 | 0.234 | 0.104 | |
| TPSB226*006#0375 | B | 22 | 6.3 | 1.4 | 6 | 375 | 1 | 0.476 | 0.428 | 0.190 | 0.179 | 0.161 | 0.071 | |
| TPSB226*006#0600 | B | 22 | 6.3 | 1.4 | 6 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 | |
| TPSC226*006#0500 | C | 22 | 6.3 | 1.4 | 6 | 500 | 1 | 0.469 | 0.422 | 0.188 | 0.235 | 0.211 | 0.094 | |
| TPSS226*006#0900 | S | 22 | 6.3 | 1.3 | 10 | 900 | 1 | 0.269 | 0.242 | 0.107 | 0.242 | 0.218 | 0.097 | |
| TPSA336*006#0600 | A | 33 | 6.3 | 2.1 | 8 | 600 | 1 | 0.354 | 0.318 | 0.141 | 0.212 | 0.191 | 0.085 | |
| TPSB336*006#0250 | B | 33 | 6.3 | 2.1 | 6 | 250 | 1 | 0.583 | 0.525 | 0.233 | 0.146 | 0.131 | 0.058 | |
| TPSB336*006#0350 | B | 33 | 6.3 | 2.1 | 6 | 350 | 1 | 0.493 | 0.444 | 0.197 | 0.172 | 0.155 | 0.069 | |
| TPSB336*006#0450 | B | 33 | 6.3 | 2.1 | 6 | 450 | 1 | 0.435 | 0.391 | 0.174 | 0.196 | 0.176 | 0.078 | |
| TPSB336*006#0600 | B | 33 | 6.3 | 2.1 | 6 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 | |
| TPST336*006#0800 | T | 33 | 6.3 | 2.1 | 10 | 800 | 1 | 0.316 | 0.285 | 0.126 | 0.253 | 0.228 | 0.101 | |
| TPSA476*006#0800 | A | 47 | 6.3 | 2.8 | 10 | 800 | 1 | 0.306 | 0.276 | 0.122 | 0.245 | 0.220 | 0.098 | |
| TPSB476*006#0250 | B | 47 | 6.3 | 3 | 6 | 250 | 1 | 0.583 | 0.525 | 0.233 | 0.146 | 0.131 | 0.058 | |
| TPSB476*006#0350 | B | 47 | 6.3 | 3 | 6 | 350 | 1 | 0.493 | 0.444 | 0.197 | 0.172 | 0.155 | 0.069 | |
| TPSB476*006#0500 | B | 47 | 6.3 | 3 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 | |
| TPSC476*006#0300 | C | 47 | 6.3 | 3 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 | |
| TPST476*006#1200 | T | 47 | 6.3 | 2.8 | 10 | 1200 | 1 | 0.258 | 0.232 | 0.103 | 0.310 | 0.279 | 0.124 | |
| TPSB686*006#0250 | B | 68 | 6.3 | 4 | 8 | 250 | 1 | 0.583 | 0.525 | 0.233 | 0.146 | 0.131 | 0.058 | |
| TPSB686*006#0350 | B | 68 | 6.3 | 4 | 8 | 350 | 1 | 0.493 | 0.444 | 0.197 | 0.172 | 0.155 | 0.069 | |
| TPSB686*006#0500 | B | 68 | 6.3 | 4 | 8 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 | |
| TPSC686*006#0150 | C | 68 | 6.3 | 4.3 | 6 | 150 | 1 | 0.856 | 0.771 | 0.343 | 0.128 | 0.116 | 0.051 | |
| TPSC686*006#0200 | C | 68 | 6.3 | 4.3 | 6 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 | |
| TPSW686*006#0110 | W | 68 | 6.3 | 4.3 | 6 | 110 | 1 | 0.905 | 0.814 | 0.362 | 0.099 | 0.090 | 0.040 | |
| TPSW686*006#0125 | W | 68 | 6.3 | 4.3 | 6 | 125 | 1 | 0.849 | 0.764 | 0.339 | 0.106 | 0.095 | 0.042 | |
| TPSW686*006#0250 | W | 68 | 6.3 | 4.3 | 6 | 250 | 1 | 0.600 | 0.540 | 0.240 | 0.150 | 0.135 | 0.060 | |
| TPSB107*006#0250 | B | 100 | 6.3 | 6.3 | 10 | 250 | 1 | 0.583 | 0.525 | 0.233 | 0.146 | 0.131 | 0.058 | |
| TPSB107*006#0400 | B | 100 | 6.3 | 6.3 | 10 | 400 | 1 | 0.461 | 0.415 | 0.184 | 0.184 | 0.166 | 0.074 | |
| TPSC107*006#0075 | C | 100 | 6.3 | 6.3 | 6 | 75 | 1 | 1.211 | 1.090 | 0.484 | 0.091 | 0.082 | 0.036 | |
| TPSC107*006#0150 | C | 100 | 6.3 | 6.3 | 6 | 150 | 1 | 0.856 | 0.771 | 0.343 | 0.128 | 0.116 | 0.051 | |
| TPSD107*006#0300 | D | 100 | 6.3 | 6.3 | 6 | 300 | 1 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 | |
| TPSW107*006#0100 | W | 100 | 6.3 | 6.3 | 6 | 100 | 1 | 0.949 | 0.854 | 0.379 | 0.095 | 0.085 | 0.038 | |
| TPSW107*006#0150 | W | 100 | 6.3 | 6.3 | 6 | 150 | 1 | 0.775 | 0.697 | 0.310 | 0.116 | 0.105 | 0.046 | |
| TPSY107*006#0100 | Y | 100 | 6.3 | 6.3 | 6 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 | |
| TPSC157*006#0050 | C | 150 | 6.3 | 9.5 | 6 | 50 | 1 | 1.483 | 1.335 | 0.593 | 0.074 | 0.067 | 0.030 | |
| TPSC157*006#0090 | C | 150 | 6.3 | 9.5 | 6 | 90 | 1 | 1.106 | 0.995 | 0.442 | 0.099 | 0.090 | 0.040 | |
| TPSC157*006#0150 | C | 150 | 6.3 | 9.5 | 6 | 150 | 1 | 0.856 | 0.771 | 0.343 | 0.128 | 0.116 | 0.051 | |
| TPSC157*006#0200 | C | 150 | 6.3 | 9.5 | 6 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 | |
| TPSC157*006#0250 | C | 150 | 6.3 | 9.5 | 6 | 250 | 1 | 0.663 | 0.597 | 0.265 | 0.166 | 0.149 | 0.066 | |
| TPSD157*006#0050 | D | 150 | 6.3 | 9.5 | 6 | 50 | 1 | 1.732 | 1.559 | 0.693 | 0.087 | 0.078 | 0.035 | |
| TPSD157*006#0125 | D | 150 | 6.3 | 9.5 | 6 | 125 | 1 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 | |
| TPSY157*006#0040 | Y | 150 | 6.3 | 9.5 | 6 | 40 | 1 ¹⁾ | 1.768 | 1.591 | 0.707 | 0.071 | 0.064 | 0.028 | |
| TPSY157*006#0050 | Y | 150 | 6.3 | 9.5 | 6 | 50 | 1 ¹⁾ | 1.581 | 1.423 | 0.632 | 0.079 | 0.071 | 0.032 | |
| TPSC227*006#0070 | C | 220 | 6.3 | 13.9 | 8 | 70 | 1 | 1.254 | 1.128 | 0.501 | 0.088 | 0.079 | 0.035 | |
| TPSC227*006#0100 | C | 220 | 6.3 | 13.9 | 8 | 100 | 1 | 1.049 | 0.944 | 0.420 | 0.105 | 0.094 | 0.042 | |
| TPSC227*006#0125 | C | 220 | 6.3 | 13.9 | 8 | 125 | 1 | 0.938 | 0.844 | 0.375 | 0.117 | 0.106 | 0.047 | |
| TPSC227*006#0250 | C | 220 | 6.3 | 13.9 | 8 | 250 | 1 | 0.663 | 0.597 | 0.265 | 0.166 | 0.149 | 0.066 | |
| TPSD227*006#0050 | D | 220 | 6.3 | 13.9 | 8 | 50 | 1 | 1.732 | 1.559 | 0.693 | 0.087 | 0.078 | 0.035 | |
| TPSD227*006#0100 | D | 220 | 6.3 | 13.9 | 8 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 | |
| TPSD227*006#0125 | D | 220 | 6.3 | 13.9 | 8 | 125 | 1 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 | |
| TPSE227*006#0100 | E | 220 | 6.3 | 13.9 | 8 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 | |
| TPSF227*006#0200 | F | 220 | 6.3 | 13.2 | 10 | 200 | 1 | 0.707 | 0.636 | 0.283 | 0.141 | 0.127 | 0.057 | |
| TPSY227*006#0100 | Y | 220 | 6.3 | 13.9 | 8 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 | |
| TPSY227*006#0150 | Y | 220 | 6.3 | 13.9 | 8 | 150 | 1 ¹⁾ | 0.913 | 0.822 | 0.365 | 0.137 | 0.123 | 0.055 | |

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

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

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 142.

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 |
| TPSC337*006#0080 | C | 330 | 6.3 | 19.8 | 12 | 80 | 1 | 1.173 | 1.055 | 0.469 | 0.094 | 0.084 | 0.038 |
| TPSC337*006#0100 | C | 330 | 6.3 | 19.8 | 12 | 100 | 1 | 1.049 | 0.944 | 0.420 | 0.105 | 0.094 | 0.042 |
| TPSD337*006#0045 | D | 330 | 6.3 | 20.8 | 8 | 45 | 1 | 1.826 | 1.643 | 0.730 | 0.082 | 0.074 | 0.033 |
| TPSD337*006#0050 | D | 330 | 6.3 | 20.8 | 8 | 50 | 1 | 1.732 | 1.559 | 0.693 | 0.087 | 0.078 | 0.035 |
| TPSD337*006#0070 | D | 330 | 6.3 | 20.8 | 8 | 70 | 1 | 1.464 | 1.317 | 0.586 | 0.102 | 0.092 | 0.041 |
| TPSD337*006#0100 | D | 330 | 6.3 | 20.8 | 8 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSE337*006#0050 | E | 330 | 6.3 | 20.8 | 8 | 50 | 1 ¹⁾ | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSE337*006#0100 | E | 330 | 6.3 | 20.8 | 8 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE337*006#0125 | E | 330 | 6.3 | 20.8 | 8 | 125 | 1 ¹⁾ | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE337*006#0150 | E | 330 | 6.3 | 20.8 | 8 | 150 | 1 ¹⁾ | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSV337*006#0100 | V | 330 | 6.3 | 20.8 | 8 | 100 | 1 ¹⁾ | 1.581 | 1.423 | 0.632 | 0.158 | 0.142 | 0.063 |
| TPSY337*006#0100 | Y | 330 | 6.3 | 20.8 | 12 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 |
| TPSY337*006#0150 | Y | 330 | 6.3 | 20.8 | 12 | 150 | 1 ¹⁾ | 0.913 | 0.822 | 0.365 | 0.137 | 0.123 | 0.055 |
| TPSD477*006#0045 | D | 470 | 6.3 | 28 | 12 | 45 | 1 | 1.826 | 1.643 | 0.730 | 0.082 | 0.074 | 0.033 |
| TPSD477*006#0060 | D | 470 | 6.3 | 28 | 12 | 60 | 1 | 1.581 | 1.423 | 0.632 | 0.095 | 0.085 | 0.038 |
| TPSD477*006#0100 | D | 470 | 6.3 | 28 | 12 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD477*006#0200 | D | 470 | 6.3 | 28 | 12 | 200 | 1 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSE477*006#0045 | E | 470 | 6.3 | 28 | 10 | 45 | 1 ¹⁾ | 1.915 | 1.723 | 0.766 | 0.086 | 0.078 | 0.034 |
| TPSE477*006#0050 | E | 470 | 6.3 | 28 | 10 | 50 | 1 ¹⁾ | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSE477*006#0060 | E | 470 | 6.3 | 28 | 10 | 60 | 1 ¹⁾ | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE477*006#0100 | E | 470 | 6.3 | 28 | 10 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE477*006#0200 | E | 470 | 6.3 | 28 | 10 | 200 | 1 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSV477*006#0040 | V | 470 | 6.3 | 28 | 10 | 40 | 1 ¹⁾ | 2.500 | 2.250 | 1.000 | 0.100 | 0.090 | 0.040 |
| TPSV477*006#0055 | V | 470 | 6.3 | 28 | 10 | 55 | 1 ¹⁾ | 2.132 | 1.919 | 0.853 | 0.117 | 0.106 | 0.047 |
| TPSV477*006#0100 | V | 470 | 6.3 | 28 | 10 | 100 | 1 ¹⁾ | 1.581 | 1.423 | 0.632 | 0.158 | 0.142 | 0.063 |
| TPSY477*006#0150 | Y | 470 | 6.3 | 28.2 | 20 | 150 | 1 ¹⁾ | 0.913 | 0.822 | 0.365 | 0.137 | 0.123 | 0.055 |
| TPSE687*006#0045 | E | 680 | 6.3 | 42.8 | 10 | 45 | 1 ¹⁾ | 1.915 | 1.723 | 0.766 | 0.086 | 0.078 | 0.034 |
| TPSE687*006#0060 | E | 680 | 6.3 | 42.8 | 10 | 60 | 1 ¹⁾ | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE687*006#0100 | E | 680 | 6.3 | 42.8 | 10 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSV687*006#0035 | V | 680 | 6.3 | 42.8 | 14 | 35 | 1 ¹⁾ | 2.673 | 2.405 | 1.069 | 0.094 | 0.084 | 0.037 |
| TPSV687*006#0040 | V | 680 | 6.3 | 42.8 | 10 | 40 | 1 ¹⁾ | 2.500 | 2.250 | 1.000 | 0.100 | 0.090 | 0.040 |
| TPSV687*006#0050 | V | 680 | 6.3 | 42.8 | 10 | 50 | 1 ¹⁾ | 2.236 | 2.012 | 0.894 | 0.112 | 0.101 | 0.045 |
| TPSE108M006#0100 | E | 1000 | 6.3 | 60 | 20 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSV108M006#0040 | V | 1000 | 6.3 | 60 | 16 | 40 | 1 ¹⁾ | 2.500 | 2.250 | 1.000 | 0.100 | 0.090 | 0.040 |
| TPSV108M006#0050 | V | 1000 | 6.3 | 60 | 16 | 50 | 1 ¹⁾ | 2.236 | 2.012 | 0.894 | 0.112 | 0.101 | 0.045 |
| 10 Volt @ 85°C (7 Volt @ 125°C) | | | | | | | | | | | | | |
| TPSR105*010#9000 | R | 1 | 10 | 0.5 | 4 | 9000 | 1 | 0.078 | 0.078 | 0.070 | 0.704 | 0.633 | 0.281 |
| TPSA225*010#1800 | A | 2.2 | 10 | 0.5 | 6 | 1800 | 1 | 0.204 | 0.184 | 0.082 | 0.367 | 0.331 | 0.147 |
| TPST335*010#1500 | T | 3.3 | 10 | 0.5 | 6 | 1500 | 1 | 0.231 | 0.208 | 0.092 | 0.346 | 0.312 | 0.139 |
| TPSA475*010#1400 | A | 4.7 | 10 | 0.5 | 6 | 1400 | 1 | 0.231 | 0.208 | 0.093 | 0.324 | 0.292 | 0.130 |
| TPSB475*010#1400 | B | 4.7 | 10 | 0.5 | 6 | 1400 | 1 | 0.246 | 0.222 | 0.099 | 0.345 | 0.310 | 0.138 |
| TPSR475*010#3000 | R | 4.7 | 10 | 0.5 | 6 | 3000 | 1 | 0.135 | 0.122 | 0.054 | 0.406 | 0.366 | 0.162 |
| TPSR475*010#5000 | R | 4.7 | 10 | 0.5 | 6 | 5000 | 1 | 0.105 | 0.094 | 0.042 | 0.524 | 0.472 | 0.210 |
| TPSA685*010#1800 | A | 6.8 | 10 | 0.7 | 6 | 1800 | 1 | 0.204 | 0.184 | 0.082 | 0.367 | 0.331 | 0.147 |
| TPSB685*010#1300 | B | 6.8 | 10 | 0.7 | 6 | 1300 | 1 | 0.256 | 0.230 | 0.102 | 0.332 | 0.299 | 0.133 |
| TPST685*010#1800 | T | 6.8 | 10 | 0.7 | 6 | 1800 | 1 | 0.211 | 0.190 | 0.084 | 0.379 | 0.342 | 0.152 |
| TPSA106*010#0900 | A | 10 | 10 | 1 | 6 | 900 | 1 | 0.289 | 0.260 | 0.115 | 0.260 | 0.234 | 0.104 |
| TPSA106*010#1800 | A | 10 | 10 | 1 | 6 | 1800 | 1 | 0.204 | 0.184 | 0.082 | 0.367 | 0.331 | 0.147 |
| TPSB106*010#1000 | B | 10 | 10 | 1 | 6 | 1000 | 1 | 0.292 | 0.262 | 0.117 | 0.292 | 0.262 | 0.117 |
| TPSP106M010#2000 | P | 10 | 10 | 1 | 8 | 2000 | 1 | 0.173 | 0.156 | 0.069 | 0.346 | 0.312 | 0.139 |
| TPST106*010#0900 | S | 10 | 10 | 1 | 8 | 900 | 1 | 0.269 | 0.242 | 0.107 | 0.242 | 0.218 | 0.097 |
| TPST106*010#1000 | T | 10 | 10 | 1 | 6 | 1000 | 1 | 0.283 | 0.255 | 0.113 | 0.283 | 0.255 | 0.113 |
| TPST106*010#2000 | T | 10 | 10 | 1 | 6 | 2000 | 1 | 0.200 | 0.180 | 0.080 | 0.400 | 0.360 | 0.160 |
| TPSA156*010#1000 | A | 15 | 10 | 1.5 | 6 | 1000 | 1 | 0.274 | 0.246 | 0.110 | 0.274 | 0.246 | 0.110 |
| TPSB156*010#0450 | B | 15 | 10 | 1.5 | 6 | 450 | 1 | 0.435 | 0.391 | 0.174 | 0.196 | 0.176 | 0.078 |
| TPSB156*010#0600 | B | 15 | 10 | 1.5 | 6 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 |
| TPSC156*010#0700 | C | 15 | 10 | 1.5 | 6 | 700 | 1 | 0.396 | 0.357 | 0.159 | 0.277 | 0.250 | 0.111 |
| TPST156*010#1200 | T | 15 | 10 | 1.5 | 8 | 1200 | 1 | 0.258 | 0.232 | 0.103 | 0.310 | 0.279 | 0.124 |
| TPSA226*010#0900 | A | 22 | 10 | 2.2 | 8 | 900 | 1 | 0.289 | 0.260 | 0.115 | 0.260 | 0.234 | 0.104 |
| TPSB226*010#0400 | B | 22 | 10 | 2.2 | 6 | 400 | 1 | 0.461 | 0.415 | 0.184 | 0.184 | 0.166 | 0.074 |
| TPSB226*010#0500 | B | 22 | 10 | 2.2 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB226*010#0700 | B | 22 | 10 | 2.2 | 6 | 700 | 1 | 0.348 | 0.314 | 0.139 | 0.244 | 0.220 | 0.098 |
| TPSC226*010#0300 | C | 22 | 10 | 2.2 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPST226*010#0800 | T | 22 | 10 | 2.2 | 8 | 800 | 1 | 0.316 | 0.285 | 0.126 | 0.253 | 0.228 | 0.101 |
| TPSA336*010#0700 | A | 33 | 10 | 3.3 | 8 | 700 | 1 | 0.327 | 0.295 | 0.131 | 0.229 | 0.206 | 0.092 |
| TPSB336*010#0250 | B | 33 | 10 | 3.3 | 6 | 250 | 1 | 0.583 | 0.525 | 0.233 | 0.146 | 0.131 | 0.058 |
| TPSB336*010#0425 | B | 33 | 10 | 3.3 | 6 | 425 | 1 | 0.447 | 0.402 | 0.179 | 0.190 | 0.171 | 0.076 |
| TPSB336*010#0500 | B | 33 | 10 | 3.3 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB336*010#0650 | B | 33 | 10 | 3.3 | 6 | 650 | 1 | 0.362 | 0.325 | 0.145 | 0.235 | 0.212 | 0.094 |

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

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

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 142.

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 |
| TPSC336*010#0150 | C | 33 | 10 | 3.3 | 6 | 150 | 1 | 0.856 | 0.771 | 0.343 | 0.128 | 0.116 | 0.051 |
| TPSC336*010#0375 | C | 33 | 10 | 3.3 | 6 | 375 | 1 | 0.542 | 0.487 | 0.217 | 0.203 | 0.183 | 0.081 |
| TPSC336*010#0500 | C | 33 | 10 | 3.3 | 6 | 500 | 1 | 0.469 | 0.422 | 0.188 | 0.235 | 0.211 | 0.094 |
| TPSW336*010#0350 | W | 33 | 10 | 3.3 | 6 | 350 | 1 | 0.507 | 0.456 | 0.203 | 0.177 | 0.160 | 0.071 |
| TPSB476*010#0250 | B | 47 | 10 | 4.7 | 8 | 250 | 1 | 0.583 | 0.525 | 0.233 | 0.146 | 0.131 | 0.058 |
| TPSB476*010#0350 | B | 47 | 10 | 4.7 | 8 | 350 | 1 | 0.493 | 0.444 | 0.197 | 0.172 | 0.155 | 0.069 |
| TPSB476*010#0500 | B | 47 | 10 | 4.7 | 8 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB476*010#0650 | B | 47 | 10 | 4.7 | 8 | 650 | 1 | 0.362 | 0.325 | 0.145 | 0.235 | 0.212 | 0.094 |
| TPSC476*010#0200 | C | 47 | 10 | 4.7 | 6 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 |
| TPSC476*010#0350 | C | 47 | 10 | 4.7 | 6 | 350 | 1 | 0.561 | 0.505 | 0.224 | 0.196 | 0.177 | 0.078 |
| TPSD476*010#0100 | D | 47 | 10 | 4.7 | 6 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD476*010#0300 | D | 47 | 10 | 4.7 | 6 | 300 | 1 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSW476*010#0125 | W | 47 | 10 | 4.7 | 6 | 125 | 1 | 0.849 | 0.764 | 0.339 | 0.106 | 0.095 | 0.042 |
| TPSW476*010#0150 | W | 47 | 10 | 4.7 | 6 | 150 | 1 | 0.775 | 0.697 | 0.310 | 0.116 | 0.105 | 0.046 |
| TPSW476*010#0250 | W | 47 | 10 | 4.7 | 6 | 250 | 1 | 0.600 | 0.540 | 0.240 | 0.150 | 0.135 | 0.060 |
| TPSB686*010#0600 | B | 68 | 10 | 6.8 | 8 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 |
| TPSC686*010#0080 | C | 68 | 10 | 6.8 | 6 | 80 | 1 | 1.173 | 1.055 | 0.469 | 0.094 | 0.084 | 0.038 |
| TPSC686*010#0100 | C | 68 | 10 | 6.8 | 6 | 100 | 1 | 1.049 | 0.944 | 0.420 | 0.105 | 0.094 | 0.042 |
| TPSC686*010#0200 | C | 68 | 10 | 6.8 | 6 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 |
| TPSC686*010#0300 | C | 68 | 10 | 6.8 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPSD686*010#0100 | D | 68 | 10 | 6.8 | 6 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD686*010#0150 | D | 68 | 10 | 6.8 | 6 | 150 | 1 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSY686*010#0100 | Y | 68 | 10 | 6.8 | 6 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 |
| TPSY686*010#0200 | Y | 68 | 10 | 6.8 | 6 | 200 | 1 ¹⁾ | 0.791 | 0.712 | 0.316 | 0.158 | 0.142 | 0.063 |
| TPSW686*010#0100 | W | 68 | 10 | 6.8 | 6 | 100 | 1 | 0.949 | 0.854 | 0.379 | 0.095 | 0.085 | 0.038 |
| TPSW686*010#0150 | W | 68 | 10 | 6.8 | 6 | 150 | 1 | 0.775 | 0.697 | 0.310 | 0.116 | 0.105 | 0.046 |
| TPSB107M010#0400 | B | 100 | 10 | 10 | 8 | 400 | 1 | 0.461 | 0.415 | 0.184 | 0.184 | 0.166 | 0.074 |
| TPSC107*010#0075 | C | 100 | 10 | 10 | 8 | 75 | 1 | 1.211 | 1.090 | 0.484 | 0.091 | 0.082 | 0.036 |
| TPSC107*010#0100 | C | 100 | 10 | 10 | 8 | 100 | 1 | 1.049 | 0.944 | 0.420 | 0.105 | 0.094 | 0.042 |
| TPSC107*010#0150 | C | 100 | 10 | 10 | 8 | 150 | 1 | 0.856 | 0.771 | 0.343 | 0.128 | 0.116 | 0.051 |
| TPSC107*010#0200 | C | 100 | 10 | 10 | 8 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 |
| TPSD107*010#0050 | D | 100 | 10 | 10 | 6 | 50 | 1 | 1.732 | 1.559 | 0.693 | 0.087 | 0.078 | 0.035 |
| TPSD107*010#0065 | D | 100 | 10 | 10 | 6 | 65 | 1 | 1.519 | 1.367 | 0.608 | 0.099 | 0.089 | 0.039 |
| TPSD107*010#0080 | D | 100 | 10 | 10 | 6 | 80 | 1 | 1.369 | 1.232 | 0.548 | 0.110 | 0.099 | 0.044 |
| TPSD107*010#0100 | D | 100 | 10 | 10 | 6 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD107*010#0125 | D | 100 | 10 | 10 | 6 | 125 | 1 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD107*010#0150 | D | 100 | 10 | 10 | 6 | 150 | 1 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSE107*010#0125 | E | 100 | 10 | 10 | 6 | 125 | 1 ¹⁾ | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSW107*010#0150 | W | 100 | 10 | 10 | 6 | 150 | 1 | 0.775 | 0.697 | 0.310 | 0.116 | 0.105 | 0.046 |
| TPSX107*010#0085 | X | 100 | 10 | 10 | 8 | 85 | 1 ¹⁾ | 1.085 | 0.976 | 0.434 | 0.092 | 0.083 | 0.037 |
| TPSX107*010#0150 | X | 100 | 10 | 10 | 8 | 150 | 1 ¹⁾ | 0.816 | 0.735 | 0.327 | 0.122 | 0.110 | 0.049 |
| TPSX107*010#0200 | X | 100 | 10 | 10 | 8 | 200 | 1 ¹⁾ | 0.707 | 0.636 | 0.283 | 0.141 | 0.127 | 0.057 |
| TPSY107*010#0100 | Y | 100 | 10 | 10 | 6 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 |
| TPSY107*010#0150 | Y | 100 | 10 | 10 | 6 | 150 | 1 ¹⁾ | 0.913 | 0.822 | 0.365 | 0.137 | 0.123 | 0.055 |
| TPSY107*010#0200 | Y | 100 | 10 | 10 | 6 | 200 | 1 ¹⁾ | 0.791 | 0.712 | 0.316 | 0.158 | 0.142 | 0.063 |
| TPSC157*010#0150 | C | 150 | 10 | 15 | 8 | 150 | 1 | 0.856 | 0.771 | 0.343 | 0.128 | 0.116 | 0.051 |
| TPSD157*010#0050 | D | 150 | 10 | 15 | 8 | 50 | 1 | 1.732 | 1.559 | 0.693 | 0.087 | 0.078 | 0.035 |
| TPSD157*010#0085 | D | 150 | 10 | 15 | 8 | 85 | 1 | 1.328 | 1.196 | 0.531 | 0.113 | 0.102 | 0.045 |
| TPSD157*010#0100 | D | 150 | 10 | 15 | 8 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSE157*010#0100 | E | 150 | 10 | 15 | 8 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSF157*010#0200 | F | 150 | 10 | 15 | 10 | 200 | 1 | 0.707 | 0.636 | 0.283 | 0.141 | 0.127 | 0.057 |
| TPSX157M010#0100 | X | 150 | 10 | 15 | 6 | 100 | 1 ¹⁾ | 1.000 | 0.900 | 0.400 | 0.100 | 0.090 | 0.040 |
| TPSY157*010#0100 | Y | 150 | 10 | 15 | 6 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 |
| TPSY157*010#0150 | Y | 150 | 10 | 15 | 6 | 150 | 1 ¹⁾ | 0.913 | 0.822 | 0.365 | 0.137 | 0.123 | 0.055 |
| TPSY157*010#0200 | Y | 150 | 10 | 15 | 6 | 200 | 1 ¹⁾ | 0.791 | 0.712 | 0.316 | 0.158 | 0.142 | 0.063 |
| TPSD227*010#0050 | D | 220 | 10 | 22 | 8 | 50 | 1 | 1.732 | 1.559 | 0.693 | 0.087 | 0.078 | 0.035 |
| TPSD227*010#0100 | D | 220 | 10 | 22 | 8 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD227*010#0150 | D | 220 | 10 | 22 | 8 | 150 | 1 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSE227*010#0050 | E | 220 | 10 | 22 | 8 | 50 | 1 ¹⁾ | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSE227*010#0060 | E | 220 | 10 | 22 | 8 | 60 | 1 ¹⁾ | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE227*010#0070 | E | 220 | 10 | 22 | 8 | 70 | 1 ¹⁾ | 1.535 | 1.382 | 0.614 | 0.107 | 0.097 | 0.043 |
| TPSE227*010#0100 | E | 220 | 10 | 22 | 8 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE227*010#0125 | E | 220 | 10 | 22 | 8 | 125 | 1 ¹⁾ | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE227*010#0150 | E | 220 | 10 | 22 | 8 | 150 | 1 ¹⁾ | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSY227*010#0100 | Y | 220 | 10 | 22 | 10 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 |
| TPSY227*010#0150 | Y | 220 | 10 | 22 | 10 | 150 | 1 ¹⁾ | 0.913 | 0.822 | 0.365 | 0.137 | 0.123 | 0.055 |
| TPSY227*010#0200 | Y | 220 | 10 | 22 | 10 | 200 | 1 ¹⁾ | 0.791 | 0.712 | 0.316 | 0.158 | 0.142 | 0.063 |
| TPSD337*010#0050 | D | 330 | 10 | 33 | 8 | 50 | 1 | 1.732 | 1.559 | 0.693 | 0.087 | 0.078 | 0.035 |

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

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

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 142.

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

RATINGS & PART NUMBER REFERENCE

| AVX Part No. | Case Size | Capacitance (µF) | Rated Voltage (V) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @100kHz | MSL | 100kHz RMS Current (A) | | | 100kHz RMS Voltage (V) | | |
|---|-----------|------------------|-------------------|---------------|-----------|-----------------------|-----------------|------------------------|-------|-------|------------------------|-------|-------|
| | | | | | | | | 25°C | 85°C | 125°C | 25°C | 85°C | 125°C |
| TPSD337*010#0065 | D | 330 | 10 | 33 | 8 | 65 | 1 | 1.519 | 1.367 | 0.608 | 0.099 | 0.089 | 0.039 |
| TPSD337*010#0100 | D | 330 | 10 | 33 | 8 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD337*010#0150 | D | 330 | 10 | 33 | 8 | 150 | 1 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSE337*010#0040 | E | 330 | 10 | 33 | 8 | 40 | 1 ¹⁾ | 2.031 | 1.828 | 0.812 | 0.081 | 0.073 | 0.032 |
| TPSE337*010#0050 | E | 330 | 10 | 33 | 8 | 50 | 1 ¹⁾ | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSE337*010#0060 | E | 330 | 10 | 33 | 8 | 60 | 1 ¹⁾ | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE337*010#0100 | E | 330 | 10 | 33 | 8 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSV337*010#0040 | V | 330 | 10 | 33 | 10 | 40 | 1 ¹⁾ | 2.500 | 2.250 | 1.000 | 0.100 | 0.090 | 0.040 |
| TPSV337*010#0060 | V | 330 | 10 | 33 | 10 | 60 | 1 ¹⁾ | 2.041 | 1.837 | 0.816 | 0.122 | 0.110 | 0.049 |
| TPSV337*010#0100 | V | 330 | 10 | 33 | 10 | 100 | 1 ¹⁾ | 1.581 | 1.423 | 0.632 | 0.158 | 0.142 | 0.063 |
| TPSE477*010#0045 | E | 470 | 10 | 47 | 10 | 45 | 1 ¹⁾ | 1.915 | 1.723 | 0.766 | 0.086 | 0.078 | 0.034 |
| TPSE477*010#0050 | E | 470 | 10 | 47 | 10 | 50 | 1 ¹⁾ | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSE477*010#0060 | E | 470 | 10 | 47 | 10 | 60 | 1 ¹⁾ | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE477*010#0100 | E | 470 | 10 | 47 | 10 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE477*010#0200 | E | 470 | 10 | 47 | 10 | 200 | 1 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSV477*010#0040 | V | 470 | 10 | 47 | 10 | 40 | 1 ¹⁾ | 2.500 | 2.250 | 1.000 | 0.100 | 0.090 | 0.040 |
| TPSV477*010#0060 | V | 470 | 10 | 47 | 10 | 60 | 1 ¹⁾ | 2.041 | 1.837 | 0.816 | 0.122 | 0.110 | 0.049 |
| TPSV477*010#0100 | V | 470 | 10 | 47 | 10 | 100 | 1 ¹⁾ | 1.581 | 1.423 | 0.632 | 0.158 | 0.142 | 0.063 |
| 16 Volt @ 85°C (10 Volt @ 125°C) | | | | | | | | | | | | | |
| TPSA105*016#6200 | A | 1 | 16 | 0.5 | 4 | 6200 | 1 | 0.110 | 0.099 | 0.044 | 0.682 | 0.614 | 0.273 |
| TPSA225*016#1800 | A | 2.2 | 16 | 0.5 | 6 | 1800 | 1 | 0.204 | 0.184 | 0.082 | 0.367 | 0.331 | 0.147 |
| TPSA225*016#3500 | A | 2.2 | 16 | 0.5 | 6 | 3500 | 1 | 0.146 | 0.132 | 0.059 | 0.512 | 0.461 | 0.205 |
| TPST225*016#2000 | T | 2.2 | 16 | 0.5 | 6 | 2000 | 1 | 0.200 | 0.180 | 0.080 | 0.400 | 0.360 | 0.160 |
| TPSA335*016#3500 | A | 3.3 | 16 | 0.5 | 6 | 3500 | 1 | 0.146 | 0.132 | 0.059 | 0.512 | 0.461 | 0.205 |
| TPSB335*016#2500 | B | 3.3 | 16 | 0.5 | 6 | 2500 | 1 | 0.184 | 0.166 | 0.074 | 0.461 | 0.415 | 0.184 |
| TPSA475*016#2000 | A | 4.7 | 16 | 0.8 | 6 | 2000 | 1 | 0.194 | 0.174 | 0.077 | 0.387 | 0.349 | 0.155 |
| TPSB475*016#0800 | B | 4.7 | 16 | 0.8 | 6 | 800 | 1 | 0.326 | 0.293 | 0.130 | 0.261 | 0.235 | 0.104 |
| TPSB475*016#1500 | B | 4.7 | 16 | 0.8 | 6 | 1500 | 1 | 0.238 | 0.214 | 0.095 | 0.357 | 0.321 | 0.143 |
| TPSA685*016#1500 | A | 6.8 | 16 | 1.1 | 6 | 1500 | 1 | 0.224 | 0.201 | 0.089 | 0.335 | 0.302 | 0.134 |
| TPSB685*016#0600 | B | 6.8 | 16 | 1.1 | 6 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 |
| TPSB685*016#1200 | B | 6.8 | 16 | 1.1 | 6 | 1200 | 1 | 0.266 | 0.240 | 0.106 | 0.319 | 0.287 | 0.128 |
| TPSA106*016#1000 | A | 10 | 16 | 1.6 | 6 | 1000 | 1 | 0.274 | 0.246 | 0.110 | 0.274 | 0.246 | 0.110 |
| TPSB106*016#0500 | B | 10 | 16 | 1.6 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB106*016#0800 | B | 10 | 16 | 1.6 | 6 | 800 | 1 | 0.326 | 0.293 | 0.130 | 0.261 | 0.235 | 0.104 |
| TPSC106*016#0500 | C | 10 | 16 | 1.6 | 6 | 500 | 1 | 0.469 | 0.422 | 0.188 | 0.235 | 0.211 | 0.094 |
| TPST106*016#0800 | T | 10 | 16 | 1.6 | 8 | 800 | 1 | 0.316 | 0.285 | 0.126 | 0.253 | 0.228 | 0.101 |
| TPST106*016#1000 | T | 10 | 16 | 1.6 | 8 | 1000 | 1 | 0.283 | 0.255 | 0.113 | 0.283 | 0.255 | 0.113 |
| TPSW106*016#0500 | W | 10 | 16 | 1.6 | 6 | 500 | 1 | 0.424 | 0.382 | 0.170 | 0.212 | 0.191 | 0.085 |
| TPSW106*016#0600 | W | 10 | 16 | 1.6 | 6 | 600 | 1 | 0.387 | 0.349 | 0.155 | 0.232 | 0.209 | 0.093 |
| TPSB156*016#0500 | B | 15 | 16 | 2.4 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB156*016#0800 | B | 15 | 16 | 2.4 | 6 | 800 | 1 | 0.326 | 0.293 | 0.130 | 0.261 | 0.235 | 0.104 |
| TPSC156*016#0700 | C | 15 | 16 | 2.4 | 6 | 700 | 1 | 0.396 | 0.357 | 0.159 | 0.277 | 0.250 | 0.111 |
| TPSB226*016#0400 | B | 22 | 16 | 3.5 | 6 | 400 | 1 | 0.461 | 0.415 | 0.184 | 0.184 | 0.166 | 0.074 |
| TPSB226*016#0600 | B | 22 | 16 | 3.5 | 6 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 |
| TPSC226*016#0150 | C | 22 | 16 | 3.5 | 6 | 150 | 1 | 0.856 | 0.771 | 0.343 | 0.128 | 0.116 | 0.051 |
| TPSC226*016#0250 | C | 22 | 16 | 3.5 | 6 | 250 | 1 | 0.663 | 0.597 | 0.265 | 0.166 | 0.149 | 0.066 |
| TPSC226*016#0300 | C | 22 | 16 | 3.5 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPSC226*016#0375 | C | 22 | 16 | 3.5 | 6 | 375 | 1 | 0.542 | 0.487 | 0.217 | 0.203 | 0.183 | 0.081 |
| TPSD226*016#0700 | D | 22 | 16 | 3.5 | 6 | 700 | 1 | 0.463 | 0.417 | 0.185 | 0.324 | 0.292 | 0.130 |
| TPSW226*016#0500 | W | 22 | 16 | 3.5 | 6 | 500 | 1 | 0.424 | 0.382 | 0.170 | 0.212 | 0.191 | 0.085 |
| TPSB336*016#0350 | B | 33 | 16 | 5.3 | 8 | 350 | 1 | 0.493 | 0.444 | 0.197 | 0.172 | 0.155 | 0.069 |
| TPSB336*016#0500 | B | 33 | 16 | 5.3 | 8 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSC336*016#0100 | C | 33 | 16 | 5.3 | 6 | 100 | 1 | 1.049 | 0.944 | 0.420 | 0.105 | 0.094 | 0.042 |
| TPSC336*016#0150 | C | 33 | 16 | 5.3 | 6 | 150 | 1 | 0.856 | 0.771 | 0.343 | 0.128 | 0.116 | 0.051 |
| TPSC336*016#0225 | C | 33 | 16 | 5.3 | 6 | 225 | 1 | 0.699 | 0.629 | 0.280 | 0.157 | 0.142 | 0.063 |
| TPSC336*016#0300 | C | 33 | 16 | 5.3 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPSD336*016#0200 | D | 33 | 16 | 5.3 | 6 | 200 | 1 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSW336*016#0140 | W | 33 | 16 | 5.3 | 6 | 140 | 1 | 0.802 | 0.722 | 0.321 | 0.112 | 0.101 | 0.045 |
| TPSW336*016#0175 | W | 33 | 16 | 5.3 | 6 | 175 | 1 | 0.717 | 0.645 | 0.287 | 0.125 | 0.113 | 0.050 |
| TPSW336*016#0250 | W | 33 | 16 | 5.3 | 6 | 250 | 1 | 0.600 | 0.540 | 0.240 | 0.150 | 0.135 | 0.060 |
| TPSW336*016#0400 | W | 33 | 16 | 5.3 | 6 | 400 | 1 | 0.474 | 0.427 | 0.190 | 0.190 | 0.171 | 0.076 |
| TPSW336*016#0500 | W | 33 | 16 | 5.3 | 6 | 500 | 1 | 0.424 | 0.382 | 0.170 | 0.212 | 0.191 | 0.085 |
| TPSY336*016#0300 | Y | 33 | 16 | 5.3 | 6 | 300 | 1 ¹⁾ | 0.645 | 0.581 | 0.258 | 0.194 | 0.174 | 0.077 |
| TPSY336*016#0400 | Y | 33 | 16 | 5.3 | 6 | 400 | 1 ¹⁾ | 0.559 | 0.503 | 0.224 | 0.224 | 0.201 | 0.089 |
| TPSC476*016#0110 | C | 47 | 16 | 7.5 | 6 | 110 | 1 | 1.000 | 0.900 | 0.400 | 0.110 | 0.099 | 0.044 |
| TPSC476*016#0350 | C | 47 | 16 | 7.5 | 6 | 350 | 1 | 0.561 | 0.505 | 0.224 | 0.196 | 0.177 | 0.078 |
| TPSD476*016#0080 | D | 47 | 16 | 7.5 | 6 | 80 | 1 | 1.369 | 1.232 | 0.548 | 0.110 | 0.099 | 0.044 |

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

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

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 142.

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 |
| TPSD476*016#0100 | D | 47 | 16 | 7.5 | 6 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD476*016#0150 | D | 47 | 16 | 7.5 | 6 | 150 | 1 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSD476*016#0200 | D | 47 | 16 | 7.5 | 6 | 200 | 1 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSW476*016#0200 | W | 47 | 16 | 7.5 | 6 | 200 | 1 | 0.671 | 0.604 | 0.268 | 0.134 | 0.121 | 0.054 |
| TPSX476*016#0180 | X | 47 | 16 | 7.5 | 6 | 180 | 1 ¹⁾ | 0.745 | 0.671 | 0.298 | 0.134 | 0.121 | 0.054 |
| TPSY476*016#0250 | Y | 47 | 16 | 7.5 | 6 | 250 | 1 ¹⁾ | 0.707 | 0.636 | 0.283 | 0.177 | 0.159 | 0.071 |
| TPSC686*016#0125 | C | 68 | 16 | 10.9 | 6 | 125 | 1 | 0.938 | 0.844 | 0.375 | 0.117 | 0.106 | 0.047 |
| TPSC686*016#0200 | C | 68 | 16 | 10.9 | 6 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 |
| TPSD686*016#0070 | D | 68 | 16 | 10.9 | 6 | 70 | 1 | 1.464 | 1.317 | 0.586 | 0.102 | 0.092 | 0.041 |
| TPSD686*016#0100 | D | 68 | 16 | 10.9 | 6 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD686*016#0150 | D | 68 | 16 | 10.9 | 6 | 150 | 1 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSF686*016#0200 | F | 68 | 16 | 10.9 | 10 | 200 | 1 | 0.707 | 0.636 | 0.283 | 0.141 | 0.127 | 0.057 |
| TPSX686*016#0150 | X | 68 | 16 | 10.9 | 8 | 150 | 1 ¹⁾ | 0.816 | 0.735 | 0.327 | 0.122 | 0.110 | 0.049 |
| TPSY686*016#0150 | Y | 68 | 16 | 10.9 | 6 | 150 | 1 ¹⁾ | 0.913 | 0.822 | 0.365 | 0.137 | 0.123 | 0.055 |
| TPSY686*016#0200 | Y | 68 | 16 | 10.9 | 6 | 200 | 1 ¹⁾ | 0.791 | 0.712 | 0.316 | 0.158 | 0.142 | 0.063 |
| TPSY686*016#0250 | Y | 68 | 16 | 10.9 | 6 | 250 | 1 ¹⁾ | 0.707 | 0.636 | 0.283 | 0.177 | 0.159 | 0.071 |
| TPSC107*016#0200 | C | 100 | 16 | 16 | 8 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 |
| TPSD107*016#0060 | D | 100 | 16 | 16 | 6 | 60 | 1 | 1.581 | 1.423 | 0.632 | 0.095 | 0.085 | 0.038 |
| TPSD107*016#0100 | D | 100 | 16 | 16 | 6 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD107*016#0125 | D | 100 | 16 | 16 | 6 | 125 | 1 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD107*016#0150 | D | 100 | 16 | 16 | 6 | 150 | 1 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSE107*016#0055 | E | 100 | 16 | 16 | 6 | 55 | 1 ¹⁾ | 1.732 | 1.559 | 0.693 | 0.095 | 0.086 | 0.038 |
| TPSE107*016#0100 | E | 100 | 16 | 16 | 6 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE107*016#0125 | E | 100 | 16 | 16 | 6 | 125 | 1 ¹⁾ | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE107*016#0150 | E | 100 | 16 | 16 | 6 | 150 | 1 ¹⁾ | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSF107M016#0150 | F | 100 | 16 | 16 | 10 | 150 | 1 | 0.816 | 0.735 | 0.327 | 0.122 | 0.110 | 0.049 |
| TPSF107M016#0200 | F | 100 | 16 | 16 | 10 | 200 | 1 | 0.707 | 0.636 | 0.283 | 0.141 | 0.127 | 0.057 |
| TPSY107*016#0100 | Y | 100 | 16 | 16 | 8 | 100 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.112 | 0.101 | 0.045 |
| TPSY107*016#0150 | Y | 100 | 16 | 16 | 8 | 150 | 1 ¹⁾ | 0.913 | 0.822 | 0.365 | 0.137 | 0.123 | 0.055 |
| TPSY107*016#0200 | Y | 100 | 16 | 16 | 8 | 200 | 1 ¹⁾ | 0.791 | 0.712 | 0.316 | 0.158 | 0.142 | 0.063 |
| TPSD157*016#0060 | D | 150 | 16 | 24 | 6 | 60 | 1 | 1.581 | 1.423 | 0.632 | 0.095 | 0.085 | 0.038 |
| TPSD157*016#0085 | D | 150 | 16 | 24 | 6 | 85 | 1 | 1.328 | 1.196 | 0.531 | 0.113 | 0.102 | 0.045 |
| TPSD157*016#0100 | D | 150 | 16 | 24 | 6 | 100 | 1 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD157*016#0125 | D | 150 | 16 | 24 | 6 | 125 | 1 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD157*016#0150 | D | 150 | 16 | 24 | 6 | 150 | 1 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSE157*016#0100 | E | 150 | 16 | 23 | 8 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSV157*016#0045 | V | 150 | 16 | 24 | 8 | 45 | 1 ¹⁾ | 2.357 | 2.121 | 0.943 | 0.106 | 0.095 | 0.042 |
| TPSV157*016#0075 | V | 150 | 16 | 24 | 8 | 75 | 1 ¹⁾ | 1.826 | 1.643 | 0.730 | 0.137 | 0.123 | 0.055 |
| TPSY157M016#0200 | Y | 150 | 16 | 24 | 15 | 200 | 1 ¹⁾ | 0.791 | 0.712 | 0.316 | 0.158 | 0.142 | 0.063 |
| TPSE227*016#0100 | E | 220 | 16 | 35.2 | 10 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE227*016#0150 | E | 220 | 16 | 35.2 | 10 | 150 | 1 ¹⁾ | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSV227*016#0050 | V | 220 | 16 | 35.2 | 8 | 50 | 1 ¹⁾ | 2.236 | 2.012 | 0.894 | 0.112 | 0.101 | 0.045 |
| TPSV227*016#0075 | V | 220 | 16 | 35.2 | 8 | 75 | 1 ¹⁾ | 1.826 | 1.643 | 0.730 | 0.137 | 0.123 | 0.055 |
| TPSV227*016#0100 | V | 220 | 16 | 35.2 | 8 | 100 | 1 ¹⁾ | 1.581 | 1.423 | 0.632 | 0.158 | 0.142 | 0.063 |
| TPSV227*016#0150 | V | 220 | 16 | 35.2 | 8 | 150 | 1 ¹⁾ | 1.291 | 1.162 | 0.516 | 0.194 | 0.174 | 0.077 |
| TPSE337M016#0200 | E | 330 | 16 | 52.8 | 30 | 200 | 1 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| 20 Volt @ 85°C (13 Volt @ 125°C) | | | | | | | | | | | | | |
| TPSA105*020#3000 | A | 1 | 20 | 0.5 | 4 | 3000 | 1 | 0.158 | 0.142 | 0.063 | 0.474 | 0.427 | 0.190 |
| TPSR105*020#6000 | R | 1 | 20 | 0.5 | 4 | 6000 | 1 | 0.096 | 0.086 | 0.038 | 0.574 | 0.517 | 0.230 |
| TPSS105*020#6000 | S | 1 | 20 | 0.5 | 4 | 6000 | 1 | 0.104 | 0.094 | 0.042 | 0.624 | 0.562 | 0.250 |
| TPST105*020#2000 | T | 1 | 20 | 0.5 | 4 | 2000 | 1 | 0.200 | 0.180 | 0.080 | 0.400 | 0.360 | 0.160 |
| TPSA155*020#3000 | A | 1.5 | 20 | 0.5 | 6 | 3000 | 1 | 0.158 | 0.142 | 0.063 | 0.474 | 0.427 | 0.190 |
| TPSA225*020#3000 | A | 2.2 | 20 | 0.5 | 6 | 3000 | 1 | 0.158 | 0.142 | 0.063 | 0.474 | 0.427 | 0.190 |
| TPSB225*020#1700 | B | 2.2 | 20 | 0.5 | 6 | 1700 | 1 | 0.224 | 0.201 | 0.089 | 0.380 | 0.342 | 0.152 |
| TPSA335*020#2500 | A | 3.3 | 20 | 0.7 | 6 | 2500 | 1 | 0.173 | 0.156 | 0.069 | 0.433 | 0.390 | 0.173 |
| TPSB335*020#1300 | B | 3.3 | 20 | 0.7 | 6 | 1300 | 1 | 0.256 | 0.230 | 0.102 | 0.332 | 0.299 | 0.133 |
| TPSA475*020#1800 | A | 4.7 | 20 | 0.9 | 6 | 1800 | 1 | 0.204 | 0.184 | 0.082 | 0.367 | 0.331 | 0.147 |
| TPSB475*020#0750 | B | 4.7 | 20 | 0.9 | 6 | 750 | 1 | 0.337 | 0.303 | 0.135 | 0.252 | 0.227 | 0.101 |
| TPSB475*020#1000 | B | 4.7 | 20 | 0.9 | 6 | 1000 | 1 | 0.292 | 0.262 | 0.117 | 0.292 | 0.262 | 0.117 |
| TPSA685*020#1000 | A | 6.8 | 20 | 1.4 | 6 | 1000 | 1 | 0.274 | 0.246 | 0.110 | 0.274 | 0.246 | 0.110 |
| TPSB685*020#0600 | B | 6.8 | 20 | 1.4 | 6 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 |
| TPSB685*020#1000 | B | 6.8 | 20 | 1.4 | 6 | 1000 | 1 | 0.292 | 0.262 | 0.117 | 0.292 | 0.262 | 0.117 |
| TPSC685*020#0700 | C | 6.8 | 20 | 1.4 | 6 | 700 | 1 | 0.396 | 0.357 | 0.159 | 0.277 | 0.250 | 0.111 |
| TPSB106*020#0500 | B | 10 | 20 | 2 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB106*020#1000 | B | 10 | 20 | 2 | 6 | 1000 | 1 | 0.292 | 0.262 | 0.117 | 0.292 | 0.262 | 0.117 |
| TPSC106*020#0500 | C | 10 | 20 | 2 | 6 | 500 | 1 | 0.469 | 0.422 | 0.188 | 0.235 | 0.211 | 0.094 |
| TPSC106*020#0700 | C | 10 | 20 | 2 | 6 | 700 | 1 | 0.396 | 0.357 | 0.159 | 0.277 | 0.250 | 0.111 |

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

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

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 142.

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 |
| 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 |
| TPSC226*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 ¹⁾ | 1.535 | 1.382 | 0.614 | 0.107 | 0.097 | 0.043 |
| TPSE476*020#0125 | E | 47 | 20 | 9.4 | 6 | 125 | 1 ¹⁾ | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE476*020#0150 | E | 47 | 20 | 9.4 | 6 | 150 | 1 ¹⁾ | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE476*020#0200 | E | 47 | 20 | 9.4 | 6 | 200 | 1 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSE476*020#0250 | E | 47 | 20 | 9.4 | 6 | 250 | 1 ¹⁾ | 0.812 | 0.731 | 0.325 | 0.203 | 0.183 | 0.081 |
| TPSX476*020#0200 | X | 47 | 20 | 9.4 | 6 | 200 | 1 ¹⁾ | 0.707 | 0.636 | 0.283 | 0.141 | 0.127 | 0.057 |
| 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 ¹⁾ | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE686*020#0150 | E | 68 | 20 | 13.6 | 6 | 150 | 1 ¹⁾ | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE686*020#0200 | E | 68 | 20 | 13.6 | 6 | 200 | 1 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSY686*020#0200 | Y | 68 | 20 | 13.6 | 6 | 200 | 1 ¹⁾ | 0.791 | 0.712 | 0.316 | 0.158 | 0.142 | 0.063 |
| 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 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE107*020#0150 | E | 100 | 20 | 20 | 6 | 150 | 1 ¹⁾ | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE107*020#0200 | E | 100 | 20 | 20 | 6 | 200 | 1 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSV107*020#0060 | V | 100 | 20 | 20 | 8 | 60 | 1 ¹⁾ | 2.041 | 1.837 | 0.816 | 0.122 | 0.110 | 0.049 |
| TPSV107*020#0085 | V | 100 | 20 | 20 | 8 | 85 | 1 ¹⁾ | 1.715 | 1.543 | 0.686 | 0.146 | 0.131 | 0.058 |
| TPSV107*020#0100 | V | 100 | 20 | 20 | 8 | 100 | 1 ¹⁾ | 1.581 | 1.423 | 0.632 | 0.158 | 0.142 | 0.063 |
| TPSV107*020#0200 | V | 100 | 20 | 20 | 8 | 200 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.224 | 0.201 | 0.089 |
| TPSV157*020#0080 | V | 150 | 20 | 30 | 8 | 80 | 1 ¹⁾ | 1.768 | 1.591 | 0.707 | 0.141 | 0.127 | 0.057 |
| 25 Volt @ 85°C (17 Volt @ 125°C) | | | | | | | | | | | | | |
| 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 |

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

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

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For typical weight and composition see page 142.

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 |
| 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 |
| 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 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE336*025#0175 | E | 33 | 25 | 8.3 | 6 | 175 | 1 ¹⁾ | 0.971 | 0.874 | 0.388 | 0.170 | 0.153 | 0.068 |
| TPSE336*025#0200 | E | 33 | 25 | 8.3 | 6 | 200 | 1 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSE336*025#0300 | E | 33 | 25 | 8.3 | 6 | 300 | 1 ¹⁾ | 0.742 | 0.667 | 0.297 | 0.222 | 0.200 | 0.089 |
| TPSY336*025#0200 | Y | 33 | 25 | 8.3 | 6 | 200 | 1 ¹⁾ | 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 ¹⁾ | 1.436 | 1.293 | 0.574 | 0.115 | 0.103 | 0.046 |
| TPSE476*025#0100 | E | 47 | 25 | 11.8 | 6 | 100 | 1 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE476*025#0125 | E | 47 | 25 | 11.8 | 6 | 125 | 1 ¹⁾ | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSY476*025#0250 | Y | 47 | 25 | 11.8 | 6 | 250 | 1 ¹⁾ | 0.707 | 0.636 | 0.283 | 0.177 | 0.159 | 0.071 |
| TPSE686*025#0125 | E | 68 | 25 | 17 | 6 | 125 | 1 ¹⁾ | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE686*025#0200 | E | 68 | 25 | 17 | 6 | 200 | 1 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSV686*025#0080 | V | 68 | 25 | 17 | 6 | 80 | 1 ¹⁾ | 1.768 | 1.591 | 0.707 | 0.141 | 0.127 | 0.057 |
| TPSV686*025#0095 | V | 68 | 25 | 17 | 6 | 95 | 1 ¹⁾ | 1.622 | 1.460 | 0.649 | 0.154 | 0.139 | 0.062 |
| TPSV686*025#0150 | V | 68 | 25 | 17 | 6 | 150 | 1 ¹⁾ | 1.291 | 1.162 | 0.516 | 0.194 | 0.174 | 0.077 |
| TPSV686*025#0200 | V | 68 | 25 | 17 | 6 | 200 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.224 | 0.201 | 0.089 |
| TPSE107M025#0150 | E | 100 | 25 | 25 | 10 | 150 | 1 ¹⁾ | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSV107*025#0100 | V | 100 | 25 | 25 | 8 | 100 | 1 ¹⁾ | 1.581 | 1.423 | 0.632 | 0.158 | 0.142 | 0.063 |
| TPSV157M025#0150 | V | 150 | 25 | 37.5 | 10 | 150 | 1 ¹⁾ | 1.291 | 1.162 | 0.516 | 0.194 | 0.174 | 0.077 |
| 35 Volt @ 85°C (23 Volt @ 125°C) | | | | | | | | | | | | | |
| 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 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |

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

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

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 142.

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 |
| TPSY106*035#0250 | Y | 10 | 35 | 3.5 | 6 | 250 | 1 ¹⁾ | 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 |
| 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 ¹⁾ | 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 ¹⁾ | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE226*035#0200 | E | 22 | 35 | 7.7 | 6 | 200 | 1 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSE226*035#0300 | E | 22 | 35 | 7.7 | 6 | 300 | 1 ¹⁾ | 0.742 | 0.667 | 0.297 | 0.222 | 0.200 | 0.089 |
| TPSY226*035#0200 | Y | 22 | 35 | 7.7 | 6 | 200 | 1 ¹⁾ | 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 ¹⁾ | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE336*035#0250 | E | 33 | 35 | 11.6 | 6 | 250 | 1 ¹⁾ | 0.812 | 0.731 | 0.325 | 0.203 | 0.183 | 0.081 |
| TPSE336*035#0300 | E | 33 | 35 | 11.6 | 6 | 300 | 1 ¹⁾ | 0.742 | 0.667 | 0.297 | 0.222 | 0.200 | 0.089 |
| TPSV336*035#0200 | V | 33 | 35 | 11.6 | 6 | 200 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.224 | 0.201 | 0.089 |
| TPSE476*035#0200 | E | 47 | 35 | 16.5 | 6 | 200 | 1 ¹⁾ | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSE476*035#0250 | E | 47 | 35 | 16.5 | 6 | 250 | 1 ¹⁾ | 0.812 | 0.731 | 0.325 | 0.203 | 0.183 | 0.081 |
| TPSV476*035#0150 | V | 47 | 35 | 16.5 | 6 | 150 | 1 ¹⁾ | 1.291 | 1.162 | 0.516 | 0.194 | 0.174 | 0.077 |
| TPSV476*035#0200 | V | 47 | 35 | 16.5 | 6 | 200 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.224 | 0.201 | 0.089 |
| TPSV686*035#0150 | V | 68 | 35 | 23.8 | 6 | 150 | 1 ¹⁾ | 1.291 | 1.162 | 0.516 | 0.194 | 0.174 | 0.077 |
| TPSV686*035#0200 | V | 68 | 35 | 23.8 | 6 | 200 | 1 ¹⁾ | 1.118 | 1.006 | 0.447 | 0.224 | 0.201 | 0.089 |
| 50 Volt @ 85°C (33 Volt @ 125°C) | | | | | | | | | | | | | |
| 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 ¹⁾ | 0.812 | 0.731 | 0.325 | 0.203 | 0.183 | 0.081 |
| TPSE106*050#0300 | E | 10 | 50 | 5 | 6 | 300 | 1 ¹⁾ | 0.742 | 0.667 | 0.297 | 0.222 | 0.200 | 0.089 |
| TPSE106*050#0400 | E | 10 | 50 | 5 | 6 | 400 | 1 ¹⁾ | 0.642 | 0.578 | 0.257 | 0.257 | 0.231 | 0.103 |
| TPSE106*050#0500 | E | 10 | 50 | 5 | 6 | 500 | 1 ¹⁾ | 0.574 | 0.517 | 0.230 | 0.287 | 0.259 | 0.115 |
| TPSE156*050#0250 | E | 15 | 50 | 7.5 | 6 | 250 | 1 ¹⁾ | 0.812 | 0.731 | 0.325 | 0.203 | 0.183 | 0.081 |
| TPSV156*050#0250 | V | 15 | 50 | 7.5 | 6 | 250 | 1 ¹⁾ | 1.000 | 0.900 | 0.400 | 0.250 | 0.225 | 0.100 |

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

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

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 142.

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 | | | | | | |
|---------------|------|---------------------------------------|--|--------------------------------|--------------------------------|---------------------------|-----------------------------|----------------------------|
| μF | 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) | E(250) |
| 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

Engineering samples - please contact manufacturer

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

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

TECHNICAL SPECIFICATIONS

Technical Data:

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

| | | | | | | | | | |
|-------------------------------|--|-----|----|----|----|----|----|----|--|
| Capacitance Range: | 0.22 μF to 680 μF | | | | | | | | |
| 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 Ω /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 |
| 6.3 Volt @ 85°C (4 Volt @ 125°C) | | | | | | | | | | | | | |
| TPSA335*006T2100 | A | 3.3 | 6.3 | 0.5 | 6 | 2100 | 1 | 0.189 | 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*006T0300V | D | 100 | 6.3 | 6.3 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.121 | 0.116 | 0.051 |
| 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*006T0125V | D | 150 | 6.3 | 9.5 | 6 | 125 | 3 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD227*006T0100V | D | 220 | 6.3 | 13.9 | 8 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD227*006T0125V | D | 220 | 6.3 | 13.9 | 8 | 125 | 3 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD337*006T0070V | D | 330 | 6.3 | 20.8 | 8 | 70 | 3 | 1.464 | 1.317 | 0.586 | 0.102 | 0.092 | 0.041 |
| TPSD337*006T0100V | D | 330 | 6.3 | 20.8 | 8 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSE337*006T0100V | E | 330 | 6.3 | 20.8 | 8 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE337*006T0125V | E | 330 | 6.3 | 20.8 | 8 | 125 | 3 | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE337*006T0150V | E | 330 | 6.3 | 20.8 | 8 | 150 | 3 | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSD477*006T0045V | D | 470 | 6.3 | 28 | 12 | 45 | 3 | 1.826 | 1.643 | 0.730 | 0.082 | 0.074 | 0.033 |
| TPSD477*006T0060V | D | 470 | 6.3 | 28 | 12 | 60 | 3 | 1.581 | 1.423 | 0.632 | 0.095 | 0.085 | 0.038 |
| TPSD477*006T0100V | D | 470 | 6.3 | 28 | 12 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD477*006T0200V | D | 470 | 6.3 | 28 | 12 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSE477*006T0045V | E | 470 | 6.3 | 28 | 10 | 45 | 3 | 1.915 | 1.723 | 0.766 | 0.086 | 0.078 | 0.034 |
| TPSE477*006T0050V | E | 470 | 6.3 | 28 | 10 | 50 | 3 | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSE477*006T0060V | E | 470 | 6.3 | 28 | 10 | 60 | 3 | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE477*006T0100V | E | 470 | 6.3 | 28 | 10 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE477*006T0200V | E | 470 | 6.3 | 28 | 10 | 200 | 3 | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSE687*006T0045V | E | 680 | 6.3 | 42.8 | 10 | 45 | 3 | 1.915 | 1.723 | 0.766 | 0.086 | 0.078 | 0.034 |
| TPSE687*006T0060V | E | 680 | 6.3 | 42.8 | 10 | 60 | 3 | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE687*006T0100V | E | 680 | 6.3 | 42.8 | 10 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| 10 Volt @ 85°C (7 Volt @ 125°C) | | | | | | | | | | | | | |
| 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 142.

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*010T0300V | 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*010T0150V | 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*010T0100V | D | 100 | 10 | 10 | 6 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD107*010T0125V | D | 100 | 10 | 10 | 6 | 125 | 3 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD107*010T0150V | D | 100 | 10 | 10 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSD157*010T0085V | D | 150 | 10 | 15 | 8 | 85 | 3 | 1.328 | 1.196 | 0.531 | 0.113 | 0.102 | 0.045 |
| TPSD157*010T0100V | D | 150 | 10 | 15 | 8 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSE157*010T0100V | E | 150 | 10 | 15 | 8 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSD227*010T0100V | D | 220 | 10 | 22 | 8 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD227*010T0150V | D | 220 | 10 | 22 | 8 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSE227*010T0070V | E | 220 | 10 | 22 | 8 | 70 | 3 | 1.535 | 1.382 | 0.614 | 0.107 | 0.097 | 0.043 |
| TPSE227*010T0100V | E | 220 | 10 | 22 | 8 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE227*010T0125V | E | 220 | 10 | 22 | 8 | 125 | 3 | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE227*010T0150V | E | 220 | 10 | 22 | 8 | 150 | 3 | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE337*010T0050V | E | 330 | 10 | 33 | 8 | 50 | 3 | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSE337*010T0060V | E | 330 | 10 | 33 | 8 | 60 | 3 | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE337*010T0100V | E | 330 | 10 | 33 | 8 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| 16 Volt @ 85°C (10 Volt @ 25°C) | | | | | | | | | | | | | |
| 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*016T0700V | 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*016T0200V | 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*016T0200V | 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*016T0150V | D | 68 | 16 | 10.9 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSD107*016T0100V | D | 100 | 16 | 16 | 6 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD107*016T0125V | D | 100 | 16 | 16 | 6 | 125 | 3 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |

Moinstone 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 142.

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*016T0150V | D | 100 | 16 | 16 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSE107*016T0100V | E | 100 | 16 | 16 | 6 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE107*016T0125V | E | 100 | 16 | 16 | 6 | 125 | 3 | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE107*016T0150V | E | 100 | 16 | 16 | 6 | 150 | 3 | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE157*016T0100V | E | 150 | 16 | 23 | 8 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| 20 Volt @ 85°C (13 Volt @ 125°C) | | | | | | | | | | | | | |
| 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*020T0200V | D | 22 | 20 | 4.4 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD226*020T0300V | 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*020T0200V | D | 33 | 20 | 6.6 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD476*020T0200V | D | 47 | 20 | 9.4 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD686*020T0150V | D | 68 | 20 | 13.6 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSD686*020T0200V | D | 68 | 20 | 13.6 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD686*020T0300V | D | 68 | 20 | 13.6 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSE686*020T0125V | E | 68 | 20 | 13.6 | 6 | 125 | 3 | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE686*020T0150V | E | 68 | 20 | 13.6 | 6 | 150 | 3 | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE686*020T0200V | E | 68 | 20 | 13.6 | 6 | 200 | 3 | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSE107*020T0100V | E | 100 | 20 | 20 | 6 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE107*020T0150V | E | 100 | 20 | 20 | 6 | 150 | 3 | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE107*020T0200V | E | 100 | 20 | 20 | 6 | 200 | 3 | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| 25 Volt @ 85°C (17 Volt @ 125°C) | | | | | | | | | | | | | |
| 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*025T0500V | 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*025T0300V | 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 142.

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*025T0200V | D | 22 | 25 | 5.5 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD226*025T0300V | D | 22 | 25 | 5.5 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSD336*025T0200V | D | 33 | 25 | 8.3 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD336*025T0300V | D | 33 | 25 | 8.3 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSD476*025T0125V | D | 47 | 25 | 11.8 | 6 | 125 | 3 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD476*025T0150V | D | 47 | 25 | 11.8 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSD476*025T0250V | D | 47 | 25 | 11.8 | 6 | 250 | 3 | 0.775 | 0.697 | 0.310 | 0.194 | 0.174 | 0.077 |
| TPSE476*025T0125V | E | 47 | 25 | 11.8 | 6 | 125 | 3 | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| 35 Volt @ 85°C (23 Volt @ 125°C) | | | | | | | | | | | | | |
| 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*035T0700V | 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*035T0400V | D | 6.8 | 35 | 2.4 | 6 | 400 | 3 | 0.612 | 0.551 | 0.245 | 0.245 | 0.220 | 0.098 |
| TPSD685*035T0500V | 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*035T0300V | D | 10 | 35 | 3.5 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSD156*035T0300V | D | 15 | 35 | 5.3 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSD226*035T0200V | D | 22 | 35 | 7.7 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD226*035T0300V | D | 22 | 35 | 7.7 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSD226*035T0400V | D | 22 | 35 | 7.7 | 6 | 400 | 3 | 0.612 | 0.551 | 0.245 | 0.245 | 0.220 | 0.098 |
| TPSE226*035T0200V | E | 22 | 35 | 7.7 | 6 | 200 | 3 | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSE226*035T0300V | E | 22 | 35 | 7.7 | 6 | 300 | 3 | 0.742 | 0.667 | 0.297 | 0.222 | 0.200 | 0.089 |
| TPSE336*035T0250V | E | 33 | 35 | 11.6 | 6 | 250 | 3 | 0.812 | 0.731 | 0.325 | 0.203 | 0.183 | 0.081 |
| TPSE336*035T0300V | E | 33 | 35 | 11.6 | 6 | 300 | 3 | 0.742 | 0.667 | 0.297 | 0.222 | 0.200 | 0.089 |
| 50 Volt @ 85°C (33 Volt @ 125°C) | | | | | | | | | | | | | |
| 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*050T1200V | 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*050T0800V | 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*050T0500V | D | 4.7 | 50 | 2.4 | 6 | 500 | 3 | 0.548 | 0.493 | 0.219 | 0.274 | 0.246 | 0.110 |
| TPSD475*050T0700V | D | 4.7 | 50 | 2.4 | 6 | 700 | 3 | 0.463 | 0.417 | 0.185 | 0.324 | 0.292 | 0.130 |
| TPSD685*050T0500V | D | 6.8 | 50 | 3.4 | 6 | 500 | 3 | 0.548 | 0.493 | 0.219 | 0.274 | 0.246 | 0.110 |
| TPSD685*050T0600V | D | 6.8 | 50 | 3.4 | 6 | 600 | 3 | 0.500 | 0.450 | 0.200 | 0.300 | 0.270 | 0.120 |
| TPSD106*050T0500V | D | 10 | 50 | 5 | 6 | 500 | 3 | 0.548 | 0.493 | 0.219 | 0.274 | 0.246 | 0.110 |
| TPSE106*050T0250V | E | 10 | 50 | 5 | 6 | 250 | 3 | 0.812 | 0.731 | 0.325 | 0.203 | 0.183 | 0.081 |
| TPSE106*050T0300V | E | 10 | 50 | 5 | 6 | 300 | 3 | 0.742 | 0.667 | 0.297 | 0.222 | 0.200 | 0.089 |
| TPSE106*050T0400V | E | 10 | 50 | 5 | 6 | 400 | 3 | 0.642 | 0.578 | 0.257 | 0.257 | 0.231 | 0.103 |
| TPSE106*050T0500V | E | 10 | 50 | 5 | 6 | 500 | 3 | 0.574 | 0.517 | 0.230 | 0.287 | 0.259 | 0.115 |
| TPSE156*050T0250V | E | 15 | 50 | 7.5 | 6 | 250 | 3 | 0.812 | 0.731 | 0.325 | 0.203 | 0.183 | 0.081 |

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 142.

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.

