# TPS Series

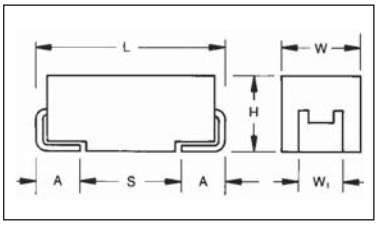
## Low ESR

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

LEAD-FREE
LEAD-FREE COMPATIBLE COMPONENT

RoHS COMPLIANT

*SnPb termination option is not RoHS compliant.*




For part marking see page 132

## CASE DIMENSIONS: millimeters (inches)

| Code | EIA Code | EIA Metric | L±0.20 (0.008) | W+0.20 (0.008) -0.10 (0.004) | H+0.20 (0.008) -0.10 (0.004) | $W_1$±0.20 (0.008) | A+0.30 (0.012) -0.20 (0.008) | S Min. |
|---|---|---|---|---|---|---|---|---|
| A | 1206 | 3216-18 | 3.20 (0.126) | 1.60 (0.063) | 1.60 (0.063) | 1.20 (0.047) | 0.80 (0.031) | 1.10 (0.043) |
| B | 1210 | 3528-21 | 3.50 (0.138) | 2.80 (0.110) | 1.90 (0.075) | 2.20 (0.087) | 0.80 (0.031) | 1.40 (0.055) |
| C | 2312 | 6032-28 | 6.00 (0.236) | 3.20 (0.126) | 2.60 (0.102) | 2.20 (0.087) | 1.30 (0.051) | 2.90 (0.114) |
| D | 2917 | 7343-31 | 7.30 (0.287) | 4.30 (0.169) | 2.90 (0.114) | 2.40 (0.094) | 1.30 (0.051) | 4.40 (0.173) |
| E | 2917 | 7343-43 | 7.30 (0.287) | 4.30 (0.169) | 4.10 (0.162) | 2.40 (0.094) | 1.30 (0.051) | 4.40 (0.173) |
| F | 2312 | 6032-20 | 6.00 (0.236) | 3.20 (0.126) | 2.00 (0.079) max. | 2.20 (0.087) | 1.30 (0.051) | 2.90 (0.114) |
| P | 0805 | 2012-15 | 2.05 (0.081) | 1.35 (0.053) | 1.50 (0.059) max. | 1.00±0.10 (0.039±0.004) | 0.50 (0.020) | 0.85 (0.033) |
| R | 0805 | 2012-12 | 2.05 (0.081) | 1.30 (0.051) | 1.20 (0.047) max. | 1.00 ±0.10 (0.039±0.004) | 0.50 (0.020) | 0.85 (0.033) |
| S | 1206 | 3216-12 | 3.20 (0.126) | 1.60 (0.063) | 1.20 (0.047) max. | 1.20 (0.047) | 0.80 (0.031) | 1.10 (0.043) |
| T | 1210 | 3528-12 | 3.50 (0.138) | 2.80 (0.110) | 1.20 (0.047) max. | 2.20 (0.087) | 0.80 (0.031) | 1.40 (0.055) |
| V | 2924 | 7361-38 | 7.30 (0.287) | 6.10 (0.240) | 3.55 (0.140) | 3.10 (0.120) | 1.30 (0.051) | 4.40 (0.173) |
| W | 2312 | 6032-15 | 6.00 (0.236) | 3.20 (0.126) | 1.50 (0.059) max. | 2.20 (0.087) | 1.30 (0.051) | 2.90 (0.114) |
| X | 2917 | 7343-15 | 7.30 (0.287) | 4.30 (0.169) | 1.50 (0.059) max. | 2.40 (0.094) | 1.30 (0.051) | 4.40 (0.173) |
| Y | 2917 | 7343-20 | 7.30 (0.287) | 4.30 (0.169) | 2.00 (0.079) max. | 2.40 (0.094) | 1.30 (0.051) | 4.40 (0.173) |

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

## HOW TO ORDER

**TPS C 107 M 010 R 0100 –**

**Type**

**Case Size**
See table above

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

**Tolerance**
K = ±10%
M = ±20%

**Rated DC Voltage**
002 = 2.5Vdc
004 = 4Vdc
006 = 6.3Vdc
010 = 10Vdc
016 = 16Vdc
020 = 20Vdc
025 = 25Vdc
035 = 35Vdc
050 = 50Vdc

**Packaging**
R = Pure Tin 7" Reel
S = Pure Tin 13" Reel
A = Gold Plating 7" Reel
B = Gold Plating 13" Reel
H = Tin Lead 7" Reel (Contact Manufacturer)
K = Tin Lead 13" Reel (Contact Manufacturer)
H, K = Non RoHS

**ESR in mΩ**

**Additional characters may be added for special requirements**
V = Dry pack Option (selected 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)<br>B(4000) | A(6500), B(6000)<br>C(2300) |
| 0.68 | 684 | | | | | | | A(6000) | A(6000) | B(4000) |
| 1.0 | 105 | | | | R(9000) | A(6200) | A(3000), R(6000)<br>S(6000), T(2000) | A(4000)<br>R(2500,4000) | A(3000)<br>B(2000) | B(3000)<br>C(2500) |
| 1.5 | 155 | | | | | | A(3000) | A(3000)<br>B(1800) | A(3000)<br>B(2500) | C(1500,2000) |
| 2.2 | 225 | | | R(7000) | A(1800) | A(1800,3500)<br>T(2000) | A(3000), B(1700) | A(2500)<br>B(900,1200,2500) | A(1500), B(750,<br>1500,2000), C(1000) | C(1500)<br>D(1200) |
| 3.3 | 335 | | | A(2100) | T(1500) | A(3500), B(2500) | A(2500)<br>B(1300) | A(1000,1500)<br>B(750,1500,2000) | B(1000)<br>C(700) | C(1000)<br>D(800) |
| 4.7 | 475 | | | S(4000) | A(1400), B(1400)<br>R(3000,5000) | A(2000)<br>B(800,1500) | A(1800)<br>B(750,1000) | B(700,900,1500)<br>C(700) | B(700,1500)<br>C(600), D(700) | C(800)<br>D(300,500,700) |
| 6.8 | 685 | | | A(1800) | A(1800), B(1300)<br>T(1800) | A(1500)<br>B(600,1200) | A(1000)<br>B(600,1000)<br>C(700) | B(700)<br>C(500,600,700) | C(350)<br>D(150,400,500) | D(200, 300,<br>500,600) |
| 10 | 106 | | R(3000) | A(1500), B(1500)<br>R(1000,1500,3000)<br>T(1000) | A(900,1800), B(1000)<br>P(2000)(M), S(900)<br>T(1000,2000) | A(1000), B(500,800)<br>C(500), T(800,1000)<br>W(500,600) | B(500,1000)<br>C(500,700)<br>W(250, 500) | B(1800)<br>C(300,500)<br>D(500) | C(600)<br>D(125,300)<br>E(200), Y(250) | D(500)<br>E(250,300,<br>400,500) |
| 15 | 156 | | | A(700,1500) | A(1000)<br>B(450,600), C(700)<br>T(1200) | B(500,800), C(700) | B(500)<br>C(400,450) | C(220,300)<br>D(100,300) | C(350,450)<br>D(100,300)<br>Y(250) | E(250)<br>V(250) |
| 22 | 226 | | | A(500,900)<br>B(375,600)<br>C(500), S(900) | A(900)<br>B(400,500,700)<br>C(300), T(800) | B(400,600)<br>C(150,250,300,375)<br>D(700), W(500) | B(400,600)<br>C(100,150,400)<br>D(200,300) | C(275,400)<br>D(100,200,300) | D(125,200,300,400)<br>E(125,200,300)<br>Y(200) | |
| 33 | 336 | | | A(600)<br>B(250,350,450,600)<br>T(800) | A(700)<br>B(250,425,500,650)<br>C(150,375,500)<br>W(350) | B(350,500)<br>C(100,150,225,300)<br>D(200), W(140,175,<br>250,400,500)<br>Y(300,400) | C(300)<br>D(100,200) | D(100,200,300)<br>E(100,175,<br>200,300)<br>Y(200) | D(200,300)<br>E(100,250,300)<br>V(200) | |
| 47 | 476 | | A(500) | A(800)<br>B(250,350,500)<br>C(300), T(1200) | B(250,350,500,650)<br>C(200,350)<br>D(100,300)<br>W(125,150,250) | C(110,350)<br>D(80,100,150,200)<br>W(200)<br>X(180), Y(250) | D(75,100,200)<br>E(70,125,150,<br>200,250) | D(125,150,250)<br>E(80,100,125) | E(200,250)<br>V(150,200) | |
| 68 | 686 | | | B(250,350,500)<br>C(150,200)<br>W(110,125,250) | B(600)<br>C(80,100,200,300)<br>D(100,150), W(100,150)<br>Y(100,200) | C(125,200)<br>D(70,100,150)<br>F(200), X(150)<br>Y(150,200,250) | D(70,150,<br>200,300)<br>E(125,150,200) | E(125,200)<br>V(80,95,150,200) | V(150,200) | |
| 100 | 107 | B(200) | B(200,250,<br>350,500)<br>W(100) | B(250,400)<br>C(75,150), D(300)<br>W(100,150)<br>Y(100) | B(400)(M)<br>C(75,100,150,200)<br>D(50,65,80,100,125,<br>150), E(125) W(150)<br>X(85,150,200)<br>Y(100,150,200) | C(200)<br>D(60,100,125,150)<br>E(55,100,125,150)<br>F(150,200)(M)<br>Y(100,150,200) | D(85,100,150)<br>E(100,150,200)<br>V(60,85,100,200) | E(150)(M), V(100) | | |
| 150 | 157 | B(150) | B(250)<br>C(70,80) | C(50,90,150,200,250)<br>D(50,125),<br>Y(40,50) | C(150), D(50,85,100),<br>E(100), F(200), X(100)(M)<br>Y(100,150,200) | D(60,85,100,125,150)<br>E(100), V(45,75)<br>Y(200)(M) | V(80) | V(150)(M) | | |
| 220 | 227 | B(150,<br>200,600)<br>D(45) | D(40,50,100)<br>Y(40,50,75) | C(70,100,125,250)<br>D(50,100,125)<br>E(100), F(200)<br>Y(100,150) | D(40,50,100,150)<br>E(50,60,70,100,<br>125,150)<br>Y(100,150,200) | E(100,150)<br>V(50,75,100,150) | | | | |
| 330 | 337 | Y(40) | C(100)<br>D(35,45,100)<br>F(200)<br>X(100) | C(80,100)<br>D(45,50,70,100)<br>E(50,100,125,150)<br>V(100), Y(100,150) | D(50,65,100,150)<br>E(40,50,60,100)<br>V(40,60,100) | E(200)(M) | | | | |
| 470 | 477 | D(35)<br>F(200)<br>Y(100) | D(45,100)<br>E(35,45,100) | D(45,60,100,200)<br>E(45,50,60,100,200)<br>V(40,55,100), Y(150) | E(45,50,60,100,200)<br>V(40,60,100) | | | | | |
| 680 | 687 | D(35,50)<br>E(35,50)<br>Y(100) | D(45,60,100)<br>E(40,60,100) | E(45,60,100)<br>V(35,40,50) | | | | | | |
| 1000 | 108 | E(30,40)<br>Y(100)(M) | E(40,60)<br>V(25,35,40,50) | E(100)(M), V(40,50)(M) | | | | | | |
| 1500 | 158 | D(100)<br>E(50)<br>V(30,40)(M) | E(50,75)<br>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.

# TPS Series

## Low ESR

## 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[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 126.

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

# TPS Series

## Low ESR

## RATINGS & PART NUMBER REFERENCE

| AVX Part No. | Case Size | Capacitance (µF) | Rated Voltage (V) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @100kHz | MSL | 100kHz RMS Current (A) | | | 100kHz RMS Voltage (V) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 25°C | 85°C | 125°C | 25°C | 85°C | 125°C |
| **6.3 Volt @ 85°C (4 Volt @ 125°C)** | | | | | | | | | | | | | |
| TPSR225*006#7000 | R | 2.2 | 6.3 | 0.5 | 6 | 7000 | 1 | 0.089 | 0.080 | 0.035 | 0.620 | 0.558 | 0.248 |
| 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[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 126.

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

# TPS Series

## Low ESR

## 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) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 25ºC | 85ºC | 125ºC | 25ºC | 85ºC | 125ºC |
| 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 @ 85ºC (7 Volt @ 125ºC)** | | | | | | | | | | | | | |
| TPSR105*010#9000 | R | 1 | 10 | 0.5 | 4 | 9000 | 1 | 0.078 | 0.070 | 0.031 | 0.704 | 0.633 | 0.281 |
| TPSA225*010#1800 | A | 2.2 | 10 | 0.5 | 6 | 1800 | 1 | 0.204 | 0.184 | 0.082 | 0.367 | 0.331 | 0.147 |
| TPST335*010#1500 | T | 3.3 | 10 | 0.5 | 6 | 1500 | 1 | 0.231 | 0.208 | 0.092 | 0.346 | 0.312 | 0.139 |
| TPSA475*010#1400 | A | 4.7 | 10 | 0.5 | 6 | 1400 | 1 | 0.231 | 0.208 | 0.093 | 0.324 | 0.292 | 0.130 |
| 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 |
| TPSS106*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[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 126.

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

# TPS Series

## Low ESR

## 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[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 126.

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

# TPS Series

## Low ESR

### 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[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 126.

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

# TPS Series

## Low ESR

## 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) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 25ºC | 85ºC | 125ºC | 25ºC | 85ºC | 125ºC |
| 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 @ 85ºC (13 Volt @ 125ºC)** | | | | | | | | | | | | | |
| 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[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 126.

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

# TPS Series

## Low ESR

## 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 |
| 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 |
| 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 |
| 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 |

1[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 126.

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

# TPS Series

## Low ESR

## 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) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 25ºC | 85ºC | 125ºC | 25ºC | 85ºC | 125ºC |
| 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 |
| 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 @ 85ºC (23 Volt @ 125ºC)** | | | | | | | | | | | | | |
| 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 |
| 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 |

1[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 126.

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

# TPS Series

## Low ESR

## 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) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 25ºC | 85ºC | 125ºC | 25ºC | 85ºC | 125ºC |
| 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 @ 85ºC (33 Volt @ 125ºC)** | | | | | | | | | | | | | |
| 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[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 126.

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

# TPS Automotive Range

## Low ESR - Automotive Product Range

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

| Capacitance | | Rated Voltage DC ($V_R$) to 85°C | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 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) | |
| 22 | 226 | A(500,900), B(375,600), C(500) | A(900), B(400,500,700), C(300) | B(400,600), C(300,375), D(700) | C(400), D(200,300) | C(275,400), D(200,300) | D(200,300,400), E(200,300) | |
| 33 | 336 | A(600), B(250,350,450,600) | B(250,425,500,650), C(375,500) | C(225,300), D(200) | C(300), D(200) | D(200,300) | E(250,300) | |
| 47 | 476 | B(250,350,500), C(300) | B(250,350,500,650), C(200,350), D(300) | C(350), D(200) | D(200) | D(125,150,250), E(125) | | |
| 68 | 686 | B(250,350,500), C(150,200) | C(200,300), D(150) | C(200), D(150) | D(150,200,300), E(125,150,200) | | | |
| 100 | 107 | C(150), D(300) | C(150,200), D(100,125,150) | D(100,125,150), E(100,125,150) | E(100,150,200) | | | |
| 150 | 157 | C(150,200,250), D(125) | D(85,100), E(100) | E(100) | | | | |
| 220 | 227 | D(100,125) | D(100,150), E(70,100,125,150) | | | | | |
| 330 | 337 | D(70,100), E(100,125,150) | E(50,60,100) | | | | | |
| 470 | 477 | D(45,60,100,200), E(45,50,60,100,200) | | | | | | |
| 680 | 687 | E(45,60,100) | | | | | | |

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

Released codes

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

### HOW TO ORDER

**TPS** **C** **107** **M** **010** **T** **0150**

**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**
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 mΩ**

### 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: | ±10%; ±20% | | | | | | | |
| Rated Voltage ($V_R$) | ≤ +85°C: | 6.3 | 10 | 16 | 20 | 25 | 35 | 50 |
| Category Voltage ($V_C$) | ≤ +125°C: | 4 | 7 | 10 | 13 | 17 | 23 | 33 |
| Surge Voltage ($V_S$) | ≤ +85°C: | 8 | 13 | 20 | 26 | 32 | 46 | 65 |
| Surge Voltage ($V_S$) | ≤ +125°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 0.1Ω/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) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 25ºC | 85ºC | 125ºC | 25ºC | 85ºC | 125ºC |
| **6.3 Volt @ 85ºC (4 Volt @ 125ºC)** | | | | | | | | | | | | | |
| 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*006T0300 | D | 100 | 6.3 | 6.3 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSC157*006T0150 | C | 150 | 6.3 | 9.5 | 6 | 150 | 1 | 0.856 | 0.771 | 0.343 | 0.128 | 0.116 | 0.051 |
| TPSC157*006T0200 | C | 150 | 6.3 | 9.5 | 6 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 |
| TPSC157*006T0250 | C | 150 | 6.3 | 9.5 | 6 | 250 | 1 | 0.663 | 0.597 | 0.265 | 0.166 | 0.149 | 0.066 |
| TPSD157*006T0125 | D | 150 | 6.3 | 9.5 | 6 | 125 | 3 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD227*006T0100 | D | 220 | 6.3 | 13.9 | 8 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD227*006T0125 | D | 220 | 6.3 | 13.9 | 8 | 125 | 3 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD337*006T0070 | D | 330 | 6.3 | 20.8 | 8 | 70 | 3 | 1.464 | 1.317 | 0.586 | 0.102 | 0.092 | 0.041 |
| TPSD337*006T0100 | D | 330 | 6.3 | 20.8 | 8 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSE337*006T0100 | E | 330 | 6.3 | 20.8 | 8 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE337*006T0125 | E | 330 | 6.3 | 20.8 | 8 | 125 | 3 | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE337*006T0150 | E | 330 | 6.3 | 20.8 | 8 | 150 | 3 | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSD477*006T0045 | D | 470 | 6.3 | 28 | 12 | 45 | 3 | 1.826 | 1.643 | 0.730 | 0.082 | 0.074 | 0.033 |
| TPSD477*006T0060 | D | 470 | 6.3 | 28 | 12 | 60 | 3 | 1.581 | 1.423 | 0.632 | 0.095 | 0.085 | 0.038 |
| TPSD477*006T0100 | D | 470 | 6.3 | 28 | 12 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD477*006T0200 | D | 470 | 6.3 | 28 | 12 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSE477*006T0045 | E | 470 | 6.3 | 28 | 10 | 45 | 3 | 1.915 | 1.723 | 0.766 | 0.086 | 0.078 | 0.034 |
| TPSE477*006T0050 | E | 470 | 6.3 | 28 | 10 | 50 | 3 | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSE477*006T0060 | E | 470 | 6.3 | 28 | 10 | 60 | 3 | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE477*006T0100 | E | 470 | 6.3 | 28 | 10 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE477*006T0200 | E | 470 | 6.3 | 28 | 10 | 200 | 3 | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSE687*006T0045 | E | 680 | 6.3 | 42.8 | 10 | 45 | 3 | 1.915 | 1.723 | 0.766 | 0.086 | 0.078 | 0.034 |
| TPSE687*006T0060 | E | 680 | 6.3 | 42.8 | 10 | 60 | 3 | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE687*006T0100 | E | 680 | 6.3 | 42.8 | 10 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| **10 Volt @ 85ºC (7 Volt @ 125ºC)** | | | | | | | | | | | | | |
| 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 |

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

*Please use "U" instead of "T" in the suffix letter for 13'' reel packaging

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

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

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

For typical weight and composition see page 126.

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

# TPS Automotive Range

## Low ESR - Automotive Product Range

### RATINGS & PART NUMBER REFERENCE

| AVX Part No.* | Case Size | Capacitance (µF) | Rated Voltage (V) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @100kHz | MSL | 100kHz RMS Current (A) | | | 100kHz RMS Voltage (V) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 25ºC | 85ºC | 125ºC | 25ºC | 85ºC | 125ºC |
| TPSC226*010T0300 | C | 22 | 10 | 2.2 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPSB336*010T0250 | B | 33 | 10 | 3.3 | 6 | 250 | 1 | 0.583 | 0.525 | 0.233 | 0.146 | 0.131 | 0.058 |
| TPSB336*010T0425 | B | 33 | 10 | 3.3 | 6 | 425 | 1 | 0.447 | 0.402 | 0.179 | 0.190 | 0.171 | 0.076 |
| TPSB336*010T0500 | B | 33 | 10 | 3.3 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB336*010T0650 | B | 33 | 10 | 3.3 | 6 | 650 | 1 | 0.362 | 0.325 | 0.145 | 0.235 | 0.212 | 0.094 |
| TPSC336*010T0375 | C | 33 | 10 | 3.3 | 6 | 375 | 1 | 0.542 | 0.487 | 0.217 | 0.203 | 0.183 | 0.081 |
| TPSC336*010T0500 | C | 33 | 10 | 3.3 | 6 | 500 | 1 | 0.469 | 0.422 | 0.188 | 0.235 | 0.211 | 0.094 |
| TPSB476*010T0250 | B | 47 | 10 | 4.7 | 8 | 250 | 1 | 0.583 | 0.525 | 0.233 | 0.146 | 0.131 | 0.058 |
| TPSB476*010T0350 | B | 47 | 10 | 4.7 | 8 | 350 | 1 | 0.493 | 0.444 | 0.197 | 0.172 | 0.155 | 0.069 |
| TPSB476*010T0500 | B | 47 | 10 | 4.7 | 8 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB476*010T0650 | B | 47 | 10 | 4.7 | 8 | 650 | 1 | 0.362 | 0.325 | 0.145 | 0.235 | 0.212 | 0.094 |
| TPSC476*010T0200 | C | 47 | 10 | 4.7 | 6 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 |
| TPSC476*010T0350 | C | 47 | 10 | 4.7 | 6 | 350 | 1 | 0.561 | 0.505 | 0.224 | 0.196 | 0.177 | 0.078 |
| TPSD476*010T0300 | D | 47 | 10 | 4.7 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSC686*010T0200 | C | 68 | 10 | 6.8 | 6 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 |
| TPSC686*010T0300 | C | 68 | 10 | 6.8 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPSD686*010T0150 | D | 68 | 10 | 6.8 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSC107*010T0150 | C | 100 | 10 | 10 | 8 | 150 | 1 | 0.856 | 0.771 | 0.343 | 0.128 | 0.116 | 0.051 |
| TPSC107*010T0200 | C | 100 | 10 | 10 | 8 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 |
| TPSD107*010T0100 | D | 100 | 10 | 10 | 6 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD107*010T0125 | D | 100 | 10 | 10 | 6 | 125 | 3 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD107*010T0150 | D | 100 | 10 | 10 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSD157*010T0085 | D | 150 | 10 | 15 | 8 | 85 | 3 | 1.328 | 1.196 | 0.531 | 0.113 | 0.102 | 0.045 |
| TPSD157*010T0100 | D | 150 | 10 | 15 | 8 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSE157*010T0100 | E | 150 | 10 | 15 | 8 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSD227*010T0100 | D | 220 | 10 | 22 | 8 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD227*010T0150 | D | 220 | 10 | 22 | 8 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSE227*010T0070 | E | 220 | 10 | 22 | 8 | 70 | 3 | 1.535 | 1.382 | 0.614 | 0.107 | 0.097 | 0.043 |
| TPSE227*010T0100 | E | 220 | 10 | 22 | 8 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE227*010T0125 | E | 220 | 10 | 22 | 8 | 125 | 3 | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE227*010T0150 | E | 220 | 10 | 22 | 8 | 150 | 3 | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE337*010T0050 | E | 330 | 10 | 33 | 8 | 50 | 3 | 1.817 | 1.635 | 0.727 | 0.091 | 0.082 | 0.036 |
| TPSE337*010T0060 | E | 330 | 10 | 33 | 8 | 60 | 3 | 1.658 | 1.492 | 0.663 | 0.099 | 0.090 | 0.040 |
| TPSE337*010T0100 | E | 330 | 10 | 33 | 8 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| **16 Volt @ 85ºC (10 Volt @ 25ºC)** | | | | | | | | | | | | | |
| TPSA105*016T6200 | A | 1.0 | 16 | 0.5 | 4 | 6200 | 1 | 0.110 | 0.099 | 0.044 | 0.682 | 0.614 | 0.273 |
| TPSA225*016T1800 | A | 2.2 | 16 | 0.5 | 6 | 1800 | 1 | 0.204 | 0.184 | 0.082 | 0.367 | 0.331 | 0.147 |
| TPSA225*016T3500 | A | 2.2 | 16 | 0.5 | 6 | 3500 | 1 | 0.146 | 0.132 | 0.059 | 0.512 | 0.461 | 0.205 |
| TPSA335*016T3500 | A | 3.3 | 16 | 0.5 | 6 | 3500 | 1 | 0.146 | 0.132 | 0.059 | 0.512 | 0.461 | 0.205 |
| TPSB335*016T2500 | B | 3.3 | 16 | 0.5 | 6 | 2500 | 1 | 0.184 | 0.166 | 0.074 | 0.461 | 0.415 | 0.184 |
| TPSA475*016T2000 | A | 4.7 | 16 | 0.8 | 6 | 2000 | 1 | 0.194 | 0.174 | 0.077 | 0.387 | 0.349 | 0.155 |
| TPSB475*016T0800 | B | 4.7 | 16 | 0.8 | 6 | 800 | 1 | 0.326 | 0.293 | 0.130 | 0.261 | 0.235 | 0.104 |
| TPSB475*016T1500 | B | 4.7 | 16 | 0.8 | 6 | 1500 | 1 | 0.238 | 0.214 | 0.095 | 0.357 | 0.321 | 0.143 |
| TPSA685*016T1500 | A | 6.8 | 16 | 1.1 | 6 | 1500 | 1 | 0.224 | 0.201 | 0.089 | 0.335 | 0.302 | 0.134 |
| TPSB685*016T0600 | B | 6.8 | 16 | 1.1 | 6 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 |
| TPSB685*016T1200 | B | 6.8 | 16 | 1.1 | 6 | 1200 | 1 | 0.266 | 0.240 | 0.106 | 0.319 | 0.287 | 0.128 |
| TPSA106*016T1000 | A | 10 | 16 | 1.6 | 6 | 1000 | 1 | 0.274 | 0.246 | 0.110 | 0.274 | 0.246 | 0.110 |
| TPSB106*016T0500 | B | 10 | 16 | 1.6 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB106*016T0800 | B | 10 | 16 | 1.6 | 6 | 800 | 1 | 0.326 | 0.293 | 0.130 | 0.261 | 0.235 | 0.104 |
| TPSC106*016T0500 | C | 10 | 16 | 1.6 | 6 | 500 | 1 | 0.469 | 0.422 | 0.188 | 0.235 | 0.211 | 0.094 |
| TPSB156*016T0500 | B | 15 | 16 | 2.4 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB156*016T0800 | B | 15 | 16 | 2.4 | 6 | 800 | 1 | 0.326 | 0.293 | 0.130 | 0.261 | 0.235 | 0.104 |
| TPSC156*016T0700 | C | 15 | 16 | 2.4 | 6 | 700 | 1 | 0.396 | 0.357 | 0.159 | 0.277 | 0.250 | 0.111 |
| TPSB226*016T0400 | B | 22 | 16 | 3.5 | 6 | 400 | 1 | 0.461 | 0.415 | 0.184 | 0.184 | 0.166 | 0.074 |
| TPSB226*016T0600 | B | 22 | 16 | 3.5 | 6 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 |
| TPSC226*016T0300 | C | 22 | 16 | 3.5 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPSC226*016T0375 | C | 22 | 16 | 3.5 | 6 | 375 | 1 | 0.542 | 0.487 | 0.217 | 0.203 | 0.183 | 0.081 |
| TPSD226*016T0700 | D | 22 | 16 | 3.5 | 6 | 700 | 3 | 0.463 | 0.417 | 0.185 | 0.324 | 0.292 | 0.130 |
| TPSC336*016T0225 | C | 33 | 16 | 5.3 | 6 | 225 | 1 | 0.699 | 0.629 | 0.280 | 0.157 | 0.142 | 0.063 |
| TPSC336*016T0300 | C | 33 | 16 | 5.3 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPSD336*016T0200 | D | 33 | 16 | 5.3 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSC476*016T0350 | C | 47 | 16 | 7.5 | 6 | 350 | 1 | 0.561 | 0.505 | 0.224 | 0.196 | 0.177 | 0.078 |
| TPSD476*016T0200 | D | 47 | 16 | 7.5 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSC686*016T0200 | C | 68 | 16 | 10.9 | 6 | 200 | 1 | 0.742 | 0.667 | 0.297 | 0.148 | 0.133 | 0.059 |
| TPSD686*016T0150 | D | 68 | 16 | 10.9 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSD107*016T0100 | D | 100 | 16 | 16 | 6 | 100 | 3 | 1.225 | 1.102 | 0.490 | 0.122 | 0.110 | 0.049 |
| TPSD107*016T0125 | D | 100 | 16 | 16 | 6 | 125 | 3 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |

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

*Please use "U" instead of "T" in the suffix letter for 13'' reel packaging

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

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

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

For typical weight and composition see page 126.

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

# TPS Automotive Range

## Low ESR - Automotive Product Range

### RATINGS & PART NUMBER REFERENCE

| AVX Part No.* | Case Size | Capacitance (µF) | Rated Voltage (V) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @100kHz | MSL | 100kHz RMS Current (A) | | | 100kHz RMS Voltage (V) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 25ºC | 85ºC | 125ºC | 25ºC | 85ºC | 125ºC |
| TPSD107*016T0150 | D | 100 | 16 | 16 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSE107*016T0100 | E | 100 | 16 | 16 | 6 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE107*016T0125 | E | 100 | 16 | 16 | 6 | 125 | 3 | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE107*016T0150 | E | 100 | 16 | 16 | 6 | 150 | 3 | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE157*016T0100 | E | 150 | 16 | 23 | 8 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| **20 Volt @ 85ºC (13 Volt @ 125ºC)** | | | | | | | | | | | | | |
| TPSA105*020T3000 | A | 1 | 20 | 0.5 | 4 | 3000 | 1 | 0.158 | 0.142 | 0.063 | 0.474 | 0.427 | 0.190 |
| TPSA155*020T3000 | A | 1.5 | 20 | 0.5 | 6 | 3000 | 1 | 0.158 | 0.142 | 0.063 | 0.474 | 0.427 | 0.190 |
| TPSA225*020T3000 | A | 2.2 | 20 | 0.5 | 6 | 3000 | 1 | 0.158 | 0.142 | 0.063 | 0.474 | 0.427 | 0.190 |
| TPSB225*020T1700 | B | 2.2 | 20 | 0.5 | 6 | 1700 | 1 | 0.224 | 0.201 | 0.089 | 0.380 | 0.342 | 0.152 |
| TPSA335*020T2500 | A | 3.3 | 20 | 0.7 | 6 | 2500 | 1 | 0.173 | 0.156 | 0.069 | 0.433 | 0.390 | 0.173 |
| TPSB335*020T1300 | B | 3.3 | 20 | 0.7 | 6 | 1300 | 1 | 0.256 | 0.230 | 0.102 | 0.332 | 0.299 | 0.133 |
| TPSA475*020T1800 | A | 4.7 | 20 | 0.9 | 6 | 1800 | 1 | 0.204 | 0.184 | 0.082 | 0.367 | 0.331 | 0.147 |
| TPSB475*020T0750 | B | 4.7 | 20 | 0.9 | 6 | 750 | 1 | 0.337 | 0.303 | 0.135 | 0.252 | 0.227 | 0.101 |
| TPSB475*020T1000 | B | 4.7 | 20 | 0.9 | 6 | 1000 | 1 | 0.292 | 0.262 | 0.117 | 0.292 | 0.262 | 0.117 |
| TPSB685*020T0600 | B | 6.8 | 20 | 1.4 | 6 | 600 | 1 | 0.376 | 0.339 | 0.151 | 0.226 | 0.203 | 0.090 |
| TPSB685*020T1000 | B | 6.8 | 20 | 1.4 | 6 | 1000 | 1 | 0.292 | 0.262 | 0.117 | 0.292 | 0.262 | 0.117 |
| TPSC685*020T0700 | C | 6.8 | 20 | 1.4 | 6 | 700 | 1 | 0.396 | 0.357 | 0.159 | 0.277 | 0.250 | 0.111 |
| TPSB106*020T0500 | B | 10 | 20 | 2 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSB106*020T1000 | B | 10 | 20 | 2 | 6 | 1000 | 1 | 0.292 | 0.262 | 0.117 | 0.292 | 0.262 | 0.117 |
| TPSC106*020T0500 | C | 10 | 20 | 2 | 6 | 500 | 1 | 0.469 | 0.422 | 0.188 | 0.235 | 0.211 | 0.094 |
| TPSC106*020T0700 | C | 10 | 20 | 2 | 6 | 700 | 1 | 0.396 | 0.357 | 0.159 | 0.277 | 0.250 | 0.111 |
| TPSB156*020T0500 | B | 15 | 20 | 3 | 6 | 500 | 1 | 0.412 | 0.371 | 0.165 | 0.206 | 0.186 | 0.082 |
| TPSC156*020T0400 | C | 15 | 20 | 3 | 6 | 400 | 1 | 0.524 | 0.472 | 0.210 | 0.210 | 0.189 | 0.084 |
| TPSC156*020T0450 | C | 15 | 20 | 3 | 6 | 450 | 1 | 0.494 | 0.445 | 0.198 | 0.222 | 0.200 | 0.089 |
| TPSC226*020T0400 | C | 22 | 20 | 4.4 | 6 | 400 | 1 | 0.524 | 0.472 | 0.210 | 0.210 | 0.189 | 0.084 |
| TPSD226*020T0200 | D | 22 | 20 | 4.4 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD226*020T0300 | D | 22 | 20 | 4.4 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSC336*020T0300 | C | 33 | 20 | 6.6 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPSD336*020T0200 | D | 33 | 20 | 6.6 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD476*020T0200 | D | 47 | 20 | 9.4 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD686*020T0150 | D | 68 | 20 | 13.6 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSD686*020T0200 | D | 68 | 20 | 13.6 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD686*020T0300 | D | 68 | 20 | 13.6 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSE686*020T0125 | E | 68 | 20 | 13.6 | 6 | 125 | 3 | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| TPSE686*020T0150 | E | 68 | 20 | 13.6 | 6 | 150 | 3 | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE686*020T0200 | E | 68 | 20 | 13.6 | 6 | 200 | 3 | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSE107*020T0100 | E | 100 | 20 | 20 | 6 | 100 | 3 | 1.285 | 1.156 | 0.514 | 0.128 | 0.116 | 0.051 |
| TPSE107*020T0150 | E | 100 | 20 | 20 | 6 | 150 | 3 | 1.049 | 0.944 | 0.420 | 0.157 | 0.142 | 0.063 |
| TPSE107*020T0200 | E | 100 | 20 | 20 | 6 | 200 | 3 | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| **25 Volt @ 85ºC (17 Volt @ 125ºC)** | | | | | | | | | | | | | |
| TPSA474*025T7000 | A | 0.47 | 25 | 0.5 | 4 | 7000 | 1 | 0.104 | 0.093 | 0.041 | 0.725 | 0.652 | 0.290 |
| TPSA684*025T6000 | A | 0.68 | 25 | 0.5 | 4 | 6000 | 1 | 0.112 | 0.101 | 0.045 | 0.671 | 0.604 | 0.268 |
| TPSA105*025T4000 | A | 1.0 | 25 | 0.5 | 4 | 4000 | 1 | 0.137 | 0.123 | 0.055 | 0.548 | 0.493 | 0.219 |
| TPSA155*025T3000 | A | 1.5 | 25 | 0.5 | 6 | 3000 | 1 | 0.158 | 0.142 | 0.063 | 0.474 | 0.427 | 0.190 |
| TPSA225*025T2500 | A | 2.2 | 25 | 0.6 | 6 | 2500 | 1 | 0.173 | 0.156 | 0.069 | 0.433 | 0.390 | 0.173 |
| TPSB225*025T0900 | B | 2.2 | 25 | 0.6 | 6 | 900 | 1 | 0.307 | 0.277 | 0.123 | 0.277 | 0.249 | 0.111 |
| TPSB225*025T1200 | B | 2.2 | 25 | 0.6 | 6 | 1200 | 1 | 0.266 | 0.240 | 0.106 | 0.319 | 0.287 | 0.128 |
| TPSB225*025T2500 | B | 2.2 | 25 | 0.6 | 6 | 2500 | 1 | 0.184 | 0.166 | 0.074 | 0.461 | 0.415 | 0.184 |
| TPSB335*025T0750 | B | 3.3 | 25 | 0.8 | 6 | 750 | 1 | 0.337 | 0.303 | 0.135 | 0.252 | 0.227 | 0.101 |
| TPSB335*025T1500 | B | 3.3 | 25 | 0.8 | 6 | 1500 | 1 | 0.238 | 0.214 | 0.095 | 0.357 | 0.321 | 0.143 |
| TPSB335*025T2000 | B | 3.3 | 25 | 0.8 | 6 | 2000 | 1 | 0.206 | 0.186 | 0.082 | 0.412 | 0.371 | 0.165 |
| TPSB475*025T0700 | B | 4.7 | 25 | 1.2 | 6 | 700 | 1 | 0.348 | 0.314 | 0.139 | 0.244 | 0.220 | 0.098 |
| TPSB475*025T0900 | B | 4.7 | 25 | 1.2 | 6 | 900 | 1 | 0.307 | 0.277 | 0.123 | 0.277 | 0.249 | 0.111 |
| TPSC475*025T0700 | C | 4.7 | 25 | 1.2 | 6 | 700 | 1 | 0.396 | 0.357 | 0.159 | 0.277 | 0.250 | 0.111 |
| TPSB685*025T0700 | B | 6.8 | 25 | 1.7 | 6 | 700 | 1 | 0.348 | 0.314 | 0.139 | 0.244 | 0.220 | 0.098 |
| TPSC685*025T0500 | C | 6.8 | 25 | 1.7 | 6 | 500 | 1 | 0.469 | 0.422 | 0.188 | 0.235 | 0.211 | 0.094 |
| TPSC685*025T0600 | C | 6.8 | 25 | 1.7 | 6 | 600 | 1 | 0.428 | 0.385 | 0.171 | 0.257 | 0.231 | 0.103 |
| TPSC685*025T0700 | C | 6.8 | 25 | 1.7 | 6 | 700 | 1 | 0.396 | 0.357 | 0.159 | 0.277 | 0.250 | 0.111 |
| TPSC106*025T0300 | C | 10 | 25 | 2.5 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPSC106*025T0500 | C | 10 | 25 | 2.5 | 6 | 500 | 1 | 0.469 | 0.422 | 0.188 | 0.235 | 0.211 | 0.094 |
| TPSD106*025T0500 | D | 10 | 25 | 2.5 | 6 | 500 | 3 | 0.548 | 0.493 | 0.219 | 0.274 | 0.246 | 0.110 |
| TPSC156*025T0220 | C | 15 | 25 | 3.8 | 6 | 220 | 1 | 0.707 | 0.636 | 0.283 | 0.156 | 0.140 | 0.062 |
| TPSC156*025T0300 | C | 15 | 25 | 3.8 | 6 | 300 | 1 | 0.606 | 0.545 | 0.242 | 0.182 | 0.163 | 0.073 |
| TPSD156*025T0300 | D | 15 | 25 | 3.8 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSC226*025T0275 | C | 22 | 25 | 5.5 | 6 | 275 | 1 | 0.632 | 0.569 | 0.253 | 0.174 | 0.157 | 0.070 |
| TPSC226*025T0400 | C | 22 | 25 | 5.5 | 6 | 400 | 1 | 0.524 | 0.472 | 0.210 | 0.210 | 0.189 | 0.084 |

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

*Please use "U" instead of "T" in the suffix letter for 13'' reel packaging

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

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

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

For typical weight and composition see page 126.

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

# TPS Automotive Range

## Low ESR - Automotive Product Range

### RATINGS & PART NUMBER REFERENCE

| AVX Part No.* | Case Size | Capacitance (µF) | Rated Voltage (V) | DCL (µA) Max. | DF % Max. | ESR Max. (mΩ) @100kHz | MSL | 100kHz RMS Current (A) | | | 100kHz RMS Voltage (V) | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 25ºC | 85ºC | 125ºC | 25ºC | 85ºC | 125ºC |
| TPSD226*025T0200 | D | 22 | 25 | 5.5 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD226*025T0300 | D | 22 | 25 | 5.5 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSD336*025T0200 | D | 33 | 25 | 8.3 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD336*025T0300 | D | 33 | 25 | 8.3 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSD476*025T0125 | D | 47 | 25 | 11.8 | 6 | 125 | 3 | 1.095 | 0.986 | 0.438 | 0.137 | 0.123 | 0.055 |
| TPSD476*025T0150 | D | 47 | 25 | 11.8 | 6 | 150 | 3 | 1.000 | 0.900 | 0.400 | 0.150 | 0.135 | 0.060 |
| TPSD476*025T0250 | D | 47 | 25 | 11.8 | 6 | 250 | 3 | 0.775 | 0.697 | 0.310 | 0.194 | 0.174 | 0.077 |
| TPSE476*025T0125 | E | 47 | 25 | 11.8 | 6 | 125 | 3 | 1.149 | 1.034 | 0.460 | 0.144 | 0.129 | 0.057 |
| **35 Volt @ 85ºC (23 Volt @ 125ºC)** | | | | | | | | | | | | | |
| TPSA334*035T6000 | A | 0.33 | 35 | 0.5 | 4 | 6000 | 1 | 0.112 | 0.101 | 0.045 | 0.671 | 0.604 | 0.268 |
| TPSA474*035T6000 | A | 0.47 | 35 | 0.5 | 4 | 6000 | 1 | 0.112 | 0.101 | 0.045 | 0.671 | 0.604 | 0.268 |
| TPSA684*035T6000 | A | 0.68 | 35 | 0.5 | 4 | 6000 | 1 | 0.112 | 0.101 | 0.045 | 0.671 | 0.604 | 0.268 |
| TPSA105*035T3000 | A | 1 | 35 | 0.5 | 4 | 3000 | 1 | 0.158 | 0.142 | 0.063 | 0.474 | 0.427 | 0.190 |
| TPSB105*035T2000 | B | 1 | 35 | 0.5 | 4 | 2000 | 1 | 0.206 | 0.186 | 0.082 | 0.412 | 0.371 | 0.165 |
| TPSA155*035T3000 | A | 1.5 | 35 | 0.5 | 6 | 3000 | 1 | 0.158 | 0.142 | 0.063 | 0.474 | 0.427 | 0.190 |
| TPSB155*035T2500 | B | 1.5 | 35 | 0.5 | 6 | 2500 | 1 | 0.184 | 0.166 | 0.074 | 0.461 | 0.415 | 0.184 |
| TPSB225*035T0750 | B | 2.2 | 35 | 0.8 | 6 | 750 | 1 | 0.337 | 0.303 | 0.135 | 0.252 | 0.227 | 0.101 |
| TPSB225*035T1500 | B | 2.2 | 35 | 0.8 | 6 | 1500 | 1 | 0.238 | 0.214 | 0.095 | 0.357 | 0.321 | 0.143 |
| TPSB225*035T2000 | B | 2.2 | 35 | 0.8 | 6 | 2000 | 1 | 0.206 | 0.186 | 0.082 | 0.412 | 0.371 | 0.165 |
| TPSC225*035T1000 | C | 2.2 | 35 | 0.8 | 6 | 1000 | 1 | 0.332 | 0.298 | 0.133 | 0.332 | 0.298 | 0.133 |
| TPSB335*035T1000 | B | 3.3 | 35 | 1.2 | 6 | 1000 | 1 | 0.292 | 0.262 | 0.117 | 0.292 | 0.262 | 0.117 |
| TPSC335*035T0700 | C | 3.3 | 35 | 1.2 | 6 | 700 | 1 | 0.396 | 0.357 | 0.159 | 0.277 | 0.250 | 0.111 |
| TPSB475*035T0700 | B | 4.7 | 35 | 1.6 | 6 | 700 | 1 | 0.348 | 0.314 | 0.139 | 0.244 | 0.220 | 0.098 |
| TPSB475*035T1500 | B | 4.7 | 35 | 1.6 | 6 | 1500 | 1 | 0.238 | 0.214 | 0.095 | 0.357 | 0.321 | 0.143 |
| TPSC475*035T0600 | C | 4.7 | 35 | 1.6 | 6 | 600 | 1 | 0.428 | 0.385 | 0.171 | 0.257 | 0.231 | 0.103 |
| TPSD475*035T0700 | D | 4.7 | 35 | 1.6 | 6 | 700 | 3 | 0.463 | 0.417 | 0.185 | 0.324 | 0.292 | 0.130 |
| TPSC685*035T0350 | C | 6.8 | 35 | 2.4 | 6 | 350 | 1 | 0.561 | 0.505 | 0.224 | 0.196 | 0.177 | 0.078 |
| TPSD685*035T0400 | D | 6.8 | 35 | 2.4 | 6 | 400 | 3 | 0.612 | 0.551 | 0.245 | 0.245 | 0.220 | 0.098 |
| TPSD685*035T0500 | D | 6.8 | 35 | 2.4 | 6 | 500 | 3 | 0.548 | 0.493 | 0.219 | 0.274 | 0.246 | 0.110 |
| TPSC106*035T0600 | C | 10 | 35 | 3.5 | 6 | 600 | 1 | 0.428 | 0.385 | 0.171 | 0.257 | 0.231 | 0.103 |
| TPSD106*035T0300 | D | 10 | 35 | 3.5 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSD156*035T0300 | D | 15 | 35 | 5.3 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSD226*035T0200 | D | 22 | 35 | 7.7 | 6 | 200 | 3 | 0.866 | 0.779 | 0.346 | 0.173 | 0.156 | 0.069 |
| TPSD226*035T0300 | D | 22 | 35 | 7.7 | 6 | 300 | 3 | 0.707 | 0.636 | 0.283 | 0.212 | 0.191 | 0.085 |
| TPSD226*035T0400 | D | 22 | 35 | 7.7 | 6 | 400 | 3 | 0.612 | 0.551 | 0.245 | 0.245 | 0.220 | 0.098 |
| TPSE226*035T0200 | E | 22 | 35 | 7.7 | 6 | 200 | 3 | 0.908 | 0.817 | 0.363 | 0.182 | 0.163 | 0.073 |
| TPSE226*035T0300 | E | 22 | 35 | 7.7 | 6 | 300 | 3 | 0.742 | 0.667 | 0.297 | 0.222 | 0.200 | 0.089 |
| TPSE336*035T0250 | E | 33 | 35 | 11.6 | 6 | 250 | 3 | 0.812 | 0.731 | 0.325 | 0.203 | 0.183 | 0.081 |
| TPSE336*035T0300 | E | 33 | 35 | 11.6 | 6 | 300 | 3 | 0.742 | 0.667 | 0.297 | 0.222 | 0.200 | 0.089 |
| **50 Volt @ 85ºC (33 Volt @ 125ºC)** | | | | | | | | | | | | | |
| TPSA224*050T7000 | A | 0.22 | 50 | 0.5 | 4 | 7000 | 1 | 0.104 | 0.093 | 0.041 | 0.725 | 0.652 | 0.290 |
| TPSA334*050T7000 | A | 0.33 | 50 | 0.5 | 4 | 7000 | 1 | 0.104 | 0.093 | 0.041 | 0.725 | 0.652 | 0.290 |
| TPSA474*050T6500 | A | 0.47 | 50 | 0.5 | 4 | 6500 | 1 | 0.107 | 0.097 | 0.043 | 0.698 | 0.628 | 0.279 |
| TPSB474*050T6000 | B | 0.47 | 50 | 0.5 | 4 | 6000 | 1 | 0.119 | 0.107 | 0.048 | 0.714 | 0.643 | 0.286 |
| TPSB684*050T4000 | B | 0.68 | 50 | 0.5 | 4 | 4000 | 1 | 0.146 | 0.131 | 0.058 | 0.583 | 0.525 | 0.233 |
| TPSB105*050T3000 | B | 1 | 50 | 0.5 | 6 | 3000 | 1 | 0.168 | 0.151 | 0.067 | 0.505 | 0.454 | 0.202 |
| TPSC105*050T2500 | C | 1 | 50 | 0.5 | 4 | 2500 | 1 | 0.210 | 0.189 | 0.084 | 0.524 | 0.472 | 0.210 |
| TPSC155*050T1500 | C | 1.5 | 50 | 0.8 | 6 | 1500 | 1 | 0.271 | 0.244 | 0.108 | 0.406 | 0.366 | 0.162 |
| TPSC155*050T2000 | C | 1.5 | 50 | 0.8 | 6 | 2000 | 1 | 0.235 | 0.211 | 0.094 | 0.469 | 0.422 | 0.188 |
| TPSC225*050T1500 | C | 2.2 | 50 | 1.1 | 8 | 1500 | 1 | 0.271 | 0.244 | 0.108 | 0.406 | 0.366 | 0.162 |
| TPSD225*050T1200 | D | 2.2 | 50 | 1.1 | 6 | 1200 | 3 | 0.354 | 0.318 | 0.141 | 0.424 | 0.382 | 0.170 |
| TPSC335*050T1000 | C | 3.3 | 50 | 1.6 | 6 | 1000 | 1 | 0.332 | 0.298 | 0.133 | 0.332 | 0.298 | 0.133 |
| TPSD335*050T0800 | D | 3.3 | 50 | 1.7 | 6 | 800 | 3 | 0.433 | 0.390 | 0.173 | 0.346 | 0.312 | 0.139 |
| TPSC475*050T0800 | C | 4.7 | 50 | 2.4 | 6 | 800 | 1 | 0.371 | 0.334 | 0.148 | 0.297 | 0.267 | 0.119 |
| TPSD475*050T0500 | D | 4.7 | 50 | 2.4 | 6 | 500 | 3 | 0.548 | 0.493 | 0.219 | 0.274 | 0.246 | 0.110 |
| TPSD475*050T0700 | D | 4.7 | 50 | 2.4 | 6 | 700 | 3 | 0.463 | 0.417 | 0.185 | 0.324 | 0.292 | 0.130 |
| TPSD685*050T0500 | D | 6.8 | 50 | 3.4 | 6 | 500 | 3 | 0.548 | 0.493 | 0.219 | 0.274 | 0.246 | 0.110 |
| TPSD685*050T0600 | D | 6.8 | 50 | 3.4 | 6 | 600 | 3 | 0.500 | 0.450 | 0.200 | 0.300 | 0.270 | 0.120 |
| TPSD106*050T0500 | D | 10 | 50 | 5 | 6 | 500 | 3 | 0.548 | 0.493 | 0.219 | 0.274 | 0.246 | 0.110 |
| TPSE106*050T0250 | E | 10 | 50 | 5 | 6 | 250 | 3 | 0.812 | 0.731 | 0.325 | 0.203 | 0.183 | 0.081 |
| TPSE106*050T0300 | E | 10 | 50 | 5 | 6 | 300 | 3 | 0.742 | 0.667 | 0.297 | 0.222 | 0.200 | 0.089 |
| TPSE106*050T0400 | E | 10 | 50 | 5 | 6 | 400 | 3 | 0.642 | 0.578 | 0.257 | 0.257 | 0.231 | 0.103 |
| TPSE106*050T0500 | E | 10 | 50 | 5 | 6 | 500 | 3 | 0.574 | 0.517 | 0.230 | 0.287 | 0.259 | 0.115 |

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

*Please use "U" instead of "T" in the suffix letter for 13'' reel packaging

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

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

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

For typical weight and composition see page 126.

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

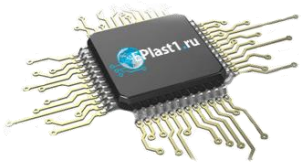
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

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

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

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




**Как с нами связаться**

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