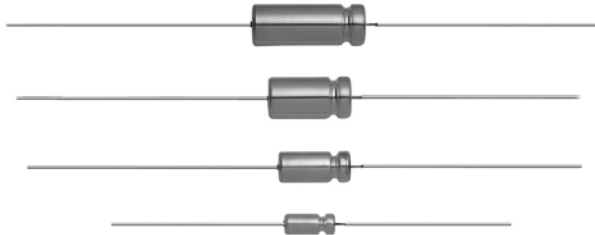


Wet Tantalum Capacitors Sintered Anode TANTALEX® Capacitors for Operation to + 125 °C, Elastomer-Sealed



FEATURES

- Axial through-hole terminations: Standard tin/lead (SnPb), 100 % tin (RoHS compliant) available
- Vishay Sprague model 109D tubular elastomer-sealed, sintered anode TANTALEX® capacitors fill the basic requirements for applications where a superior quality, reliable design for industrial, automotive and telecommunications application is desired.
- Model 109D capacitors are the commercial equivalents of Tansitor style WC, UWC, Mallory-NACC style TLS, TLH and the Military Style CL64 and CL65, designed to meet the performance requirements of Military Specification MIL-DTL-3965.
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



RoHS*
COMPLIANT

Note

* Lead (Pb)-containing terminations are not RoHS-compliant. Exemptions may apply.

PERFORMANCE CHARACTERISTICS

Operating Temperature: - 55 °C to + 85 °C (to + 125 °C with voltage derating)

Capacitance Tolerance: At 120 Hz, + 25 °C.
± 20 % standard. ± 10 %, ± 5 % available as special.

DC Leakage Current (DCL max.):

At + 25 °C, + 85 °C, + 125 °C: Leakage current shall not exceed the values listed in the Standard Ratings tables.

Life Test: Capacitors are capable of withstanding a 2000 h life test at a temperature of + 85 °C or + 125 °C at the applicable DC working voltage.

Following the life test:

1. DCL shall not exceed the initial requirements or 1 µA, whichever is greater.
2. The ESR shall meet the initial requirement.
3. Change in capacitance shall not exceed 10 % from the initial measurement. For capacitors with voltage ratings of 15 V_{DC} and below, change in capacitance shall not exceed + 10 %, - 25 % from the initial measurement.

| ORDERING INFORMATION | | | | | | |
|----------------------|---|---|---|----------------------------------|--|---|
| 109D | 207 | X0 | 006 | C | 0 | E3 |
| MODEL | CAPACITANCE | CAPACITANCE TOLERANCE | DC VOLTAGE RATING AT + 85 °C | CASE CODE | STYLE NUMBER | RoHS COMPLIANT |
| | This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow | X0 = ± 20 % X9 = ± 10 % X5 = ± 5 % special order | This is expressed in volts. To complete the three-digit block, zeros precede the voltage rating. A decimal point is indicated by an "R" (6R3 = 6.3 V) | See Ratings and Case Codes table | 0 = No outer sleeve Standard 2 = Outer plastic film insulation | E3 = 100 % tin termination (RoHS compliant) Blank = SnPb termination (standard design) |

Note

- Packaging: The use of formed plastic trays for packaging these axial lead components is standard. Tape and reel is not recommended due to the unit weight.

| DIMENSIONS in inches [millimeters] | | | | | |
|------------------------------------|-----------------------------|---|-------------------------------------|---------------|------------------------------|
| | | | | | |
| CASE CODE | BARE TUBE | | WITH PLASTIC-FILM INSULATING SLEEVE | | LEAD LENGTH |
| | D | L | D Max. | L Max. | |
| C | 0.188 ± 0.016 [4.78 ± 0.41] | 0.453 + 0.031/- 0.016 [11.51 + 0.79/- 0.41] | 0.219 [5.56] | 0.608 [15.45] | 1.500 ± 0.250 [38.10 ± 6.35] |
| F | 0.281 ± 0.016 [7.14 ± 0.41] | 0.641 + 0.031/- 0.016 [16.28 + 0.79/- 0.41] | 0.312 [7.92] | 0.796 [20.22] | 2.250 ± 0.250 [57.15 ± 6.35] |
| T | 0.375 ± 0.016 [9.53 ± 0.41] | 0.766 + 0.031/- 0.016 [19.46 + 0.79/- 0.41] | 0.406 [10.31] | 0.921 [23.40] | 2.250 ± 0.250 [57.15 ± 6.35] |
| K ⁽¹⁾ | 0.375 ± 0.016 [9.53 ± 0.41] | 1.062 + 0.031/- 0.016 [26.97 + 0.79/- 0.41] | 0.406 [10.31] | 1.217 [30.91] | 2.250 ± 0.250 [57.15 ± 6.35] |

Note
⁽¹⁾ Replaces previous W case

| STANDARD RATINGS | | | | | | | | | | |
|--|-----------|----------------------------|----------------------------|----------------------------|------------------|-------------------|--------------------------------|--------|---------|-------------------------------------|
| CAPACITANCE (μF) | CASE CODE | PART NUMBER ⁽¹⁾ | MAX. ESR | MAX. IMP. | MAX. DCL (μA) AT | | MAX. CAPACITANCE CHANGE (%) AT | | | MAX. RMS RIPPLE CURRENT 120 Hz (mA) |
| | | | AT +25 °C 120 Hz (Ω) | AT -55 °C 120 Hz (Ω) | +25 °C | +85 °C +125 °C | -55 °C | +85 °C | +125 °C | |
| 6 V_{DC} AT + 85 °C; 4 V_{DC} AT + 125 °C | | | | | | | | | | |
| 68 | C | 109D686X0006C0 | 4 | 60 | 1 | 2 | -40 | +14 | +16 | 160 |
| 140 | F | 109D147X0006F0 | 2 | 40 | 1 | 3 | -40 | +14 | +16 | 330 |
| 270 | F | 109D277X0006F0 | 4 | 25 | 1 | 7 | -44 | +17.5 | +20 | 270 |
| 560 | T | 109D567X0006T0 | 3 | 25 | 2 | 13 | -64 | +17.5 | +20 | 340 |
| 1200 | K | 109D128X0006K0 | 1.6 | 20 | 3 | 14 | -80 | +25 | +25 | 530 |
| 8 V_{DC} AT + 85 °C; 5 V_{DC} AT + 125 °C | | | | | | | | | | |
| 22 | C | 109D226X0008C0 | 6 | 115 | 1 | 2 | -40 | +10.5 | +12 | 130 |
| 220 | F | 109D227X0008F0 | 4 | 30 | 1 | 7 | -44 | +17.5 | +20 | 270 |
| 10 V_{DC} AT + 85 °C; 7 V_{DC} AT + 125 °C | | | | | | | | | | |
| 20 | C | 109D206X0010C0 | 5 | 175 | 1 | 2 | -32 | +10.5 | +12 | 140 |
| 47 | C | 109D476X0010C0 | 5 | 100 | 1 | 2 | -36 | +14 | +16 | 160 |
| 180 | F | 109D187X0010F0 | 4 | 40 | 1 | 7 | -36 | +14 | +16 | 270 |
| 390 | T | 109D397X0010T0 | 3 | 25 | 2 | 16 | -64 | +17.5 | +20 | 340 |
| 15 V_{DC} AT + 85 °C; 10 V_{DC} AT + 125 °C | | | | | | | | | | |
| 15 | C | 109D156X0015C0 | 6 | 155 | 1 | 2 | -24 | +10.5 | +12 | 130 |
| 33 | C | 109D336X0015C0 | 5 | 90 | 1 | 2 | -28 | +14 | +16 | 160 |
| 120 | F | 109D127X0015F0 | 4 | 50 | 1 | 7 | -28 | +17.5 | +20 | 270 |
| 270 | T | 109D277X0015T0 | 3 | 30 | 2 | 16 | -56 | +17.5 | +20 | 340 |
| 540 | K | 109D547X0015K0 | 1.2 | 23 | 6 | 24 | -80 | +25 | +25 | 610 |
| 25 V_{DC} AT + 85 °C; 15 V_{DC} AT + 125 °C | | | | | | | | | | |
| 10 | C | 109D106X0025C0 | 6 | 220 | 1 | 2 | -16 | +8 | +9 | 130 |
| 22 | C | 109D226X0025C0 | 5 | 140 | 1 | 3 | -20 | +10.5 | +12 | 160 |
| 50 | F | 109D506X0025F0 | 4 | 70 | 1 | 5 | -28 | +13 | +15 | 270 |
| 100 | F | 109D107X0025F0 | 4 | 50 | 1 | 10 | -28 | +13 | +15 | 270 |
| 100 | T | 109D107X0025T0 | 4 | 45 | 2 | 10 | -48 | +13 | +15 | 410 |
| 180 | T | 109D187X0025T0 | 4 | 32 | 2 | 18 | -48 | +13 | +15 | 340 |
| 350 | K | 109D357X0025K0 | 1.3 | 24 | 7 | 28 | -70 | +25 | +25 | 580 |
| 30 V_{DC} AT + 85 °C; 20 V_{DC} AT + 125 °C | | | | | | | | | | |
| 7 | C | 109D705X0030C0 | 8 | 275 | 1 | 2 | -16 | +8 | +12 | 110 |
| 8 | C | 109D805X0030C0 | 7.5 | 275 | 1 | 2 | -16 | +8 | +12 | 130 |
| 15 | C | 109D156X0030C0 | 8 | 175 | 1 | 2 | -20 | +10.5 | +12 | 160 |
| 40 | F | 109D406X0030F0 | 4 | 65 | 1 | 5 | -24 | +10.5 | +12 | 270 |
| 68 | F | 109D686X0030F0 | 6 | 60 | 1 | 8 | -24 | +13 | +15 | 270 |
| 100 | T | 109D107X0030T0 | 6 | 40 | 2 | 12 | -28 | +10.5 | +12 | 410 |
| 150 | T | 109D157X0030T0 | 4.1 | 35 | 2 | 18 | -48 | +13 | +15 | 340 |
| 300 | K | 109D307X0030K0 | 1.6 | 25 | 8 | 32 | -60 | +25 | +25 | 550 |

Note
⁽¹⁾ Part numbers shown are for units with ± 20 % capacitance tolerance and uninsulated capacitors. For ± 10 % units, change the digit following the letter "X" from "0" to "9". For units with outer plastic-film insulation, substitute "2" for "0" at the end of the part number. For RoHS compliant add "E3".



| STANDARD RATINGS | | | | | | | | | | |
|---|--------------|----------------------------|---|--|---------------------------|-------------------|-----------------------------------|--------|---------|---|
| CAPACITANCE (μ F) | CASE CODE | PART NUMBER ⁽¹⁾ | MAX. ESR AT +25 °C 120 Hz (Ω) | MAX. IMP. AT -55 °C 120 Hz (Ω) | MAX. DCL (μ A) AT | | MAX. CAPACITANCE CHANGE (%) AT | | | MAX. RMS RIPPLE CURRENT 120 Hz (mA) |
| | | | | | +25 °C | +85 °C +125 °C | -55 °C | +85 °C | +125 °C | |
| 50 V_{DC} AT +85 °C; 30 V_{DC} AT +125 °C | | | | | | | | | | |
| 4.5 | C | 109D455X0050C0 | 9 | 400 | 1 | 2 | -16 | +5 | +6 | 110 |
| 5 | C | 109D505X0050C0 | 9 | 400 | 1 | 2 | -16 | +5 | +6 | 130 |
| 10 | C | 109D106X0050C0 | 8 | 250 | 1 | 2 | -24 | +8 | +9 | 160 |
| 22 | F | 109D226X0050F0 | 7 | 95 | 1 | 4 | -20 | +10.5 | +12 | 230 |
| 25 | F | 109D256X0050F0 | 6 | 95 | 1 | 5 | -20 | +10.5 | +12 | 270 |
| 47 | F | 109D476X0050F0 | 6 | 70 | 1 | 9 | -28 | +13 | +15 | 270 |
| 60 | T | 109D606X0050T0 | 3 | 45 | 2 | 12 | -16 | +10.5 | +12 | 410 |
| 82 | T | 109D826X0050T0 | 4 | 45 | 2 | 16 | -32 | +13 | +15 | 340 |
| 160 | K | 109D167X0050K0 | 2.2 | 27 | 8 | 32 | -50 | +25 | +25 | 460 |
| 60 V_{DC} AT +85 °C; 40 V_{DC} AT +125 °C | | | | | | | | | | |
| 4 | C | 109D405X0060C0 | 10 | 550 | 1 | 2 | -16 | +5 | +6 | 110 |
| 8.2 | C | 109D825X0060C0 | 8 | 275 | 1 | 2 | -24 | +8 | +9 | 140 |
| 20 | F | 109D206X0060F0 | 5 | 105 | 1 | 5 | -16 | +10.5 | +12 | 270 |
| 39 | F | 109D396X0060F0 | 7 | 90 | 1 | 9 | -28 | +10.5 | +12 | 230 |
| 50 | T | 109D506X0060T0 | 4 | 50 | 2 | 12 | -16 | +10.5 | +12 | 410 |
| 68 | T | 109D686X0060T0 | 6 | 50 | 2 | 16 | -32 | +10.5 | +12 | 340 |
| 140 | K | 109D147X0060K0 | 2.4 | 28 | 8 | 32 | -40 | +20 | +20 | 430 |
| 75 V_{DC} AT +85 °C; 50 V_{DC} AT +125 °C | | | | | | | | | | |
| 3.5 | C | 109D355X0075C0 | 10 | 650 | 1 | 2 | -16 | +5 | +6 | 110 |
| 6.8 | C | 109D685X0075C0 | 8 | 300 | 1 | 2 | -20 | +8 | +9 | 140 |
| 13 | F | 109D136X0075F0 | 6 | 160 | 1 | 4 | -16 | +8 | +9 | 190 |
| 15 | F | 109D156X0075F0 | 6.5 | 150 | 1 | 5 | -16 | +8 | +9 | 270 |
| 33 | F | 109D336X0075F0 | 7 | 90 | 1 | 10 | -24 | +10.5 | +15 | 230 |
| 40 | T | 109D406X0075T0 | 5 | 60 | 2 | 12 | -16 | +10.5 | +12 | 410 |
| 56 | T | 109D566X0075T0 | 6 | 60 | 2 | 17 | -28 | +10.5 | +15 | 300 |
| 110 | K | 109D117X0075K0 | 3.1 | 29 | 9 | 36 | -35 | +20 | +20 | 400 |
| 100 V_{DC} AT +85 °C; 65 V_{DC} AT +125 °C | | | | | | | | | | |
| 2.5 | C | 109D255X0100C0 | 26.5 | 950 | 1 | 2 | -16 | +7 | +8 | 100 |
| 3.0 | C | 109D305X0100C0 | 10 | 800 | 1 | 2 | -16 | +7 | +8 | 110 |
| 4.7 | C | 109D475X0100C0 | 10 | 500 | 1 | 2 | -16 | +7 | +8 | 130 |
| 10 | F | 109D106X0100F0 | 6 | 215 | 1 | 4 | -16 | +7 | +8 | 190 |
| 11 | F | 109D116X0100F0 | 6 | 200 | 1 | 4 | -16 | +7 | +8 | 230 |
| 22 | F | 109D226X0100F0 | 7 | 100 | 1 | 9 | -16 | +7 | +8 | 230 |
| 30 | T | 109D306X0100T0 | 4 | 80 | 2 | 12 | -16 | +7 | +8 | 340 |
| 43 | T | 109D436X0100T0 | 6 | 70 | 2 | 17 | -20 | +7 | +8 | 300 |
| 125 V_{DC} AT +85 °C; 85 V_{DC} AT +125 °C | | | | | | | | | | |
| 1.7 | C | 109D175X0125C0 | 54.6 | 1250 | 1 | 2 | -16 | +7 | +8 | 100 |
| 3.6 | C | 109D365X0125C0 | 15 | 600 | 1 | 2 | -16 | +7 | +8 | 110 |
| 9 | F | 109D905X0125F0 | 15 | 240 | 1 | 5 | -16 | +7 | +8 | 210 |
| 14 | F | 109D146X0125F0 | 12 | 167 | 1 | 7 | -16 | +7 | +8 | 190 |
| 25 | T | 109D256X0125T0 | 10 | 93 | 2 | 13 | -16 | +7 | +8 | 260 |

Note

⁽¹⁾ Part numbers shown are for units with $\pm 20\%$ capacitance tolerance and uninsulated capacitors. For $\pm 10\%$ units, change the digit following the letter "X" from "0" to "9". For units with outer plastic-film insulation, substitute "2" for "0" at the end of the part number. For RoHS compliant add "E3".



| EXTENDED RATINGS | | | | | | | | | | |
|--|--------------|-----------------|---|--|---------------------------|-------------------|-----------------------------------|--------|---------|---|
| CAPACITANCE (μ F) | CASE CODE | PART NUMBER (1) | MAX. ESR AT +25 °C 120 Hz (Ω) | MAX. IMP. AT -55 °C 120 Hz (Ω) | MAX. DCL (μ A) AT | | MAX. CAPACITANCE CHANGE (%) AT | | | MAX. RMS RIPPLE CURRENT 120 Hz (mA) |
| | | | | | +25 °C | +85 °C +125 °C | -55 °C | +85 °C | +125 °C | |
| 6 V_{DC} AT + 85 °C; 4 V_{DC} AT + 125 °C | | | | | | | | | | |
| 140 | C | 109D147X0006C2 | 3 | 54 | 2 | 9 | -45 | +13 | +16 | 160 |
| 820 | F | 109D827X0006F0 | 2.5 | 18 | 3 | 14 | -88 | +16 | +20 | 300 |
| 1500 | T | 109D158X0006T0 | 1.5 | 18 | 5 | 20 | -90 | +20 | +25 | 480 |
| 2200 | K | 109D228X0006K0 | 1 | 13 | 6 | 24 | -90 | +25 | +30 | 670 |
| 8 V_{DC} AT + 85 °C; 5 V_{DC} AT + 125 °C | | | | | | | | | | |
| 680 | F | 109D687X0008F0 | 2.5 | 22 | 3 | 14 | -83 | +16 | +20 | 300 |
| 10 V_{DC} AT + 85 °C; 7 V_{DC} AT + 125 °C | | | | | | | | | | |
| 120 | C | 109D127X0010C0 | 4 | 60 | 2 | 9 | -45 | +13 | +16 | 160 |
| 150 | C | 109D157X0010C0 | 3 | 54 | 2 | 9 | -55 | +13 | +16 | 180 |
| 470 | F | 109D477X0010F0 | 2.5 | 30 | 3 | 16 | -65 | +16 | +20 | 300 |
| 560 | F | 109D567X0010F0 | 2.5 | 27 | 3 | 16 | -77 | +16 | +20 | 300 |
| 1000 | T | 109D108X0010T0 | 1.5 | 20 | 5 | 20 | -75 | +20 | +25 | 480 |
| 1200 | T | 109D128X0010T0 | 1.5 | 18 | 5 | 20 | -88 | +20 | +25 | 480 |
| 1200 | K | 109D128X0010K0 | 1 | 18 | 7 | 25 | -75 | +30 | +30 | 670 |
| 1500 | K | 109D158X0010K0 | 1 | 15 | 7 | 25 | -88 | +25 | +30 | 670 |
| 15 V_{DC} AT + 85 °C; 10 V_{DC} AT + 125 °C | | | | | | | | | | |
| 82 | C | 109D826X0015C0 | 4 | 80 | 2 | 9 | -38 | +13 | +16 | 160 |
| 100 | C | 109D107X0015C0 | 4 | 72 | 2 | 9 | -44 | +13 | +16 | 160 |
| 330 | F | 109D337X0015F0 | 2.5 | 35 | 3 | 16 | -60 | +16 | +20 | 300 |
| 390 | F | 109D397X0015F0 | 2.5 | 31 | 3 | 16 | -66 | +16 | +20 | 300 |
| 510 | T | 109D517X0015T0 | 1.8 | 25 | 6 | 24 | -65 | +20 | +25 | 340 |
| 820 | T | 109D827X0015T0 | 1.8 | 22 | 6 | 24 | -77 | +20 | +25 | 440 |
| 820 | K | 109D827X0015K0 | 1.2 | 20 | 8 | 32 | -70 | +30 | +30 | 610 |
| 1000 | K | 109D108X0015K0 | 1.2 | 17 | 8 | 32 | -77 | +25 | +30 | 610 |
| 25 V_{DC} AT + 85 °C; 15 V_{DC} AT + 125 °C | | | | | | | | | | |
| 68 | C | 109D686X0025C0 | 4.3 | 90 | 2 | 9 | -40 | +12 | +15 | 160 |
| 270 | F | 109D277X0025F0 | 2.7 | 33 | 3 | 16 | -62 | +13 | +16 | 300 |
| 560 | T | 109D567X0025T0 | 1.8 | 24 | 7 | 28 | -72 | +20 | +25 | 440 |
| 680 | K | 109D687X0025K0 | 1.2 | 19 | 8 | 32 | -72 | +25 | +30 | 610 |
| 750 | K | 109D757X0025K2 | 1.0 | 18 | 8 | 29 | -60 | +25 | +25 | 610 |
| 30 V_{DC} AT + 85 °C; 20 V_{DC} AT + 125 °C | | | | | | | | | | |
| 39 | C | 109D396X0030C0 | 5.2 | 110 | 2 | -28 | +10 | +12 | | 140 |
| 47 | C | 109D476X0030C0 | 5.2 | 100 | 2 | 9 | -30 | +10 | +12 | 140 |
| 56 | C | 109D566X0030C0 | 5.2 | 100 | 2 | 9 | -38 | +12 | +15 | 140 |
| 150 | F | 109D157X0030F0 | 2.5 | 40 | 3 | 9 | -40 | +12 | +15 | 300 |
| 180 | F | 109D187X0030F0 | 2.5 | 40 | 3 | 16 | -45 | +13 | +16 | 300 |
| 220 | F | 109D227X0030F0 | 2.5 | 36 | 3 | 16 | -60 | +13 | +16 | 300 |
| 330 | T | 109D337X0030T0 | 1.8 | 28 | 8 | 16 | -45 | +20 | +25 | 440 |
| 390 | T | 109D397X0030T0 | 1.8 | 28 | 8 | 32 | -50 | +20 | +25 | 440 |
| 470 | T | 109D477X0030T0 | 1.8 | 25 | 8 | 32 | -65 | +20 | +25 | 550 |
| 560 | K | 109D567X0030K0 | 1.3 | 20 | 9 | 32 | -65 | +25 | +30 | 590 |

Note

(1) Part numbers shown are for units with \pm 20 % capacitance tolerance and uninsulated capacitors. For \pm 10 % units, change the digit following the letter "X" from "0" to "9". For units with outer plastic-film insulation, substitute "2" for "0" at the end of the part number. For RoHS compliant add "E3".



| EXTENDED RATINGS | | | | | | | | | | |
|---|--------------|-----------------|-------------------------------------|-------------------------------------|-------------------------|-------------------|--|-----|-----|---|
| CAPACITANCE (μ F) | CASE CODE | PART NUMBER (1) | MAX. ESR | MAX. IMP. | MAX. DCL | | MAX. CAPACITANCE | | | MAX. RMS RIPPLE CURRENT 120 Hz (mA) |
| | | | AT +25 °C 120 Hz (Ω) | AT -55 °C 120 Hz (Ω) | (μ A) AT +25 °C | +85 °C +125 °C | CHANGE (%) AT -55 °C +85 °C +125 °C | | | |
| 50 V_{DC} AT +85 °C; 30 V_{DC} AT +125 °C | | | | | | | | | | |
| 33 | C | 109D336X0050C0 | 5 | 135 | 2 | 9 | -29 | +10 | +12 | 140 |
| 120 | F | 109D127X0050F0 | 2.5 | 49 | 4 | 24 | -42 | +12 | +15 | 300 |
| 270 | T | 109D277X0050T0 | 1.8 | 29 | 8 | 32 | -46 | +20 | +25 | 440 |
| 330 | K | 109D337X0050K0 | 1.5 | 22 | 9 | 36 | -46 | +25 | +30 | 550 |
| 60 V_{DC} AT +85 °C; 40 V_{DC} AT +125 °C | | | | | | | | | | |
| 27 | C | 109D276X0060C0 | 5 | 144 | 3 | 12 | -24 | +10 | +12 | 140 |
| 68 | F | 109D686X0060F0 | 3 | 60 | 3 | 20 | -30 | +12 | +15 | 270 |
| 100 | F | 109D107X0060F0 | 2.5 | 54 | 4 | 20 | -36 | +12 | +15 | 300 |
| 140 | T | 109D147X0060T0 | 2 | 32 | 8 | 32 | -30 | +16 | +20 | 420 |
| 220 | T | 109D227X0060T0 | 1.8 | 29 | 8 | 32 | -40 | +16 | +20 | 440 |
| 270 | K | 109D277X0060K0 | 1.5 | 23 | 9 | 36 | -45 | +20 | +25 | 550 |
| 75 V_{DC} AT +85 °C; 50 V_{DC} AT +125 °C | | | | | | | | | | |
| 12 | C | 109D126X0075C0 | 5 | 175 | 2 | 12 | -12 | +8 | +10 | 140 |
| 15 | C | 109D156X0075C0 | 5 | 160 | 2 | 12 | -14 | +10 | +12 | 140 |
| 22 | C | 109D226X0075C0 | 5 | 157 | 3 | 12 | -19 | +10 | +12 | 140 |
| 47 | F | 109D476X0075F0 | 3 | 75 | 4 | 24 | -18 | +10 | +12 | 270 |
| 56 | F | 109D566X0075F0 | 3 | 70 | 4 | 24 | -20 | +12 | +15 | 270 |
| 82 | F | 109D826X0075F0 | 2.5 | 63 | 4 | 24 | -30 | +12 | +15 | 300 |
| 110 | T | 109D117X0075T0 | 2 | 33 | 9 | 36 | -25 | +16 | +20 | 420 |
| 180 | T | 109D187X0075T0 | 1.8 | 30 | 9 | 36 | -35 | +16 | +20 | 440 |
| 220 | K | 109D227X0075K0 | 2.2 | 24 | 10 | 40 | -40 | +20 | +25 | 450 |
| 270 | K | 109D277X0075K2 | 1.3 | 24 | 10 | 40 | -40 | +20 | +25 | 450 |
| 100 V_{DC} AT +85 °C; 65 V_{DC} AT +125 °C | | | | | | | | | | |
| 8.2 | C | 109D825X0100C0 | 6 | 250 | 3 | 12 | -12 | +12 | +12 | 130 |
| 10 | C | 109D106X0100C0 | 6 | 200 | 3 | 12 | -17 | +10 | +12 | 130 |
| 33 | F | 109D336X0100F0 | 3.5 | 85 | 4 | 24 | -18 | +15 | +15 | 250 |
| 39 | F | 109D396X0100F0 | 3.5 | 80 | 5 | 24 | -20 | +12 | +15 | 250 |
| 56 | T | 109D566X0100T0 | 2.2 | 45 | 9 | 36 | -20 | +15 | +15 | 400 |
| 68 | T | 109D686X0100T0 | 2.2 | 40 | 10 | 40 | -30 | +14 | +16 | 400 |
| 86 | K | 109D866X0100K0 | 3.2 | 30 | 10 | 40 | -25 | +15 | +15 | 370 |
| 125 V_{DC} AT +85 °C; 85 V_{DC} AT +125 °C | | | | | | | | | | |
| 6.8 | C | 109D685X0125C0 | 11.7 | 300 | 3 | 12 | -14 | +10 | +12 | 130 |
| 27 | F | 109D276X0125F0 | 3.5 | 90 | 5 | 24 | -18 | +12 | +15 | 250 |
| 47 | T | 109D476X0125T0 | 2.2 | 50 | 10 | 40 | -26 | +14 | +16 | 400 |
| 56 | K | 109D566X0125K0 | 4.1 | 32 | 10 | 40 | -25 | +15 | +15 | 330 |

Note

(1) Part numbers shown are for units with \pm 20 % capacitance tolerance and uninsulated capacitors. For \pm 10 % units, change the digit following the letter "X" from "0" to "9". For units with outer plastic-film insulation, substitute "2" for "0" at the end of the part number. For RoHS compliant add "E3".



Disclaimer

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