

# Solid Tantalum Chip Capacitors, TANTAMOUNT<sup>®</sup>, Conformal Coated



## FEATURES

- Pad compatible with 194D and MIL-PRF-55365/4 (CWR06)
- 8 mm, 12 mm 16 mm tape to EIA-481 and reeling per IEC 286-3. 7" [178 mm] standard 13" [330 mm] available
- Mounting: Surface mount
- Terminations: 100 % tin (2) standard, tin/lead available
- Material categorization: For definitions please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)


**RoHS\***  
COMPLIANT

## Note

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

## PERFORMANCE CHARACTERISTICS

[www.vishay.com/doc?40088](http://www.vishay.com/doc?40088)

**Operating Temperature:** - 55 °C to + 125 °C  
(above 85 °C, voltage derating is required)

**Capacitance Range:** 1.0 µF to 270 µF

**Capacitance Tolerance:** ± 10 %, ± 20 % standard

**Voltage Rating:** 4 V<sub>DC</sub> to 50 V<sub>DC</sub>

## ORDERING INFORMATION

| 695D | 475                                                                                                                            | X0                                       | 004                                                                                                                                                    | A                                | 2                                                                                                   | T                                                                                                                |
|------|--------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| TYPE | CAPACITANCE                                                                                                                    | CAPACITANCE TOLERANCE                    | DC VOLTAGE RATING AT + 85 °C                                                                                                                           | CASE CODE                        | TERMINATION                                                                                         | REEL SIZE AND PACKAGING                                                                                          |
|      | This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow. | <b>X0 = ± 20 %</b><br><b>X9 = ± 10 %</b> | 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 | <b>2 = 100 % tin</b><br><b>4 = Gold plated</b><br><b>8 = Solder plated (60/40)</b><br>Special order | <b>T = Tape and reel</b><br><b>7" [178 mm] reel</b><br>W = 13" [330 mm] reel<br>See tape and reel specifications |

## Notes

- Preferred tolerance and reel sizes are in bold
- We reserve the right to supply higher voltage ratings and tighter capacitance tolerance capacitors in the same case size.

## DIMENSIONS in inches [millimeters]

| CASE CODE | L (MAX.)       | D (REF.)        | W                              | H                              | A                               | B                              | J (MAX.)        |
|-----------|----------------|-----------------|--------------------------------|--------------------------------|---------------------------------|--------------------------------|-----------------|
| A         | 0.134<br>[3.4] | 0.100<br>[2.54] | 0.050 ± 0.015<br>[1.27 ± 0.38] | 0.050 ± 0.015<br>[1.27 ± 0.38] | 0.023 ± 0.010<br>[0.584 ± 0.25] | 0.067 ± 0.015<br>[1.70 ± 0.38] | 0.004<br>[0.10] |
| B         | 0.185<br>[4.7] | 0.150<br>[3.81] | 0.050 ± 0.015<br>[1.27 ± 0.38] | 0.050 ± 0.015<br>[1.27 ± 0.38] | 0.040 ± 0.015<br>[1.02 ± 0.38]  | 0.120 ± 0.015<br>[3.05 ± 0.38] | 0.004<br>[0.10] |
| D         | 0.185<br>[4.7] | 0.140<br>[3.56] | 0.095 ± 0.015<br>[2.41 ± 0.38] | 0.050 ± 0.015<br>[1.27 ± 0.38] | 0.040 ± 0.015<br>[1.02 ± 0.38]  | 0.110 ± 0.020<br>[2.79 ± 0.51] | 0.004<br>[0.10] |
| E         | 0.236<br>[6.0] | 0.200<br>[5.08] | 0.095 ± 0.015<br>[2.41 ± 0.38] | 0.050 ± 0.015<br>[1.27 ± 0.38] | 0.040 ± 0.015<br>[1.02 ± 0.38]  | 0.170 ± 0.020<br>[4.32 ± 0.51] | 0.004<br>[0.10] |
| F         | 0.256<br>[6.5] | 0.220<br>[5.59] | 0.135 ± 0.015<br>[3.43 ± 0.38] | 0.070 ± 0.015<br>[1.78 ± 0.38] | 0.040 ± 0.015<br>[1.02 ± 0.38]  | 0.185 ± 0.020<br>[4.70 ± 0.51] | 0.004<br>[0.10] |
| G         | 0.300<br>[7.6] | 0.260<br>[6.60] | 0.100 ± 0.015<br>[2.54 ± 0.38] | 0.100 ± 0.015<br>[2.54 ± 0.38] | 0.040 ± 0.015<br>[1.02 ± 0.38]  | 0.220 ± 0.020<br>[5.59 ± 0.51] | 0.004<br>[0.10] |
| H         | 0.303<br>[7.7] | 0.265<br>[6.73] | 0.150 ± 0.015<br>[3.81 ± 0.38] | 0.110 ± 0.015<br>[2.79 ± 0.38] | 0.050 ± 0.015<br>[1.27 ± 0.38]  | 0.220 ± 0.020<br>[5.59 ± 0.51] | 0.004<br>[0.10] |

## Note

- The anode termination (D less B) will be a minimum of 0.25 mm (0.010").

**RATINGS AND CASE CODES**

| $\mu\text{F}$ | 4 V | 6 V | 10 V | 15 V | 20 V | 25 V | 35 V | 50 V |
|---------------|-----|-----|------|------|------|------|------|------|
| 0.10          |     |     |      |      |      |      |      | A    |
| 0.15          |     |     |      |      |      |      |      | A    |
| 0.22          |     |     |      |      |      |      | A    | B    |
| 0.33          |     |     |      |      |      |      | A    | B    |
| 0.47          |     |     |      |      |      | A    | B    | D    |
| 0.68          |     |     |      |      |      | A    | B    | D    |
| 1.0           |     |     |      |      | A    | B    | D    | D    |
| 1.5           |     |     |      | A    | B    | D    | D    | E    |
| 2.2           |     |     |      | A    | B    | D    | E    | F    |
| 3.3           |     |     | A    | B    | D    | D    | F    | F    |
| 4.7           | A   | A   | B    | D    | D    | E    | F    | G    |
| 6.8           | B   | B   | D    | D    | E    | F    | F    | H    |
| 10            | B   | D   | D    | D    | F    | F    | G    | H    |
| 15            | D   | D   | D    | E    | F    | G    | H    |      |
| 22            | D   | D   | E    | F    | G    | H    |      |      |
| 33            | E   | E   | F    | F    | G    | H    |      |      |
| 47            | F   | F   | F    | G    | H    |      |      |      |
| 68            | F   | F   | G    | H    |      |      |      |      |
| 100           | F   | G   | G    | H    |      |      |      |      |
| 120           | G   | G   | H    |      |      |      |      |      |
| 150           | G   | H   | H    |      |      |      |      |      |
| 180           | H   | H   |      |      |      |      |      |      |
| 220           | H   | H   |      |      |      |      |      |      |
| 270           | H   |     |      |      |      |      |      |      |

**STANDARD RATINGS**

| CAPACITANCE<br>( $\mu\text{F}$ )                              | CASE CODE | PART NUMBER          | MAX. DCL<br>AT + 25 °C<br>( $\mu\text{A}$ ) | MAX. DF<br>AT + 25 °C<br>120 Hz<br>(%) | MAX. ESR<br>AT + 25 °C<br>100 kHz<br>( $\Omega$ ) | MAX. RIPPLE<br>100 kHz<br>$I_{\text{RMS}}$<br>(A) |
|---------------------------------------------------------------|-----------|----------------------|---------------------------------------------|----------------------------------------|---------------------------------------------------|---------------------------------------------------|
| 4 V <sub>DC</sub> AT + 85 °C; 2.7 V <sub>DC</sub> AT + 125 °C |           |                      |                                             |                                        |                                                   |                                                   |
| 4.7                                                           | A         | 695D475(1)004A(2)(3) | 0.5                                         | 6                                      | 11.000                                            | 0.07                                              |
| 6.8                                                           | B         | 695D685(1)004B(2)(3) | 0.5                                         | 6                                      | 9.000                                             | 0.09                                              |
| 10                                                            | B         | 695D106(1)004B(2)(3) | 0.5                                         | 6                                      | 8.500                                             | 0.09                                              |
| 15                                                            | D         | 695D156(1)004D(2)(3) | 0.6                                         | 6                                      | 2.200                                             | 0.20                                              |
| 22                                                            | D         | 695D226(1)004D(2)(3) | 0.9                                         | 6                                      | 2.000                                             | 0.21                                              |
| 33                                                            | E         | 695D336(1)004E(2)(3) | 1.3                                         | 6                                      | 1.500                                             | 0.25                                              |
| 47                                                            | F         | 695D476(1)004F(2)(3) | 1.9                                         | 6                                      | 1.000                                             | 0.33                                              |
| 68                                                            | F         | 695D686(1)004F(2)(3) | 2.7                                         | 6                                      | 0.900                                             | 0.35                                              |
| 100                                                           | F         | 695D107(1)004F(2)(3) | 4.0                                         | 8                                      | 0.900                                             | 0.35                                              |
| 120                                                           | G         | 695D127(1)004G(2)(3) | 4.8                                         | 8                                      | 0.700                                             | 0.41                                              |
| 150                                                           | G         | 695D157(1)004G(2)(3) | 6.0                                         | 8                                      | 0.650                                             | 0.43                                              |
| 180                                                           | H         | 695D187(1)004H(2)(3) | 7.2                                         | 8                                      | 0.400                                             | 0.61                                              |
| 220                                                           | H         | 695D227(1)004H(2)(3) | 8.8                                         | 8                                      | 0.350                                             | 0.65                                              |
| 270                                                           | H         | 695D277(1)004H(2)(3) | 10.8                                        | 8                                      | 0.350                                             | 0.65                                              |

**Note**

- Part number definitions:
  - (1) Tolerance: For 10 % tolerance, specify "X9"; for 20 % tolerance, change to "X0"
  - (2) Termination: For 100 % tin specify "2"; for gold plated specify "4", for solder plated 60/40 specify "8"
  - (3) Packaging code: For 7" reels specify "T", for 13" reels specify "W"



| STANDARD RATINGS                                              |           |                      |                                      |                                        |                                                   |                                            |
|---------------------------------------------------------------|-----------|----------------------|--------------------------------------|----------------------------------------|---------------------------------------------------|--------------------------------------------|
| CAPACITANCE<br>( $\mu$ F)                                     | CASE CODE | PART NUMBER          | MAX. DCL<br>AT + 25 °C<br>( $\mu$ A) | MAX. DF<br>AT + 25 °C<br>120 Hz<br>(%) | MAX. ESR<br>AT + 25 °C<br>100 kHz<br>( $\Omega$ ) | MAX. RIPPLE<br>100 kHz<br>$I_{RMS}$<br>(A) |
| 6 V <sub>DC</sub> AT + 85 °C; 4 V <sub>DC</sub> AT + 125 °C   |           |                      |                                      |                                        |                                                   |                                            |
| 4.7                                                           | A         | 695D475(1)006A(2)(3) | 0.5                                  | 6                                      | 11.000                                            | 0.07                                       |
| 6.8                                                           | B         | 695D685(1)006B(2)(3) | 0.5                                  | 6                                      | 9.000                                             | 0.07                                       |
| 10                                                            | D         | 695D106(1)006D(2)(3) | 0.6                                  | 6                                      | 8.500                                             | 0.10                                       |
| 15                                                            | D         | 695D156(1)006D(2)(3) | 0.9                                  | 6                                      | 2.200                                             | 0.20                                       |
| 22                                                            | D         | 695D226(1)006D(2)(3) | 1.3                                  | 6                                      | 2.000                                             | 0.32                                       |
| 33                                                            | E         | 695D336(1)006E(2)(3) | 2.0                                  | 6                                      | 1.500                                             | 0.25                                       |
| 47                                                            | F         | 695D476(1)006F(2)(3) | 2.8                                  | 6                                      | 1.000                                             | 0.33                                       |
| 68                                                            | F         | 695D686(1)006F(2)(3) | 4.1                                  | 6                                      | 0.900                                             | 0.35                                       |
| 100                                                           | G         | 695D107(1)006G(2)(3) | 6.0                                  | 8                                      | 0.900                                             | 0.37                                       |
| 120                                                           | G         | 695D127(1)006G(2)(3) | 7.2                                  | 8                                      | 0.700                                             | 0.41                                       |
| 150                                                           | H         | 695D157(1)006H(2)(3) | 9.0                                  | 8                                      | 0.650                                             | 0.48                                       |
| 180                                                           | H         | 695D187(1)006H(2)(3) | 10.8                                 | 8                                      | 0.400                                             | 0.61                                       |
| 220                                                           | H         | 695D227(1)006H(2)(3) | 13.2                                 | 8                                      | 0.350                                             | 0.65                                       |
| 10 V <sub>DC</sub> AT + 85 °C; 7 V <sub>DC</sub> AT + 125 °C  |           |                      |                                      |                                        |                                                   |                                            |
| 3.3                                                           | A         | 695D335(1)010A(2)(3) | 0.5                                  | 6                                      | 11.500                                            | 0.07                                       |
| 4.7                                                           | B         | 695D475(1)010B(2)(3) | 0.5                                  | 6                                      | 10.600                                            | 0.08                                       |
| 6.8                                                           | D         | 695D685(1)010D(2)(3) | 0.7                                  | 6                                      | 2.600                                             | 0.18                                       |
| 10                                                            | D         | 695D106(1)010D(2)(3) | 1.0                                  | 6                                      | 2.500                                             | 0.18                                       |
| 15                                                            | D         | 695D156(1)010D(2)(3) | 1.5                                  | 6                                      | 2.200                                             | 0.2                                        |
| 22                                                            | E         | 695D226(1)010E(2)(3) | 2.2                                  | 6                                      | 2.000                                             | 0.22                                       |
| 33                                                            | F         | 695D336(1)010F(2)(3) | 3.3                                  | 6                                      | 1.200                                             | 0.3                                        |
| 47                                                            | F         | 695D476(1)010F(2)(3) | 4.7                                  | 6                                      | 1.000                                             | 0.33                                       |
| 68                                                            | G         | 695D686(1)010G(2)(3) | 6.8                                  | 6                                      | 0.750                                             | 0.4                                        |
| 100                                                           | G         | 695D107(1)010G(2)(3) | 10                                   | 8                                      | 0.750                                             | 0.4                                        |
| 120                                                           | H         | 695D127(1)010H(2)(3) | 12                                   | 8                                      | 0.450                                             | 0.58                                       |
| 150                                                           | H         | 695D157(1)010H(2)(3) | 15                                   | 8                                      | 0.400                                             | 0.61                                       |
| 15 V <sub>DC</sub> AT + 85 °C; 10 V <sub>DC</sub> AT + 125 °C |           |                      |                                      |                                        |                                                   |                                            |
| 1.5                                                           | A         | 695D155(1)015A(2)(3) | 0.5                                  | 6                                      | 14.000                                            | 0.07                                       |
| 2.2                                                           | A         | 695D225(1)015A(2)(3) | 0.5                                  | 6                                      | 12.000                                            | 0.07                                       |
| 3.3                                                           | B         | 695D335(1)015B(2)(3) | 0.5                                  | 6                                      | 10.800                                            | 0.08                                       |
| 4.7                                                           | D         | 695D475(1)015D(2)(3) | 0.7                                  | 6                                      | 2.800                                             | 0.17                                       |
| 6.8                                                           | D         | 695D685(1)015D(2)(3) | 1.0                                  | 6                                      | 2.600                                             | 0.18                                       |
| 10                                                            | D         | 695D106(1)015D(2)(3) | 1.5                                  | 6                                      | 2.500                                             | 0.18                                       |
| 15                                                            | E         | 695D156(1)015E(2)(3) | 2.3                                  | 6                                      | 2.300                                             | 0.20                                       |
| 22                                                            | F         | 695D226(1)015F(2)(3) | 3.3                                  | 6                                      | 1.400                                             | 0.28                                       |
| 33                                                            | F         | 695D336(1)015F(2)(3) | 5.0                                  | 6                                      | 1.200                                             | 0.30                                       |
| 47                                                            | G         | 695D476(1)015G(2)(3) | 7.1                                  | 6                                      | 0.800                                             | 0.39                                       |
| 68                                                            | H         | 695D686(1)015H(2)(3) | 10.2                                 | 6                                      | 0.500                                             | 0.55                                       |
| 100                                                           | H         | 695D107(1)015H(2)(3) | 15.0                                 | 8                                      | 0.450                                             | 0.58                                       |

**Note**

- Part number definitions:
  - (1) Tolerance: For 10 % tolerance, specify "X9"; for 20 % tolerance, change to "X0"
  - (2) Termination: For 100 % tin specify "2"; for gold plated specify "4", for solder plated 60/40 specify "8"
  - (3) Packaging code: For 7" reels specify "T", for 13" reels specify "W"



| STANDARD RATINGS                                              |           |                      |                                      |                                        |                                                   |                                            |
|---------------------------------------------------------------|-----------|----------------------|--------------------------------------|----------------------------------------|---------------------------------------------------|--------------------------------------------|
| CAPACITANCE<br>( $\mu$ F)                                     | CASE CODE | PART NUMBER          | MAX. DCL<br>AT + 25 °C<br>( $\mu$ A) | MAX. DF<br>AT + 25 °C<br>120 Hz<br>(%) | MAX. ESR<br>AT + 25 °C<br>100 kHz<br>( $\Omega$ ) | MAX. RIPPLE<br>100 kHz<br>$I_{RMS}$<br>(A) |
| 20 V <sub>DC</sub> AT + 85 °C; 13 V <sub>DC</sub> AT + 125 °C |           |                      |                                      |                                        |                                                   |                                            |
| 1.0                                                           | A         | 695D105(1)020A(2)(3) | 0.5                                  | 4                                      | 15.000                                            | 0.06                                       |
| 1.5                                                           | B         | 695D155(1)020B(2)(3) | 0.5                                  | 6                                      | 12.000                                            | 0.08                                       |
| 2.2                                                           | B         | 695D225(1)020B(2)(3) | 0.5                                  | 6                                      | 11.000                                            | 0.08                                       |
| 3.3                                                           | D         | 695D335(1)020D(2)(3) | 0.7                                  | 6                                      | 3.000                                             | 0.17                                       |
| 4.7                                                           | D         | 695D475(1)020D(2)(3) | 0.9                                  | 6                                      | 2.800                                             | 0.17                                       |
| 6.8                                                           | E         | 695D685(1)020E(2)(3) | 1.4                                  | 6                                      | 2.550                                             | 0.19                                       |
| 10                                                            | F         | 695D106(1)020F(2)(3) | 2.0                                  | 6                                      | 1.800                                             | 0.25                                       |
| 15                                                            | F         | 695D156(1)020F(2)(3) | 3.0                                  | 6                                      | 1.500                                             | 0.27                                       |
| 22                                                            | G         | 695D226(1)020G(2)(3) | 4.4                                  | 6                                      | 0.900                                             | 0.37                                       |
| 33                                                            | G         | 695D336(1)020G(2)(3) | 6.6                                  | 6                                      | 0.800                                             | 0.39                                       |
| 47                                                            | H         | 695D476(1)020H(2)(3) | 9.4                                  | 6                                      | 0.500                                             | 0.55                                       |
| 25 V <sub>DC</sub> AT + 85 °C; 17 V <sub>DC</sub> AT + 125 °C |           |                      |                                      |                                        |                                                   |                                            |
| 0.47                                                          | A         | 695D474(1)025A(2)(3) | 0.5                                  | 4                                      | 17.000                                            | 0.06                                       |
| 0.68                                                          | A         | 695D684(1)025A(2)(3) | 0.5                                  | 4                                      | 15.000                                            | 0.06                                       |
| 1.0                                                           | B         | 695D105(1)025B(2)(3) | 0.5                                  | 4                                      | 13.000                                            | 0.08                                       |
| 1.5                                                           | D         | 695D155(1)025D(2)(3) | 0.5                                  | 6                                      | 4.200                                             | 0.14                                       |
| 2.2                                                           | D         | 695D225(1)025D(2)(3) | 0.6                                  | 6                                      | 3.500                                             | 0.16                                       |
| 3.3                                                           | D         | 695D335(1)025D(2)(3) | 0.8                                  | 6                                      | 3.000                                             | 0.17                                       |
| 4.7                                                           | E         | 695D475(1)025E(2)(3) | 1.2                                  | 6                                      | 2.750                                             | 0.19                                       |
| 6.8                                                           | F         | 695D685(1)025F(2)(3) | 1.7                                  | 6                                      | 2.000                                             | 0.23                                       |
| 10                                                            | F         | 695D106(1)025F(2)(3) | 2.5                                  | 6                                      | 1.800                                             | 0.25                                       |
| 15                                                            | G         | 695D156(1)025G(2)(3) | 3.8                                  | 6                                      | 1.000                                             | 0.35                                       |
| 22                                                            | H         | 695D226(1)025H(2)(3) | 5.5                                  | 6                                      | 0.700                                             | 0.46                                       |
| 33                                                            | H         | 695D336(1)025H(2)(3) | 8.3                                  | 6                                      | 0.800                                             | 0.50                                       |
| 35 V <sub>DC</sub> AT + 85 °C; 23 V <sub>DC</sub> AT + 125 °C |           |                      |                                      |                                        |                                                   |                                            |
| 0.22                                                          | A         | 695D224(1)035A(2)(3) | 0.5                                  | 4                                      | 20.000                                            | 0.05                                       |
| 0.33                                                          | A         | 695D334(1)035A(2)(3) | 0.5                                  | 4                                      | 18.000                                            | 0.06                                       |
| 0.47                                                          | B         | 695D474(1)035B(2)(3) | 0.5                                  | 4                                      | 15.000                                            | 0.07                                       |
| 0.68                                                          | B         | 695D684(1)035B(2)(3) | 0.5                                  | 4                                      | 14.000                                            | 0.07                                       |
| 1.0                                                           | D         | 695D105(1)035D(2)(3) | 0.5                                  | 4                                      | 8.000                                             | 0.10                                       |
| 1.5                                                           | D         | 695D155(1)035D(2)(3) | 0.5                                  | 6                                      | 4.200                                             | 0.14                                       |
| 2.2                                                           | E         | 695D225(1)035E(2)(3) | 0.8                                  | 6                                      | 4.000                                             | 0.15                                       |
| 3.3                                                           | F         | 695D335(1)035F(2)(3) | 1.2                                  | 6                                      | 3.200                                             | 0.19                                       |
| 4.7                                                           | F         | 695D475(1)035F(2)(3) | 1.6                                  | 6                                      | 2.700                                             | 0.20                                       |
| 6.8                                                           | F         | 695D685(1)035F(2)(3) | 2.4                                  | 6                                      | 2.000                                             | 0.23                                       |
| 10                                                            | G         | 695D106(1)035G(2)(3) | 3.5                                  | 6                                      | 1.300                                             | 0.30                                       |
| 15                                                            | H         | 695D156(1)035H(2)(3) | 5.3                                  | 6                                      | 0.800                                             | 0.43                                       |

**Note**

- Part number definitions:
  - (1) Tolerance: For 10 % tolerance, specify "X9"; for 20 % tolerance, change to "X0"
  - (2) Termination: For 100 % tin specify "2"; for gold plated specify "4", for solder plated 60/40 specify "8"
  - (3) Packaging code: For 7" reels specify "T", for 13" reels specify "W"

**STANDARD RATINGS**

| CAPACITANCE<br>( $\mu$ F)                                          | CASE CODE | PART NUMBER          | MAX. DCL<br>AT + 25 °C<br>( $\mu$ A) | MAX. DF<br>AT + 25 °C<br>120 Hz<br>(%) | MAX. ESR<br>AT + 25 °C<br>100 kHz<br>( $\Omega$ ) | MAX. RIPPLE<br>100 kHz<br>$I_{RMS}$<br>(A) |
|--------------------------------------------------------------------|-----------|----------------------|--------------------------------------|----------------------------------------|---------------------------------------------------|--------------------------------------------|
| <b>50 V<sub>DC</sub> AT + 85 °C; 33 V<sub>DC</sub> AT + 125 °C</b> |           |                      |                                      |                                        |                                                   |                                            |
| 0.10                                                               | A         | 695D104(1)050A(2)(3) | 0.5                                  | 4                                      | 32.000                                            | 0.04                                       |
| 0.15                                                               | A         | 695D154(1)050A(2)(3) | 0.5                                  | 4                                      | 30.000                                            | 0.04                                       |
| 0.22                                                               | B         | 695D224(1)050B(2)(3) | 0.5                                  | 4                                      | 18.000                                            | 0.06                                       |
| 0.33                                                               | B         | 695D334(1)050B(2)(3) | 0.5                                  | 4                                      | 16.000                                            | 0.07                                       |
| 0.47                                                               | D         | 695D474(1)050D(2)(3) | 0.5                                  | 4                                      | 9.000                                             | 0.10                                       |
| 0.68                                                               | D         | 695D684(1)050D(2)(3) | 0.5                                  | 4                                      | 8.500                                             | 0.10                                       |
| 1.0                                                                | D         | 695D105(1)050D(2)(3) | 0.5                                  | 4                                      | 8.000                                             | 0.10                                       |
| 1.5                                                                | E         | 695D155(1)050E(2)(3) | 0.8                                  | 6                                      | 5.500                                             | 0.13                                       |
| 2.2                                                                | F         | 695D225(1)050F(2)(3) | 1.1                                  | 6                                      | 3.900                                             | 0.17                                       |
| 3.3                                                                | F         | 695D335(1)050F(2)(3) | 1.7                                  | 6                                      | 3.200                                             | 0.19                                       |
| 4.7                                                                | G         | 695D475(1)050G(2)(3) | 2.4                                  | 6                                      | 2.500                                             | 0.22                                       |
| 6.8                                                                | H         | 695D685(1)050H(2)(3) | 3.4                                  | 6                                      | 1.200                                             | 0.35                                       |
| 10                                                                 | H         | 695D106(1)050H(2)(3) | 5.0                                  | 6                                      | 1.000                                             | 0.39                                       |

**Note**

- Part number definitions:
  - (1) Tolerance: For 10 % tolerance, specify "X9"; for 20 % tolerance, change to "X0"
  - (2) Termination: For 100 % tin specify "2"; for gold plated specify "4", for solder plated 60/40 specify "8"
  - (3) Packaging code: For 7" reels specify "T", for 13" reels specify "W"

**RECOMMENDED VOLTAGE DERATING GUIDELINES** (for temperatures below + 85 °C)**STANDARD CONDITIONS. FOR EXAMPLE: OUTPUT FILTERS**

| Capacitor Voltage Rating | Operating Voltage |
|--------------------------|-------------------|
| 4.0                      | 2.5               |
| 6.0                      | 3.6               |
| 10                       | 6.0               |
| 15                       | 9.0               |
| 20                       | 12                |
| 25                       | 15                |
| 35                       | 24                |
| 50                       | 28                |

**SEVERE CONDITIONS. FOR EXAMPLE: INPUT FILTERS**

| Capacitor Voltage Rating | Operating Voltage |
|--------------------------|-------------------|
| 4.0                      | 2.5               |
| 6.0                      | 3.0               |
| 10                       | 5.0               |
| 15                       | 7.5               |
| 20                       | 10                |
| 25                       | 12                |
| 35                       | 15                |
| 50                       | 24                |

**TYPICAL CURVES AT + 25 °C, IMPEDANCE AND ESR VS. FREQUENCY**


**POWER DISSIPATION**

| CASE CODE | MAXIMUM PERMISSIBLE POWER DISSIPATION AT + 25 °C (W) IN FREE AIR |
|-----------|------------------------------------------------------------------|
| A         | 0.060                                                            |
| B         | 0.075                                                            |
| D         | 0.085                                                            |
| E         | 0.095                                                            |
| F         | 0.110                                                            |
| G         | 0.120                                                            |
| H         | 0.150                                                            |

**STANDARD PACKAGING QUANTITY**

| CASE CODE | UNITS PER REEL |          |
|-----------|----------------|----------|
|           | 7" REEL        | 13" REEL |
| A         | 2500           | 10 000   |
| B         | 2500           | 10 000   |
| D         | 2500           | 10 000   |
| E         | 2500           | 10 000   |
| F         | 1000           | 4000     |
| G         | 1500           | 5000     |
| H         | 600            | 2500     |

**PRODUCT INFORMATION**

|                                |                                                                        |
|--------------------------------|------------------------------------------------------------------------|
| Conformal Coated Guide         | <a href="http://www.vishay.com/doc?40150">www.vishay.com/doc?40150</a> |
| Moisture Sensitivity           | <a href="http://www.vishay.com/doc?40135">www.vishay.com/doc?40135</a> |
| <b>SELECTOR GUIDES</b>         |                                                                        |
| Solid Tantalum Selector Guide  | <a href="http://www.vishay.com/doc?49053">www.vishay.com/doc?49053</a> |
| Solid Tantalum Chip Capacitors | <a href="http://www.vishay.com/doc?40091">www.vishay.com/doc?40091</a> |
| <b>FAQ</b>                     |                                                                        |
| Frequently Asked Questions     | <a href="http://www.vishay.com/doc?40110">www.vishay.com/doc?40110</a> |



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**Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.**

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Электрон  
Связь**

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