

## Aluminum Capacitors +85 °C, Miniature, Axial Lead



### FEATURES

- Low leakage current
- Long shelf life
- Ideal for application in TV sets, auto radios, radio-phone combinations, electronic testing equipment
- Material categorization: for definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



### QUICK REFERENCE DATA

| DESCRIPTION                                                                                                                                            | VALUE                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Nominal case size<br>Ø D x L in mm                                                                                                                     | 6.350 x 12.700<br>to 34.925 x 92.075                    |
| Operating temperature<br>6 WV <sub>DC</sub> to 100 WV <sub>DC</sub><br>101 WV <sub>DC</sub> to 475 WV <sub>DC</sub><br>500 WV <sub>DC</sub> and higher | -40 °C to +85 °C<br>-20 °C to +85 °C<br>20 °C to +65 °C |
| Rated capacitance range, C <sub>R</sub>                                                                                                                | 1 µF to 15 000 µF                                       |

### ORDERING EXAMPLE <sup>(1)</sup>

Order by Distribution part no. Example: TVA1318.7

#### Note

- <sup>(1)</sup> For lead (Pb)-free / RoHS compliant products add the suffix “-E3” to the part no. Example: TVA1318.7-E3

### DIMENSIONS in inches [millimeters]

| CASE CODE | D              | L              | CASE CODE | D              | L               |
|-----------|----------------|----------------|-----------|----------------|-----------------|
| BA        | 0.250 [6.350]  | 0.500 [12.700] | FJ        | 0.625 [15.875] | 1.625 [41.275]  |
| BB        | 0.250 [6.350]  | 0.687 [17.450] | FK        | 0.485 [12.319] | 1.750 [44.450]  |
| CB        | 0.312 [7.925]  | 0.687 [17.450] | GE        | 0.750 [19.050] | 1.125 [28.575]  |
| CC        | 0.312 [7.925]  | 0.812 [20.625] | GG        | 0.750 [19.050] | 1.375 [34.925]  |
| DC        | 0.375 [9.525]  | 0.812 [20.625] | GH        | 0.625 [15.875] | 1.500 [38.100]  |
| DD        | 0.375 [9.525]  | 0.937 [23.800] | GL        | 0.750 [19.050] | 2.125 [53.975]  |
| DF        | 0.375 [9.525]  | 1.250 [31.750] | GK        | 0.625 [15.875] | 1.750 [44.450]  |
| DH        | 0.375 [9.525]  | 1.500 [38.100] | GJ        | 0.750 [19.050] | 1.625 [41.275]  |
| EE        | 0.500 [12.700] | 1.125 [28.575] | HG        | 0.875 [22.225] | 1.375 [34.925]  |
| EF        | 0.438 [11.125] | 1.250 [31.750] | HJ        | 0.875 [22.225] | 1.625 [41.275]  |
| EG        | 0.500 [12.700] | 1.375 [34.925] | HK        | 0.875 [22.225] | 1.875 [47.625]  |
| EH        | 0.438 [11.125] | 1.500 [38.100] | HL        | 0.875 [22.225] | 2.125 [53.975]  |
| EJ        | 0.500 [12.700] | 1.625 [41.275] | JB        | 1.0 [25.4]     | 3.375 [85.725]  |
| FG        | 0.625 [15.875] | 1.375 [34.925] | JJ        | 1.0 [25.4]     | 1.625 [41.275]  |
| FH        | 0.485 [12.319] | 1.500 [38.100] | JK        | 1.0 [25.4]     | 1.875 [47.625]  |
| JL        | 1.0 [25.4]     | 2.125 [53.975] | KP        | 1.125 [28.575] | 2.625 [66.675]  |
| JN        | 1.0 [25.4]     | 2.375 [60.325] | KS        | 1.125 [28.575] | 3.125 [79.375]  |
| JP        | 1.0 [25.4]     | 2.625 [66.675] | LP        | 1.250 [31.750] | 2.625 [66.675]  |
| JR        | 1.0 [25.4]     | 2.875 [73.025] | LS        | 1.250 [31.750] | 3.125 [79.375]  |
| JS        | 1.0 [25.4]     | 3.125 [79.375] | LT        | 1.250 [31.750] | 3.625 [92.075]  |
| JU        | 1.0 [25.4]     | 3.625 [92.075] | MD        | 1.375 [34.925] | 4.125 [104.775] |
| JW        | 1.0 [25.4]     | 3.875 [98.425] | MN        | 1.375 [34.925] | 2.375 [60.325]  |
| KL        | 1.125 [28.575] | 2.125 [53.975] | MS        | 1.375 [34.925] | 3.125 [79.375]  |
| KN        | 1.125 [28.575] | 2.375 [60.325] | MT        | 1.375 [34.925] | 3.625 [92.075]  |

**ELECTRICAL DATA AND ORDERING INFORMATION**

| CAPACITANCE<br>( $\mu$ F)       | CASE CODE | PART NUMBER <sup>(1)</sup> | LEAD DIAMETER (AWG) |
|---------------------------------|-----------|----------------------------|---------------------|
| <b>SINGLE UNITS (POLARIZED)</b> |           |                            |                     |
| <b>6 WV<sub>DC</sub></b>        |           |                            |                     |
| 200.0                           | CB        | TVA1101.7                  | 20                  |
| <b>10 WV<sub>DC</sub></b>       |           |                            |                     |
| 5000.0                          | GK        | TVA1129.5                  | 20                  |
| <b>16 WV<sub>DC</sub></b>       |           |                            |                     |
| 25.0                            | BA        | TVA1148                    | 20                  |
| 50.0                            | BB        | TVA1150                    | 20                  |
| 100.0                           | CB        | TVA1160                    | 20                  |
| 200.0                           | CC        | TVA1160.6                  | 20                  |
| 250.0                           | DC        | TVA1161                    | 20                  |
| 500.0                           | DD        | TVA1162                    | 20                  |
| 600.0                           | DF        | TVA1162.2                  | 20                  |
| 800.0                           | DF        | TVA1162.3                  | 20                  |
| 1000.0                          | DH        | TVA1163                    | 20                  |
| 1200.0                          | EH        | TVA1164                    | 20                  |
| 1500.0                          | EH        | TVA1175.2                  | 20                  |
| 2000.0                          | FK        | TVA1170                    | 20                  |
| 3000.0                          | GH        | TVA1175                    | 20                  |
| 5000.0                          | JL        | TVA1175.5                  | 20                  |
| 10 000.0                        | LP        | TVA1175.8                  | 20                  |
| <b>25 WV<sub>DC</sub></b>       |           |                            |                     |
| 10.0                            | BA        | TVA1204                    | 20                  |
| 25.0                            | BA        | TVA1205                    | 20                  |
| 50.0                            | BB        | TVA1206                    | 20                  |
| 75.0                            | CB        | TVA1206.1                  | 20                  |
| 100.0                           | CC        | TVA1207                    | 20                  |
| 150.0                           | DC        | TVA1207.5                  | 20                  |
| 200.0                           | DC        | TVA1207.7                  | 20                  |
| 250.0                           | DD        | TVA1208                    | 20                  |
| 500.0                           | EF        | TVA1209                    | 20                  |
| 1000.0                          | FH        | TVA1211                    | 20                  |
| 1500.0                          | GH        | TVA1212                    | 20                  |
| 2000.0                          | GK        | TVA1213                    | 20                  |
| 2500.0                          | JK        | TVA1213.5                  | 20                  |
| 5000.0                          | KP        | TVA1214.5                  | 18                  |
| <b>35 WV<sub>DC</sub></b>       |           |                            |                     |
| 500.0                           | EH        | TVA1227                    | 20                  |
| 5500.0                          | JB        | TVA1229                    | 18                  |
| <b>50 WV<sub>DC</sub></b>       |           |                            |                     |
| 1.0                             | BA        | TVA1300                    | 20                  |
| 2.0                             | BA        | TVA1301                    | 20                  |
| 5.0                             | BA        | TVA1303                    | 20                  |
| 6.0                             | BA        | TVA1303.1                  | 20                  |
| 10.0                            | BA        | TVA1304                    | 20                  |
| 15.0                            | BB        | TVA1305                    | 20                  |
| 20.0                            | BB        | TVA1305.5                  | 20                  |
| 25.0                            | BB        | TVA1306                    | 20                  |
| 40.0                            | CC        | TVA1306.5                  | 20                  |
| 50.0                            | CC        | TVA1308                    | 20                  |
| 75.0                            | DC        | TVA1309.4                  | 20                  |
| 100.0                           | DC        | TVA1310                    | 20                  |
| 150.0                           | DD        | TVA1311                    | 20                  |
| 200.0                           | DF        | TVA1311.5                  | 20                  |
| 250.0                           | DH        | TVA1312                    | 20                  |
| 300.0                           | EF        | TVA1312.1                  | 20                  |
| 400.0                           | FH        | TVA1313                    | 20                  |
| 500.0                           | FH        | TVA1315                    | 20                  |
| 600.0                           | GH        | TVA1315.2                  | 20                  |
| 1000.0                          | GK        | TVA1316                    | 20                  |

**Note**

<sup>(1)</sup> For other capacitance and voltage ratings, please see types 500D and 53D



| ELECTRICAL DATA AND ORDERING INFORMATION |           |                            |                     |
|------------------------------------------|-----------|----------------------------|---------------------|
| CAPACITANCE<br>( $\mu$ F)                | CASE CODE | PART NUMBER <sup>(1)</sup> | LEAD DIAMETER (AWG) |
| <b>SINGLE UNITS (POLARIZED)</b>          |           |                            |                     |
| <b>50 WV<sub>DC</sub></b>                |           |                            |                     |
| 1500.0                                   | HL        | TVA1318                    | 18                  |
| 2000.0                                   | KL        | TVA1318.2                  | 18                  |
| 2500.0                                   | KP        | TVA1318.3                  | 18                  |
| 3000.0                                   | LP        | TVA1318.4                  | 18                  |
| 5000.0                                   | MS        | TVA1318.7                  | 18                  |
| <b>63 WV<sub>DC</sub></b>                |           |                            |                     |
| 1.0                                      | BA        | TVA1319.10                 | 20                  |
| <b>100 WV<sub>DC</sub></b>               |           |                            |                     |
| 10.0                                     | CB        | TVA1337                    | 20                  |
| 50.0                                     | DF        | TVA1343                    | 20                  |
| 100.0                                    | EH        | TVA1346                    | 20                  |
| 250.0                                    | GK        | TVA1349                    | 20                  |
| 500.0                                    | KL        | TVA1376                    | 20                  |
| <b>150 WV<sub>DC</sub></b>               |           |                            |                     |
| 1.0                                      | BA        | TVA1400                    | 20                  |
| 2.0                                      | BB        | TVA1400.1                  | 20                  |
| 4.0                                      | CC        | TVA1402                    | 20                  |
| 5.0                                      | CC        | TVA1403                    | 20                  |
| 8.0                                      | DC        | TVA1405                    | 20                  |
| 10.0                                     | DC        | TVA1406                    | 20                  |
| 16.0                                     | DD        | TVA1409                    | 20                  |
| 20.0                                     | DF        | TVA1410                    | 20                  |
| 25.0                                     | DF        | TVA1411                    | 20                  |
| 30.0                                     | EF        | TVA1412                    | 20                  |
| 40.0                                     | EH        | TVA1413                    | 20                  |
| 50.0                                     | EH        | TVA1414                    | 20                  |
| 80.0                                     | GK        | TVA1418                    | 20                  |
| 100.0                                    | GK        | TVA1420                    | 20                  |
| 150.0                                    | HL        | TVA1422                    | 20                  |
| 200.0                                    | JL        | TVA1423                    | 18                  |
| 300.0                                    | KP        | TVA1425                    | 18                  |
| <b>200 WV<sub>DC</sub></b>               |           |                            |                     |
| 3.0                                      | CC        | TVA1436                    | 20                  |
| 5.0                                      | DC        | TVA1438                    | 20                  |
| 10.0                                     | DD        | TVA1441                    | 20                  |
| 20.0                                     | EF        | TVA1442.1                  | 20                  |
| 100.0                                    | HL        | TVA1445                    | 18                  |
| <b>250 WV<sub>DC</sub></b>               |           |                            |                     |
| 4.0                                      | DC        | TVA1501                    | 20                  |
| 10.0                                     | DF        | TVA1504                    | 20                  |
| 12.0                                     | EF        | TVA1505                    | 20                  |
| 20.0                                     | EH        | TVA1508                    | 20                  |
| 30.0                                     | GH        | TVA1510                    | 20                  |
| 40.0                                     | GK        | TVA1511                    | 20                  |
| 50.0                                     | HG        | TVA1512                    | 18                  |
| 60.0                                     | HJ        | TVA1513                    | 18                  |
| 100.0                                    | JK        | TVA1522                    | 18                  |
| <b>300 WV<sub>DC</sub></b>               |           |                            |                     |
| 1.0                                      | CB        | TVA1540                    | 20                  |
| <b>350 WV<sub>DC</sub></b>               |           |                            |                     |
| 3.0                                      | DD        | TVA1600.1                  | 20                  |
| 4.0                                      | DF        | TVA1601                    | 20                  |
| 5.0                                      | DF        | TVA1602.5                  | 20                  |
| 8.0                                      | EH        | TVA1603                    | 20                  |
| 10.0                                     | EH        | TVA1604                    | 20                  |
| 15.0                                     | FK        | TVA1607                    | 20                  |
| 20.0                                     | GK        | TVA1608                    | 20                  |
| 60.0                                     | HL        | TVA1613                    | 18                  |
| 100.0                                    | JP        | TVA1620                    | 18                  |

**Note**

<sup>(1)</sup> For other capacitance and voltage ratings, please see types 500D and 53D



| ELECTRICAL DATA AND ORDERING INFORMATION |           |                            |                     |
|------------------------------------------|-----------|----------------------------|---------------------|
| CAPACITANCE<br>( $\mu$ F)                | CASE CODE | PART NUMBER <sup>(1)</sup> | LEAD DIAMETER (AWG) |
| <b>SINGLE UNITS (POLARIZED)</b>          |           |                            |                     |
| <b>450 WV<sub>DC</sub></b>               |           |                            |                     |
| 1.0                                      | DC        | TVA1700                    | 20                  |
| 2.0                                      | DF        | TVA1701                    | 20                  |
| 4.0                                      | EH        | TVA1702                    | 20                  |
| 5.0                                      | EH        | TVA1703                    | 20                  |
| 8.0                                      | FK        | TVA1704                    | 20                  |
| 10.0                                     | GK        | TVA1705                    | 20                  |
| 12.0                                     | GK        | TVA1706                    | 20                  |
| 20.0                                     | HJ        | TVA1709                    | 18                  |
| 30.0                                     | HK        | TVA1711                    | 18                  |
| 40.0                                     | HL        | TVA1712                    | 18                  |
| 50.0                                     | KL        | TVA1713                    | 18                  |
| 100.0                                    | LS        | TVA1718                    | 18                  |
| 60.0                                     | KL        | TVA1714                    | 18                  |
| 80.0                                     | JP        | TVA1716                    | 18                  |
| <b>475 WV<sub>DC</sub></b>               |           |                            |                     |
| 16.0                                     | HJ        | TVA1803.1                  | 18                  |
| <b>500 WV<sub>DC</sub></b>               |           |                            |                     |
| 20.0                                     | HL        | TVA1906                    | 18                  |
| 40.0                                     | JN        | TVA1908                    | 18                  |
| 30.0                                     | JJ        | TVA1907                    | 18                  |
| <b>600 WV<sub>DC</sub></b>               |           |                            |                     |
| 10.0                                     | JR        | TVA1963                    | 18                  |
| 20.0                                     | JW        | TVA1966                    | 18                  |
| <b>NON-POLARIZED</b>                     |           |                            |                     |
| <b>10 WV<sub>DC</sub></b>                |           |                            |                     |
| 50.0                                     | CB        | TVAN1117                   | 20                  |
| <b>25 WV<sub>DC</sub></b>                |           |                            |                     |
| 10.0                                     | BB        | TVAN1204.1                 | 20                  |
| 16.0                                     | BB        | TVAN1204.3                 | 20                  |
| 25.0                                     | CB        | TVAN1205.1                 | 20                  |
| 50.0                                     | CC        | TVAN1206.1                 | 20                  |
| 100.0                                    | DD        | TVAN1207.1                 | 20                  |
| <b>30 WV<sub>DC</sub></b>                |           |                            |                     |
| 20.0                                     | CB        | TVAN1220                   | 20                  |
| <b>50 WV<sub>DC</sub></b>                |           |                            |                     |
| 2.0                                      | BA        | TVAN1301.1                 | 20                  |
| 3.0                                      | BA        | TVAN1302.1                 | 20                  |
| 5.0                                      | BB        | TVAN1303.1                 | 20                  |
| 8.0                                      | BB        | TVAN1303.4                 | 20                  |
| 10.0                                     | CB        | TVAN1304.1                 | 20                  |
| 25.0                                     | DC        | TVAN1306.1                 | 20                  |
| 50.0                                     | DD        | TVAN1308.1                 | 20                  |
| 100.0                                    | DH        | TVAN1310.1                 | 20                  |
| <b>100 WV<sub>DC</sub></b>               |           |                            |                     |
| 10.0                                     | EJ        | TVAN1333                   | 18                  |
| 20.0                                     | FJ        | TVAN1335                   | 18                  |
| <b>200 WV<sub>DC</sub></b>               |           |                            |                     |
| 60.0                                     | JP        | TVAN1440                   | 18                  |
| <b>300 WV<sub>DC</sub></b>               |           |                            |                     |
| 1.0                                      | EG        | TVAN1560                   | 18                  |
| <b>350 WV<sub>DC</sub></b>               |           |                            |                     |
| 5.0                                      | GJ        | TVAN1602                   | 18                  |
| <b>400 WV<sub>DC</sub></b>               |           |                            |                     |
| 20.0                                     | JL        | TVAN1652                   | 18                  |

**Note**

<sup>(1)</sup> For other capacitance and voltage ratings, please see types 500D and 53D

Statements about product lifetime are based on calculations and internal testing. They should only be interpreted as estimations. Also due to external factors, the lifetime in the field application may deviate from the calculated lifetime. In general, nothing stated herein shall be construed as a guarantee of durability.



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