

## 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 (1)

Order by Distribution part no. Example: TVA1318.7

#### Note

- (1) 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]  |



| <b>ELECTRICAL DATA AND ORDERING INFORMATION</b> |                  |                        |                            |
|---|------------------|------------------------|----------------------------|
| <b>CAPACITANCE (µF)</b>                         | <b>CASE CODE</b> | <b>PART NUMBER (1)</b> | <b>LEAD DIAMETER (AWG)</b> |
| <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**

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



| ELECTRICAL DATA AND ORDERING INFORMATION |           |                 |                     |
|--|-----------|-----------------|---------------------|
| CAPACITANCE (μF)                         | CASE CODE | PART NUMBER (1) | 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**

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



| ELECTRICAL DATA AND ORDERING INFORMATION |           |                 |                     |
|--|-----------|-----------------|---------------------|
| CAPACITANCE (μF)                         | CASE CODE | PART NUMBER (1) | 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

(1) 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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