



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

# FEATURES







 Ideal for application in TV sets, auto radios, radio-phone combinations, electronic testing equipment

 Material categorization: for definitions of compliance please see <a href="https://www.vishay.com/doc?99912"><u>www.vishay.com/doc?99912</u></a>



| 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                        |                                      |  |
| 6 WV <sub>DC</sub> to 100 WV <sub>DC</sub>   | -40 °C to +85 °C                     |  |
| 101 WV <sub>DC</sub> to 475 WV <sub>DC</sub> | -20 °C to +85 °C                     |  |
| 500 WV <sub>DC</sub> and higher              | 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

| <b>DIMENSIONS</b> in inches [millimeters] |                |                |              |                |                 |
|---|----------------|----------------|--------------|----------------|-----------------|
| CASE<br>CODE                              | D              | L              | CASE<br>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]  |
| СВ  | 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]  |



# Vishay Sprague

| CAPACITANCE             | CASE CODE | PART NUMBER (1)                  | LEAD DIAMETER (AWG) |
|-------------------------|-----------|----------------------------------|---------------------|
| (μF)                    | CAGE GODE | TAIT NOMBER                      | LEAD DIAMETER (AWG) |
| INGLE UNITS (POLARIZED) | CV        | AA./                             |                     |
| 200.0                   |           | VV <sub>DC</sub>                 | 1 00                |
| 200.0                   | CB        | TVA1101.7                        | 20                  |
| 5000.0                  | GK        | <b>VV<sub>DC</sub></b> TVA1129.5 | 20                  |
| 3000.0                  |           | WV <sub>DC</sub>                 | 20                  |
| 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<br>::  | TVA1175                          | 20                  |
| 5000.0<br>10 000.0      | JL<br>LP  | TVA1175.5<br>TVA1175.8           | 20<br>20            |
| 10 000.0                |           | W <sub>DC</sub>                  |                     |
| 10.0                    | BA        | TVA1204                          | 20                  |
| 25.0                    | BA        | TVA1204                          | 20                  |
| 50.0                    | BB        | TVA1205                          | 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                  |
| 500.0                   |           | WV <sub>DC</sub>                 |                     |
| 500.0<br>5500.0         | EH<br>JB  | TVA1227<br>TVA1229               | 20<br>18            |
| 5500.0                  |           | MV <sub>DC</sub>                 | 10                  |
| 1.0                     | BA        | TVA1300                          | 20                  |
| 2.0                     | BA        | TVA1300                          | 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<br>400.0          | EF<br>FH  | TVA1312.1<br>TVA1313             | 20<br>20            |
| 500.0                   | FH FH     | TVA1313                          | 20                  |
| 600.0                   | GH        | TVA1315.2                        | 20                  |
| 1000.0                  | GK        | TVA1313.2                        | 20                  |

### Note

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



# Vishay Sprague

| CARACITANCE             |           | TION                         |                     |
|-------------------------|-----------|------------------------------|---------------------|
| CAPACITANCE<br>(µF)     | CASE CODE | PART NUMBER (1)              | LEAD DIAMETER (AWG) |
| INGLE UNITS (POLARIZED) |           |                              |                     |
|                         | 50        | WV <sub>DC</sub>             |                     |
| 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                  |
| 10                      |           | WV <sub>DC</sub>             | 1 00                |
| 1.0                     | BA 100    | TVA1319.10                   | 20                  |
| 10.0                    | CB        | 7 WV <sub>DC</sub> TVA1337   | 20                  |
| 50.0                    | DF        | TVA1337                      | 20                  |
| 100.0                   | EH        | TVA1346                      | 20                  |
| 250.0                   | GK        | TVA1349                      | 20                  |
| 500.0                   | KL        | TVA1376                      | 20                  |
|                         | 150       | ) WV <sub>DC</sub>           | -                   |
| 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<br>25.0            | DF<br>DF  | TVA1410<br>TVA1411           | 20<br>20            |
| 30.0                    | EF        | TVA1411                      | 20                  |
| 40.0                    | EH        | TVA1412                      | 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                  |
|                         |           | ) WV <sub>DC</sub>           |                     |
| 3.0                     | CC        | TVA1436                      | 20                  |
| 5.0                     | DC        | TVA1438                      | 20                  |
| 10.0                    | DD        | TVA1441                      | 20                  |
| 20.0                    | <u>EF</u> | TVA1442.1                    | 20                  |
| 100.0                   | HL        | TVA1445                      | 18                  |
| 4.0                     | DC        | TVA1501                      | 20                  |
| 10.0                    | DF        | TVA1501                      | 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                  |
|                         | 300       | ) WV <sub>DC</sub>           |                     |
| 1.0                     | CB        | TVA1540                      | 20                  |
| 3.0                     |           | 0 WV <sub>DC</sub> TVA1600.1 | 20                  |
| 4.0                     | DF        | TVA1600.1                    | 20                  |
| 5.0                     | DF DF     | TVA1601<br>TVA1602.5         | 20                  |
| 8.0                     | EH        | TVA1603                      | 20                  |
| 10.0                    | EH        | TVA1603                      | 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



## Vishay Sprague

| ELECTRICAL DATA AND                   | ORDERING INFORMAT | TION                     |                     |
|---------------------------------------|-------------------|--------------------------|---------------------|
| CAPACITANCE<br>(μF)                   | CASE CODE         | PART NUMBER (1)          | LEAD DIAMETER (AWG) |
| SINGLE UNITS (POLARIZED)              |                   |                          |                     |
|                                       |                   | WV <sub>DC</sub>         |                     |
| 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<br>TVA1712       | 18                  |
| 40.0<br>50.0                          | HL<br>KL          | TVA1712                  | 18<br>18            |
| 100.0                                 | LS                | TVA1713                  | 18                  |
| 60.0                                  | KL                | TVA1716                  | 18                  |
| 80.0                                  | JP                | TVA1714                  | 18                  |
| 80.0                                  |                   | WV <sub>DC</sub>         | 10                  |
| 16.0                                  | HJ                | TVA1803.1                | 18                  |
| 10.0                                  |                   | WV <sub>DC</sub>         | 10                  |
| 20.0                                  | HL                | TVA1906                  | 18                  |
| 40.0                                  | JN                | TVA1908                  | 18                  |
| 30.0                                  | JJ                | TVA1907                  | 18                  |
| 00.0                                  |                   | WV <sub>DC</sub>         |                     |
| 10.0                                  | JR                | TVA1963                  | 18                  |
| 20.0                                  | JW                | TVA1966                  | 18                  |
| NON-POLARIZED                         |                   | -                        | -                   |
|                                       | 10                | WV <sub>DC</sub>         |                     |
| 50.0                                  | СВ                | TVAN1117                 | 20                  |
|                                       | 25                | WV <sub>DC</sub>         |                     |
| 10.0                                  | BB                | TVAN1204.1               | 20                  |
| 16.0                                  | BB                | TVAN1204.3               | 20                  |
| 25.0                                  | СВ                | TVAN1205.1               | 20                  |
| 50.0                                  | CC                | TVAN1206.1               | 20                  |
| 100.0                                 | DD                | TVAN1207.1               | 20                  |
|                                       | 30                | WV <sub>DC</sub>         | 1 00                |
| 20.0                                  | СВ                | TVAN1220                 | 20                  |
| 0.0                                   |                   | WV <sub>DC</sub>         | 1 00                |
| 2.0<br>3.0                            | BA<br>BA          | TVAN1301.1<br>TVAN1302.1 | 20                  |
| 5.0                                   | BB                | TVAN1302.1<br>TVAN1303.1 | 20                  |
| 8.0                                   | BB                | TVAN1303.1<br>TVAN1303.4 | 20                  |
| 10.0                                  | CB                | TVAN1303.4<br>TVAN1304.1 | 20                  |
| 25.0                                  | DC                | TVAN1304.1               | 20                  |
| 50.0                                  | DD                | TVAN1308.1               | 20                  |
| 100.0                                 | DH                | TVAN1310.1               | 20                  |
|                                       |                   | WV <sub>DC</sub>         |                     |
| 10.0                                  | EJ                | TVAN1333                 | 18                  |
| 20.0                                  | FJ                | TVAN1335                 | 18                  |
|                                       | 200               | WV <sub>DC</sub>         | -                   |
| 60.0                                  | JP                | TVAN1440                 | 18                  |
|                                       | 300               | WV <sub>DC</sub>         |                     |
| 1.0                                   | EG                | TVAN1560                 | 18                  |
|                                       | 350               | WV <sub>DC</sub>         |                     |
| 5.0                                   | GJ                | TVAN1602                 | 18                  |
|                                       |                   | WV <sub>DC</sub>         |                     |
| 20.0                                  | JL                | TVAN1652                 | 18                  |
| · · · · · · · · · · · · · · · · · · · |                   |                          |                     |

#### Note

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.

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



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