

Vishay Sprague

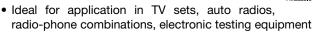
## **Aluminum Capacitors** + 85 °C, Miniature, Axial Lead

# **FEATURES**









• Material categorization: For definitions of compliance please see www.vishay.com/doc?99912



| QUICK REFERENCE DATA                                                |                    |  |
|---------------------------------------------------------------------|--------------------|--|
| DESCRIPTION                                                         | VALUE              |  |
| Nominal case size 6.350 x 12.700   Ø D x L in mm 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

| DIMENSIONS 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  |
| 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] |



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

#### Note

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



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

#### Note

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



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|                         |           |                         | _                   |
|-------------------------|-----------|-------------------------|---------------------|
| CAPACITANCE<br>(μF)     | CASE CODE | PART NUMBER (1)         | LEAD DIAMETER (AWG) |
| INGLE UNITS (POLARIZED) |           |                         |                     |
|                         |           | WV <sub>DC</sub>        |                     |
| 1.0                     | DC        | TVA1700                 | 18                  |
| 2.0                     | DF        | TVA1701                 | 18                  |
| 4.0                     | EH        | TVA1702                 | 18                  |
| 5.0                     | EH        | TVA1703                 | 18                  |
| 8.0                     | FK        | TVA1704                 | 18                  |
| 10.0                    | GK        | TVA1705                 | 18                  |
| 12.0                    | GK        | TVA1706                 | 18                  |
| 20.0                    | HJ        | TVA1709                 | 20                  |
| 30.0                    | HK        | TVA1711                 | 20                  |
| 40.0                    | HL        | TVA1712                 | 20                  |
| 50.0                    | KL        | TVA1713                 | 20                  |
| 100.0                   | LS        | TVA1718                 | 20                  |
| 60.0                    | KL        | TVA1714                 | 20                  |
| 80.0                    | JP        | TVA1716                 | 20                  |
|                         |           | WV <sub>DC</sub>        | T                   |
| 16.0                    | HJ        | TVA1803.1               | 20                  |
| <del>_</del>            |           | WV <sub>DC</sub>        |                     |
| 20.0                    | HL        | TVA1906                 | 20                  |
| 40.0                    | JN        | TVA1908                 | 20                  |
| 30.0                    | JJ        | TVA1907                 | 20                  |
|                         |           | WV <sub>DC</sub>        |                     |
| 10.0                    | JR        | TVA1963                 | 20                  |
| 20.0                    | JW        | TVA1966                 | 20                  |
| ON-POLARIZED            |           |                         |                     |
|                         | 10 '      | MV <sub>DC</sub>        |                     |
| 50.0                    | СВ        | TVAN1117                | 18                  |
|                         |           | <b>WV</b> <sub>DC</sub> |                     |
| 10.0                    | BB        | TVAN1204.1              | 18                  |
| 16.0                    | BB        | TVAN1204.3              | 18                  |
| 25.0                    | СВ        | TVAN1205.1              | 18                  |
| 50.0                    | CC        | TVAN1206.1              | 18                  |
| 100.0                   | DD        | TVAN1207.1              | 18                  |
|                         | 30 '      | WV <sub>DC</sub>        |                     |
| 20.0                    | СВ        | TVAN1220                | 18                  |
|                         | 50 \      | WV <sub>DC</sub>        |                     |
| 2.0                     | BA        | TVAN1301.1              | 18                  |
| 3.0                     | BA        | TVAN1302.1              | 18                  |
| 5.0                     | BB        | TVAN1303.1              | 18                  |
| 8.0                     | BB        | TVAN1303.4              | 18                  |
| 10.0                    | СВ        | TVAN1304.1              | 18                  |
| 25.0                    | DC        | TVAN1306.1              | 18                  |
| 50.0                    | DD        | TVAN1308.1              | 18                  |
| 100.0                   | DH        | TVAN1310.1              | 18                  |
| ,                       | 100       | WV <sub>DC</sub>        |                     |
| 10.0                    | EJ        | TVAN1333                | 18                  |
| 20.0                    | FJ        | TVAN1335                | 18                  |
| ,                       |           | WV <sub>DC</sub>        |                     |
| 60.0                    | JP        | TVAN1440                | 20                  |
|                         |           | WV <sub>DC</sub>        | •                   |
| 1.0                     | EG        | TVAN1560                | 18                  |
|                         |           | WV <sub>DC</sub>        | 1                   |
| 5.0                     | GJ        | TVAN1602                | 18                  |
|                         |           | WV <sub>DC</sub>        |                     |
|                         |           | TVAN1652                | 20                  |

### Note

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



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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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Revision: 02-Oct-12 Document Number: 91000