

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



| QUICK REFERENCE DATA | |
|--|---|
| DESCRIPTION | VALUE |
| Nominal case size Ø D x L in mm | 6.350 x 12.700 to 34.925 x 92.075 |
| Operating temperature 6 WV _{DC} to 100 WV _{DC} 101 WV _{DC} to 475 WV _{DC} 500 WV _{DC} and higher | -40 °C to +85 °C -20 °C to +85 °C 20 °C to +65 °C |
| Rated capacitance range, C _R | 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] |



| ELECTRICAL DATA AND ORDERING INFORMATION | | | |
|--|-----------|-----------------|---------------------|
| CAPACITANCE (μF) | CASE CODE | PART NUMBER (1) | LEAD DIAMETER (AWG) |
| SINGLE UNITS (POLARIZED) | | | |
| 6 WV_{DC} | | | |
| 200.0 | CB | TVA1101.7 | 20 |
| 10 WV_{DC} | | | |
| 5000.0 | GK | TVA1129.5 | 20 |
| 16 WV_{DC} | | | |
| 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 |
| 25 WV_{DC} | | | |
| 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 |
| 35 WV_{DC} | | | |
| 500.0 | EH | TVA1227 | 20 |
| 5500.0 | JB | TVA1229 | 18 |
| 50 WV_{DC} | | | |
| 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) |
| SINGLE UNITS (POLARIZED) | | | |
| 50 WV_{DC} | | | |
| 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 |
| 63 WV_{DC} | | | |
| 1.0 | BA | TVA1319.10 | 20 |
| 100 WV_{DC} | | | |
| 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 |
| 150 WV_{DC} | | | |
| 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 |
| 200 WV_{DC} | | | |
| 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 |
| 250 WV_{DC} | | | |
| 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 |
| 300 WV_{DC} | | | |
| 1.0 | CB | TVA1540 | 20 |
| 350 WV_{DC} | | | |
| 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) |
| SINGLE UNITS (POLARIZED) | | | |
| 450 WV_{DC} | | | |
| 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 |
| 475 WV_{DC} | | | |
| 16.0 | HJ | TVA1803.1 | 18 |
| 500 WV_{DC} | | | |
| 20.0 | HL | TVA1906 | 18 |
| 40.0 | JN | TVA1908 | 18 |
| 30.0 | JJ | TVA1907 | 18 |
| 600 WV_{DC} | | | |
| 10.0 | JR | TVA1963 | 18 |
| 20.0 | JW | TVA1966 | 18 |
| NON-POLARIZED | | | |
| 10 WV_{DC} | | | |
| 50.0 | CB | TVAN1117 | 20 |
| 25 WV_{DC} | | | |
| 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 |
| 30 WV_{DC} | | | |
| 20.0 | CB | TVAN1220 | 20 |
| 50 WV_{DC} | | | |
| 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 |
| 100 WV_{DC} | | | |
| 10.0 | EJ | TVAN1333 | 18 |
| 20.0 | FJ | TVAN1335 | 18 |
| 200 WV_{DC} | | | |
| 60.0 | JP | TVAN1440 | 18 |
| 300 WV_{DC} | | | |
| 1.0 | EG | TVAN1560 | 18 |
| 350 WV_{DC} | | | |
| 5.0 | GJ | TVAN1602 | 18 |
| 400 WV_{DC} | | | |
| 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.



Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.