

RJA Series

Features

- 105°C, wide temperature range
- Suitable for high reliability products
- RoHS Compliance

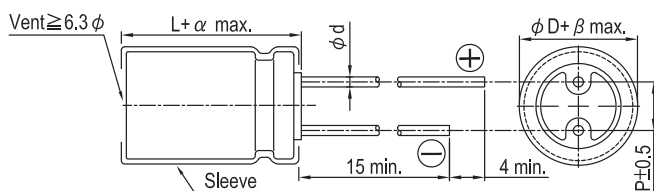


Sleeve & Marking Color: Deep Purple & White

Specifications

| Items | Performance | | | | | | | | | | | | | | | | | | | |
|--|--|-----------------|-----------------------------------|------|------|------|--------|------|-----|----|-----|------------|------|------|------|------|------|------|------|------|
| Category Temperature Range | 6.3 ~ 63V | 100V | | | | | | | | | | | | | | | | | | |
| | -55°C ~ +105°C | -40°C ~ +105°C | | | | | | | | | | | | | | | | | | |
| Capacitance Tolerance | ±20% (at 120Hz, 20°C) | | | | | | | | | | | | | | | | | | | |
| Leakage Current (at 20°C) | I = 0.01CV or 3 (µA) whichever is greater (after 2 minutes) Where, C = rated capacitance in µF V = rated DC working voltage in V | | | | | | | | | | | | | | | | | | | |
| Tanδ (at 120 Hz, 20°C) | <table border="1"> <thead> <tr> <th>Rated Voltage</th> <th>6.3</th> <th>10</th> <th>16</th> <th>25</th> <th>35</th> <th>50</th> <th>63</th> <th>100</th> </tr> </thead> <tbody> <tr> <td>Tanδ (max)</td> <td>0.23</td> <td>0.20</td> <td>0.16</td> <td>0.14</td> <td>0.12</td> <td>0.10</td> <td>0.09</td> <td>0.08</td> </tr> </tbody> </table> | | Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | Tanδ (max) | 0.23 | 0.20 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 |
| | Rated Voltage | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | | | | | | | | | | |
| Tanδ (max) | 0.23 | 0.20 | 0.16 | 0.14 | 0.12 | 0.10 | 0.09 | 0.08 | | | | | | | | | | | | |
| When the capacitance exceeds 1,000µF, 0.02 shall be added every 1,000µF increase. | | | | | | | | | | | | | | | | | | | | |
| Low Temperature Characteristics (at 120Hz) | Impedance ratio shall not exceed the values given in the table below. | | | | | | | | | | | | | | | | | | | |
| | Impedance Ratio | Rated Voltage | | 6.3 | 10 | 16 | 25 | 35 | 50 | 63 | 100 | | | | | | | | | |
| | | Z(-25°C) | φ D < 16 | 4 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | | | | | | | | | |
| | | /Z(+20°C) | φ D ≥ 16 | 5 | 4 | 3 | 2 | 2 | 2 | 2 | 3 | | | | | | | | | |
| Z(-40/-55°C) | | φ D < 16 | 8 | 6 | 4 | 4 | 4 | 3 | 3 | 3 | | | | | | | | | | |
| | | /Z(+20°C) | φ D ≥ 16 | 12 | 8 | 6 | 4 | 3 | 3 | 6 | | | | | | | | | | |
| Endurance | Test Time | | 2,000 Hrs | | | | | | | | | | | | | | | | | |
| | Capacitance Change | | Within ±20% of initial value | | | | | | | | | | | | | | | | | |
| | Tanδ | | Less than 200% of specified value | | | | | | | | | | | | | | | | | |
| | Leakage Current | | Within specified value | | | | | | | | | | | | | | | | | |
| * The above specifications shall be satisfied when the capacitors are restored to 20°C after the rated voltage applied with rated ripple current for 2,000 hours at 105°C. | | | | | | | | | | | | | | | | | | | | |
| Shelf Life Test | Test Time | | 1,000 Hrs | | | | | | | | | | | | | | | | | |
| | Capacitance Change | | Within ±20% of initial value | | | | | | | | | | | | | | | | | |
| | Tanδ | | Less than 200% of specified value | | | | | | | | | | | | | | | | | |
| | Leakage Current | | Within specified value | | | | | | | | | | | | | | | | | |
| * The above specifications shall be satisfied when the capacitors are restored to 20°C after exposing them for 1,000 hours at 105°C without voltage applied. | | | | | | | | | | | | | | | | | | | | |
| Ripple Current and Frequency Multipliers | Freq.(Hz) | | 60 (50) | 120 | 500 | 1k | 10k up | | | | | | | | | | | | | |
| | Cap.(µF) | Under 100 | 0.70 | 1.00 | 1.30 | 1.40 | 1.50 | | | | | | | | | | | | | |
| | | 100 < C ≤ 1,000 | 0.75 | 1.00 | 1.20 | 1.30 | 1.35 | | | | | | | | | | | | | |
| | | 1,000 up above | 0.80 | 1.00 | 1.10 | 1.12 | 1.15 | | | | | | | | | | | | | |

Diagram of Dimensions



Lead Spacing and Diameter Unit: mm

| | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
|----|--------------------------|-----|-----|-----|------|-----|-----|
| φD | 5 | 6.3 | 8 | 10 | 12.5 | 16 | 18 |
| P | 2.0 | 2.5 | 3.5 | 5.0 | 5.0 | 7.5 | 7.5 |
| φd | 0.5 | | 0.6 | | 0.8 | | |
| α | L < 20: 1.5, L ≥ 20: 2.0 | | | | | | |
| β | 0.5 | | | | | | |



Dimension: $\phi D \times L$ (mm)

Ripple Current: mA/rms at 120 Hz, 105°C

Dimension and Permissible Ripple Current

| Cap. (μF) | Rated Volt. (V _{DC}) Contents | 6.3V (0J) | | 10V (1A) | | 16V (1C) | | 25V (1E) | | 35V (1V) | | 50V (1H) | | 63V (1J) | | 100V (2A) | |
|------------------|--|-------------------|-------|-------------------|------------|-------------------|-------|-------------------|-------|-------------------|-------|-------------------|------------|--------------------|------------|-------------------|------------|
| | | $\phi D \times L$ | mA | $\phi D \times L$ | mA | $\phi D \times L$ | mA | $\phi D \times L$ | mA | $\phi D \times L$ | mA | $\phi D \times L$ | mA | $\phi D \times L$ | mA | $\phi D \times L$ | mA |
| 2.2 | 2R2 | | | | | | | | | | | 5×11 | 20 | | | 5×11 | 26 |
| 3.3 | 3R3 | | | | | | | | | | | 5×11 | 30 | | | 5×11 | 31 |
| 4.7 | 4R7 | | | | | | | | | | | 5×11 | 33 | 5×11 | 36 | 6.3×11 | 40 |
| 10 | 100 | | | | | | | | | | | 5×11 | 50 | 5×11 | 54 | 6.3×11 | 54 |
| 22 | 220 | | | | | | | | | | | 5×11 | 78 | 6.3×11 | 86 | 6.3×11 8×11.5 | 93 111 |
| 33 | 330 | | | | | | | | | 5×11 | 85 | 5×11 | 90 | 6.3×11 | 100 | 8×11.5 10×12.5 | 144 183 |
| 47 | 470 | | | | | | | 5×11 | 97 | 5×11 | 90 | 6.3×11 | 117 | 6.3×11 | 129 | 10×12.5 | 204 |
| 100 | 101 | | | | | 5×11 | 110 | 6.3×11 | 142 | 6.3×11 | 150 | 8×11.5 | 188 | 10×12.5 | 235 | 10×20 | 285 |
| 220 | 221 | | | 5×11 | 150 | 6.3×11 | 180 | 8×11.5 | 236 | 8×11.5 | 270 | 10×16 | 335 | 10×20 | 400 | 12.5×25 | 440 |
| 330 | 331 | | | 6.3×11 | 200 | 8×11.5 | 260 | 8×11.5 | 330 | 10×12.5 | 350 | 10×16 10×20 | 410 460 | 10×20 12.5×20 | 490 520 | 16×25 | 478 |
| 470 | 471 | 6.3×11 | 230 | 6.3×11 8×11.5 | 250 290 | 8×11.5 | 310 | 10×12.5 | 380 | 10×16 | 460 | 12.5×20 | 590 | 12.5×20 12.5×25 | 665 720 | 16×31.5 | 688 |
| 1,000 | 102 | 8×11.5 | 380 | 10×12.5 | 460 | 10×16 | 560 | 10×20 | 680 | 12.5×20 | 830 | 16×25 | 1,080 | 16×25 | 1,190 | | |
| 2,200 | 222 | 10×16 | 690 | 10×20 | 760 | 12.5×20 | 920 | 12.5×25 | 1,090 | 16×25 | 1,260 | 16×35.5 | 1,470 | | | | |
| 3,300 | 332 | 10×20 | 840 | 12.5×20 | 1,100 | 12.5×25 | 1,170 | 16×25 | 1,400 | 16×35.5 | 1,610 | 18×35.5 | 1,650 | | | | |
| 4,700 | 472 | 12.5×20 | 1,090 | 12.5×25 | 1,260 | 16×25 | 1,480 | 16×31.5 | 1,710 | 18×35.5 | 1,900 | | | | | | |
| 6,800 | 682 | 12.5×25 | 1,460 | 16×25 | 1,690 | 16×31.5 | 1,930 | 18×35.5 | 2,160 | | | | | | | | |
| 10,000 | 103 | 16×25 | 1,990 | 16×31.5 | 2,220 | 18×31.5 | 2,330 | | | | | | | | | | |
| 22,000 | 223 | 18×35.5 | 2,930 | 18×40 | 3,230 | | | | | | | | | | | | |

Part Numbering System

| | | | | | | | |
|-------------|-------------|-----------------------|---------------|------------------------------|-------------|-----------------------|---------------------------|
| RJA Series | 470 μF | $\pm 20\%$ | 6.3V | Bulk Package | Gas Type | 6.3 $\phi \times 11L$ | Pb-free and PET sleeve |
| RJA | 471 | M | 0J | BK | - | 0611 | |
| Series Name | Capacitance | Capacitance Tolerance | Rated Voltage | Lead Configuration & Package | Rubber Type | Case Size | Lead Wire and Sleeve type |

Note: For more details, please refer to "Part Numbering System (Radial Type)" on page 13.

Radial

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Aluminium Electrolytic Capacitors - Axial Leaded](#) category:

Click to view products by [Lelon](#) manufacturer:

Other Similar products are found below :

[MAL203125221E3](#) [MAL204216159E3](#) [A141GH470Q025T](#) [NPAL50V1.0](#) [A141JP221Q040A](#) [A141MP222Q040A](#) [A142GL470Q063A](#)
[A142ML471Q063A](#) [A142MS471Q100A](#) [MAL211929479E3](#) [TE1202E](#) [UVX1C222M](#) [39D757G075JL6](#) [A142MS470Q450A](#)
[MAL211990518E3](#) [MAL204281229E3](#) [TPC1V102MCH](#) [HP271M450O310A](#) [A141MS152Q063A](#) [TM1081CME165RB](#) [A142GL3R3Q450A](#)
[A142JP100Q400A](#) [227TTA300A](#) [TVA1312](#) [TVA1413-E3](#) [B41689A5458Q001](#) [B41689A7278Q001](#) [B41689K7278Q001](#)
[B41690A7528Q001](#) [B41690A7607Q001](#) [B41690B7148Q001](#) [PEG124MF333AQL1](#) [PEG124VB1220QL1](#) [PEG124VL2470QL1](#)
[PEG124YG2150QL1](#) [MAL203037339E3](#) [450MXG220MEFCSN30X30](#) [106BPA050M](#) [107BPA016M](#) [100PX220MEFC12.5X20](#)
[AXLH222P025ED](#) [TE1508.1-E3](#) [TE1402-E3](#) [600D227G030DJ4](#) [30D506G025CC2](#) [107TMA050M](#) [225BPA100M](#) [HHT472P016HLO](#)
[107TMA100M](#) [105TTA050MSD](#)