

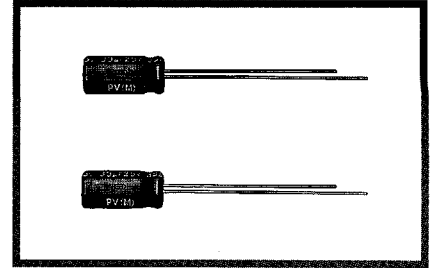
ALUMINUM ELECTROLYTIC CAPACITORS

nichicon

PV series Miniature Sized, Low Impedance, High Reliability



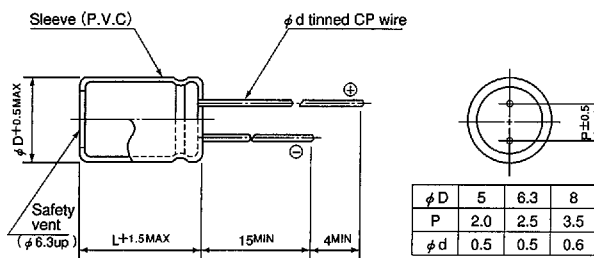
- Miniature sized low impedance series withstanding 5000 hours load life at +105°C.



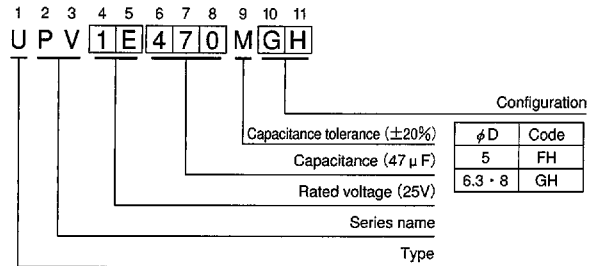
Specifications

| Item | Performance Characteristics | | | | | | |
|------------------------------|--|---------------|--------------------|---|------|------|------|
| Operating Temperature Range | -55~+105°C | | | | | | |
| Voltage Range | 6.3~50V | | | | | | |
| Capacitance Range | 0.47~390 μF | | | | | | |
| Capacitance Tolerance | ±20% at 120Hz, 20°C | | | | | | |
| Leakage Current | After 1 minute's application of rated voltage, leakage current is not more than 0.03CV or 4 (μA), whichever is greater. | | | | | | |
| tan δ | Measurement frequency : 120Hz, Temperature : 20°C | | | | | | |
| | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 |
| | tan δ (MAX.) | 0.22 | 0.19 | 0.16 | 0.14 | 0.12 | 0.10 |
| Stability at Low Temperature | Measurement frequency : 120Hz | | | | | | |
| | Rated voltage (V) | 6.3 | 10 | 16 | 25 | 35 | 50 |
| | Impedance ratio ZT/Z20 (MAX.) | Z-55°C/Z+20°C | 5 | 5 | 4 | 3 | 3 |
| Load Life | After 5000 hours' application of rated voltage at 105°C, capacitors meet the characteristics requirements listed at right. | | Capacitance change | Within ±30% of initial value | | | |
| | | | tan δ | 300% or less of initial specified value | | | |
| | | | Leakage current | Initial specified value or less | | | |
| Shelf Life | After leaving capacitors under no load at 105°C for 1000 hours, they meet the specified value for load life characteristics listed at right. | | Capacitance change | Within ±20% of initial value | | | |
| | | | tan δ | 150% or less of initial specified value | | | |
| | | | Leakage current | Initial specified value or less | | | |
| Marking | Printed with white color letter on dark brown sleeve. | | | | | | |
| Applicable Standards | JIS C-5141 and JIS C-5102. | | | | | | |

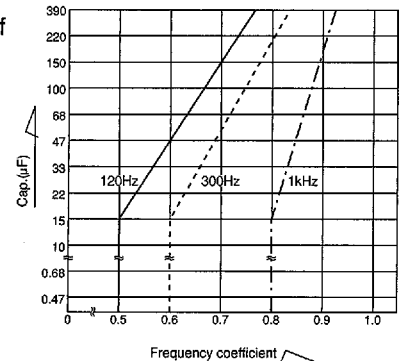
Radial Lead Type



Type numbering system (Example : 25V 47 μF φ 6.3×11)



- Frequency coefficient of allowable ripple current (10kHz~200kHz=1)



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PV series

■ Dimensions

| V (Code) | | 6.3 (0J) | | | 10 (1A) | | | 16 (1C) | | | 25 (1E) | | |
|-----------|-----------|------------|----------------------|-----------------------|------------|----------------------|-----------------------|------------|----------------------|-----------------------|------------|----------------------|-----------------------|
| Cap. (μF) | Item Code | Case size | Impedance | Allowable ripple | Case size | Impedance | Allowable ripple | Case size | Impedance | Allowable ripple | Case size | Impedance | Allowable ripple |
| | | φ D×L (mm) | (Ω) MAX. 20°C 100kHz | (mA rms) 105°C 100kHz | φ D×L (mm) | (Ω) MAX. 20°C 100kHz | (mA rms) 105°C 100kHz | φ D×L (mm) | (Ω) MAX. 20°C 100kHz | (mA rms) 105°C 100kHz | φ D×L (mm) | (Ω) MAX. 20°C 100kHz | (mA rms) 105°C 100kHz |
| 33 | 330 | | | | | | | | | | 5×11 | 1.40 | 155 |
| 39 | 390 | | | | | | | | | | 5×11 | 1.10 | 175 |
| 47 | 470 | | | | | | | 5×11 | 1.40 | 155 | 6.3×11 | 0.94 | 210 |
| 56 | 560 | | | | | | | 5×11 | 1.10 | 175 | 6.3×11 | 0.75 | 235 |
| 68 | 680 | | | | 5×11 | 1.40 | 155 | 6.3×11 | 0.85 | 220 | 6.3×11 | 0.61 | 260 |
| 82 | 820 | | | | 5×11 | 1.10 | 175 | 6.3×11 | 0.71 | 240 | 6.3×11 | 0.51 | 285 |
| 100 | 101 | 5×11 | 1.50 | 150 | 6.3×11 | 0.94 | 210 | 6.3×11 | 0.60 | 265 | 8×11.5 | 0.41 | 370 |
| 120 | 121 | 5×11 | 1.10 | 175 | 6.3×11 | 0.75 | 235 | 6.3×11 | 0.49 | 290 | 8×11.5 | 0.34 | 405 |
| 150 | 151 | 6.3×11 | 0.83 | 225 | 6.3×11 | 0.60 | 265 | 8×11.5 | 0.39 | 375 | 8×11.5 | 0.27 | 460 |
| 180 | 181 | 6.3×11 | 0.66 | 250 | 6.3×11 | 0.49 | 290 | 8×11.5 | 0.34 | 405 | | | |
| 220 | 221 | 6.3×11 | 0.51 | 285 | 8×11.5 | 0.41 | 370 | 8×11.5 | 0.27 | 460 | | | |
| 270 | 271 | 8×11.5 | 0.41 | 370 | 8×11.5 | 0.34 | 405 | | | | | | |
| 330 | 331 | 8×11.5 | 0.34 | 405 | 8×11.5 | 0.27 | 460 | | | | | | |
| 390 | 391 | 8×11.5 | 0.29 | 445 | | | | | | | | | |

| V (Code) | | 35 (1V) | | | 50 (1H) | | |
|-----------|-----------|------------|----------------------|-----------------------|------------|----------------------|-----------------------|
| Cap. (μF) | Item Code | Case size | Impedance | Allowable ripple | Case size | Impedance | Allowable ripple |
| | | φ D×L (mm) | (Ω) MAX. 20°C 100kHz | (mA rms) 105°C 100kHz | φ D×L (mm) | (Ω) MAX. 20°C 100kHz | (mA rms) 105°C 100kHz |
| 0.47 | R47 | | | | 5×11 | 32.0 | 22 |
| 0.68 | R68 | | | | 5×11 | 22.0 | 28 |
| 1 | 010 | | | | 5×11 | 15.0 | 36 |
| 1.5 | 1R5 | | | | 5×11 | 11.0 | 45 |
| 2.2 | 2R2 | | | | 5×11 | 7.00 | 54 |
| 3.3 | 3R3 | | | | 5×11 | 4.60 | 66 |
| 4.7 | 4R7 | | | | 5×11 | 3.10 | 81 |
| 6.8 | 6R8 | | | | 5×11 | 2.50 | 91 |
| 10 | 100 | | | | 5×11 | 2.00 | 115 |
| 12 | 120 | | | | 5×11 | 1.70 | 125 |
| 15 | 150 | | | | 5×11 | 1.30 | 145 |
| 18 | 180 | | | | 5×11 | 1.10 | 155 |
| 22 | 220 | 5×11 | 1.30 | 160 | 6.3×11 | 0.91 | 195 |
| 27 | 270 | 5×11 | 1.00 | 180 | 6.3×11 | 0.74 | 215 |
| 33 | 330 | 6.3×11 | 0.83 | 225 | 6.3×11 | 0.60 | 240 |
| 39 | 390 | 6.3×11 | 0.70 | 245 | 6.3×11 | 0.50 | 260 |
| 47 | 470 | 6.3×11 | 0.58 | 270 | 8×11.5 | 0.42 | 330 |
| 56 | 560 | 6.3×11 | 0.48 | 295 | 8×11.5 | 0.35 | 360 |
| 68 | 680 | 8×11.5 | 0.41 | 370 | 8×11.5 | 0.28 | 410 |
| 82 | 820 | 8×11.5 | 0.32 | 415 | | | |
| 100 | 101 | 8×11.5 | 0.27 | 460 | | | |