

AX9

HIGH VOLTAGE AIR HOLE DC FILM CAPACITORS

HIGH VOLTAGE METALLIZED POLYPROPYLENE
TAPE WRAP AND EPOXY FILLER CASE
CUSTOM DESIGNS AVAILABLE

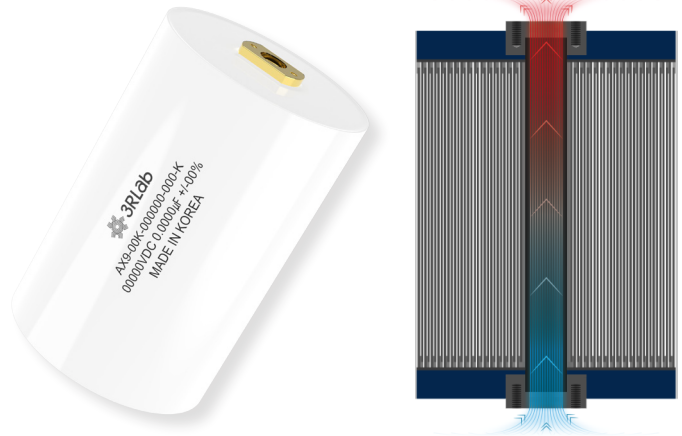


MAIN FEATURES:

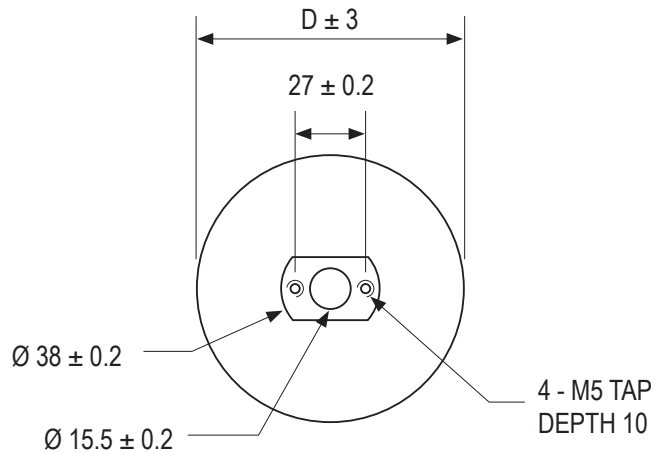
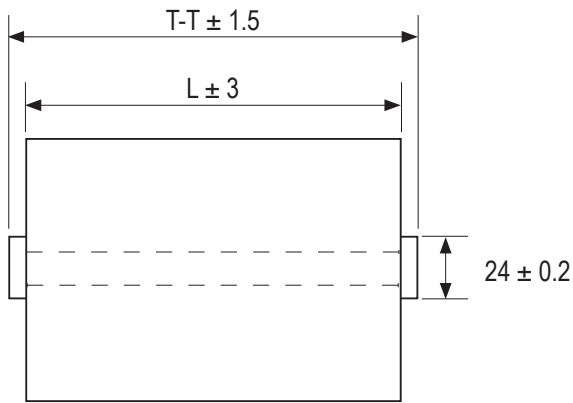
- SELF-HEALING METALLIZED POLYPROPYLENE FILM
- TAPE WRAP CASE
- EPOXY RESIN FILLING

MAIN APPLICATIONS:

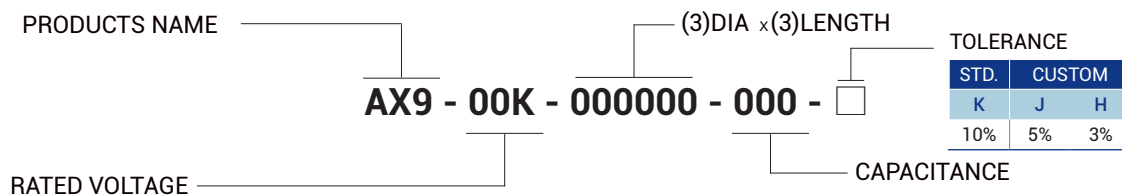
- HIGH VOLTAGE, MEDIUM PULSE APPLICATIONS
- ENERGY CONVERSION AND CONTROL IN POWER SEMICONDUCTOR CIRCUITS
- SMPS, MOTOR SPEED CONTROLS



DIMENSIONS [mm]



ORDERING INFORMATION



ALL SPECIFICATIONS MAY CHANGE WITHOUT NOTICE

AX9

HIGH VOLTAGE AIR HOLE DC FILM CAPACITORS

HIGH VOLTAGE METALLIZED POLYPROPYLENE
TAPE WRAP AND EPOXY FILLER CASE
CUSTOM DESIGNS AVAILABLE



SPECIFICATIONS

| | |
|-------------------------------------|---|
| DC VOLTAGE RANGE | 2000~50000 VDC |
| CAPACITANCE RANGE | UP TO 7 μ F |
| CAPACITANCE TOLERANCE (AT 1kHz) | STANDARD: \pm 10% ON REQUEST \pm 3, 5% |
| EQUIVALENT SERIES RESISTANCE (ESR) | < 4.5 m Ω |
| MAXIMUM VOLTAGE RATE OF RISE(dV/dT) | \leq 800 V/ μ s |
| TERMINALS | M5 TAP DEPTH 10mm |
| VOLTAGE TEST | RATED VOLTAGE X 1.5 TIMES FOR 10 SECS |
| WORKING & STORAGE TEMPERATURE | -55 / +85 $^{\circ}$ C |
| CYLINDRICAL CASE AND FILLING | FLAME RETARDANT EPOXY RESIN FILLER AND TAPE WRAP |
| PROTECTIVE MECHANISM | SELF HEALING |
| LIFE EXPECTANCY | 100,000 HOURS TYP. |
| M5 SCREW TERMINALS | MAX. 3 N·m |
| DISSIPATION FACTOR | DF VALUE \leq 0.05 %, MEASURED AT 25 \pm 5 $^{\circ}$ C, 1 kHz |
| INSULATION RESISTANCE (RINS) | C \leq 0.33 μ F \geq 300,000M Ω , C > 0.33 μ F \geq 100,000 SEC (M Ω X μ F) AT 25 \pm $^{\circ}$ C, AFTER 1 MINUTE OF ELECTRIFICATION AT 500VDC |

AX9

HIGH VOLTAGE AIR HOLE DC FILM CAPACITORS

HIGH VOLTAGE METALLIZED POLYPROPYLENE
TAPE WRAP AND EPOXY FILLER CASE
CUSTOM DESIGNS AVAILABLE



| 2000VDC, RATED VOLTAGE | | | | | | | | |
|------------------------|-----------------------|--------------------|-----------------|----|-------|----------|------------------------------|----------------------|
| VOLTAGE [V] | | CAP ⁽³⁾ | DIMENSIONS [mm] | | | TERMINAL | CURRENT | ORDERING CODE |
| VDC | V-PEAK ⁽¹⁾ | μF | D | L | T - T | | I-PEAK ⁽²⁾ [A] | |
| 2000 | 2800 | 1.2 | 47 | 71 | 81 | M5 | 132 | AX9-02K-047071-125-K |
| 2000 | 2800 | 1.5 | 54 | 71 | 81 | M5 | 165 | AX9-02K-054071-155-K |
| 2000 | 2800 | 2 | 61 | 71 | 81 | M5 | 220 | AX9-02K-061071-205-K |
| 2000 | 2800 | 2.2 | 64 | 71 | 81 | M5 | 242 | AX9-02K-064071-225-K |
| 2000 | 2800 | 2.5 | 68 | 71 | 81 | M5 | 275 | AX9-02K-068071-255-K |
| 2000 | 2800 | 3 | 75 | 71 | 81 | M5 | 330 | AX9-02K-075071-305-K |
| 2000 | 2800 | 3.3 | 78 | 71 | 81 | M5 | 363 | AX9-02K-078071-335-K |
| 2000 | 2800 | 3.5 | 80 | 71 | 81 | M5 | 385 | AX9-02K-080071-355-K |
| 2000 | 2800 | 3.7 | 82 | 71 | 81 | M5 | 407 | AX9-02K-082071-375-K |
| 2000 | 2800 | 4 | 86 | 71 | 81 | M5 | 440 | AX9-02K-086071-405-K |
| 2000 | 2800 | 4.5 | 91 | 71 | 81 | M5 | 495 | AX9-02K-091071-455-K |
| 2000 | 2800 | 5 | 95 | 71 | 81 | M5 | 550 | AX9-02K-095071-505-K |
| 2000 | 2800 | 6 | 104 | 71 | 81 | M5 | 660 | AX9-02K-104071-605-K |
| 2000 | 2800 | 7 | 112 | 71 | 81 | M5 | 770 | AX9-02K-112071-705-K |

**CAPACITANCE AND THREADS TERMINAL AVAILABLE AS CUSTOM.

(1) NON-REPETITIVE PEAK VOLTAGE LESS THAN 00μs TYP.

(2) NON-REPETITIVE PEAK CURRENT LESS THAN 00μs TYP.

(3) MEASURED AT 1kHz ±20Hz AT 25°C

AX9

HIGH VOLTAGE AIR HOLE DC FILM CAPACITORS

HIGH VOLTAGE METALLIZED POLYPROPYLENE
TAPE WRAP AND EPOXY FILLER CASE
CUSTOM DESIGNS AVAILABLE



| 4000VDC, RATED VOLTAGE | | | | | | | | |
|------------------------|-----------------------|--------------------|-----------------|----|-------|----------|------------------------------|----------------------|
| VOLTAGE [V] | | CAP ⁽³⁾ | DIMENSIONS [mm] | | | TERMINAL | CURRENT | ORDERING CODE |
| VDC | V-PEAK ⁽¹⁾ | μF | D | L | T - T | | I-PEAK ⁽²⁾ [A] | |
| 4000 | 5600 | 0.47 | 52 | 71 | 81 | M5 | 103 | AX9-04K-052071-474-K |
| 4000 | 5600 | 0.68 | 62 | 71 | 81 | M5 | 150 | AX9-04K-062071-684-K |
| 4000 | 5600 | 1 | 74 | 71 | 81 | M5 | 220 | AX9-04K-074071-105-K |
| 4000 | 5600 | 1.2 | 81 | 71 | 81 | M5 | 264 | AX9-04K-081071-125-K |
| 4000 | 5600 | 1.5 | 91 | 71 | 81 | M5 | 330 | AX9-04K-091071-155-K |
| 4000 | 5600 | 2 | 104 | 71 | 81 | M5 | 440 | AX9-04K-104071-205-K |
| 4000 | 5600 | 2.2 | 108 | 71 | 81 | M5 | 484 | AX9-04K-108071-225-K |
| 4000 | 5600 | 2.5 | 116 | 71 | 81 | M5 | 550 | AX9-04K-116071-255-K |

| 6000VDC, RATED VOLTAGE | | | | | | | | |
|------------------------|-----------------------|--------------------|-----------------|----|-------|----------|------------------------------|----------------------|
| VOLTAGE [V] | | CAP ⁽³⁾ | DIMENSIONS [mm] | | | TERMINAL | CURRENT | ORDERING CODE |
| VDC | V-PEAK ⁽¹⁾ | μF | D | L | T - T | | I-PEAK ⁽²⁾ [A] | |
| 6000 | 8500 | 0.33 | 54 | 92 | 102 | M5 | 58 | AX9-06K-054092-334-K |
| 6000 | 8500 | 0.47 | 64 | 92 | 102 | M5 | 82 | AX9-06K-064092-474-K |
| 6000 | 8500 | 0.68 | 77 | 92 | 102 | M5 | 119 | AX9-06K-077092-684-K |
| 6000 | 8500 | 1 | 93 | 92 | 102 | M5 | 175 | AX9-06K-093092-105-K |
| 6000 | 8500 | 1.2 | 102 | 92 | 102 | M5 | 210 | AX9-06K-102092-125-K |
| 6000 | 8500 | 1.5 | 114 | 92 | 102 | M5 | 263 | AX9-06K-114092-155-K |

**CAPACITANCE AND THREADS TERMINAL AVAILABLE AS CUSTOM.

(1) NON-REPETITIVE PEAK VOLTAGE LESS THAN 00μs TYP.

(2) NON-REPETITIVE PEAK CURRENT LESS THAN 00μs TYP.

(3) MEASURED AT 1kHz ±20Hz AT 25°C

AX9

HIGH VOLTAGE AIR HOLE DC FILM CAPACITORS

HIGH VOLTAGE METALLIZED POLYPROPYLENE
TAPE WRAP AND EPOXY FILLER CASE
CUSTOM DESIGNS AVAILABLE



| 8000VDC, RATED VOLTAGE | | | | | | | | |
|------------------------|-----------------------|--------------------|-----------------|----|-------|----------|---------------------------|----------------------|
| VOLTAGE [V] | | CAP ⁽³⁾ | DIMENSIONS [mm] | | | TERMINAL | CURRENT | ORDERING CODE |
| VDC | V-PEAK ⁽¹⁾ | μF | D | L | T - T | | I-PEAK ⁽²⁾ [A] | |
| 8000 | 12000 | 0.22 | 51 | 99 | 109 | M5 | 50 | AX9-08K-051099-224-K |
| 8000 | 12000 | 0.33 | 63 | 99 | 109 | M5 | 75 | AX9-08K-063099-334-K |
| 8000 | 12000 | 0.47 | 74 | 99 | 109 | M5 | 106 | AX9-08K-074099-474-K |
| 8000 | 12000 | 0.68 | 89 | 99 | 109 | M5 | 154 | AX9-08K-089099-684-K |
| 8000 | 12000 | 1 | 108 | 99 | 109 | M5 | 226 | AX9-08K-108099-105-K |
| 8000 | 12000 | 1.2 | 118 | 99 | 109 | M5 | 271 | AX9-08K-118099-125-K |

| 10000VDC, RATED VOLTAGE | | | | | | | | |
|-------------------------|-----------------------|--------------------|-----------------|----|-------|----------|---------------------------|----------------------|
| VOLTAGE [V] | | CAP ⁽³⁾ | DIMENSIONS [mm] | | | TERMINAL | CURRENT | ORDERING CODE |
| VDC | V-PEAK ⁽¹⁾ | μF | D | L | T - T | | I-PEAK ⁽²⁾ [A] | |
| 10000 | 14000 | 0.15 | 51 | 99 | 109 | M5 | 45 | AX9-10K-051099-154-K |
| 10000 | 14000 | 0.22 | 62 | 99 | 109 | M5 | 66 | AX9-10K-062099-224-K |
| 10000 | 14000 | 0.33 | 76 | 99 | 109 | M5 | 99 | AX9-10K-076099-334-K |
| 10000 | 14000 | 0.47 | 91 | 99 | 109 | M5 | 141 | AX9-10K-091099-474-K |
| 10000 | 14000 | 0.68 | 109 | 99 | 109 | M5 | 204 | AX9-10K-109099-684-K |

**CAPACITANCE AND THREADS TERMINAL AVAILABLE AS CUSTOM.

(1) NON-REPETITIVE PEAK VOLTAGE LESS THAN 00μs TYP.

(2) NON-REPETITIVE PEAK CURRENT LESS THAN 00μs TYP.

(3) MEASURED AT 1kHz ±20Hz AT 25°C

AX9

HIGH VOLTAGE AIR HOLE DC FILM CAPACITORS

HIGH VOLTAGE METALLIZED POLYPROPYLENE
TAPE WRAP AND EPOXY FILLER CASE
CUSTOM DESIGNS AVAILABLE



| 16000VDC, RATED VOLTAGE | | | | | | | | |
|-------------------------|-----------------------|--------------------|-----------------|-----|-------|----------|------------------------------|----------------------|
| VOLTAGE [V] | | CAP ⁽³⁾ | DIMENSIONS [mm] | | | TERMINAL | CURRENT | ORDERING CODE |
| VDC | V-PEAK ⁽¹⁾ | μF | D | L | T - T | | I-PEAK ⁽²⁾ [A] | |
| 16000 | 22000 | 0.022 | 46 | 101 | 111 | M5 | 11 | AX9-16K-046101-223-K |
| 16000 | 22000 | 0.033 | 55 | 101 | 111 | M5 | 17 | AX9-16K-055101-333-K |
| 16000 | 22000 | 0.047 | 66 | 101 | 111 | M5 | 24 | AX9-16K-066101-473-K |
| 16000 | 22000 | 0.068 | 79 | 101 | 111 | M5 | 34 | AX9-16K-079101-683-K |
| 16000 | 22000 | 0.1 | 95 | 101 | 111 | M5 | 50 | AX9-16K-095101-104-K |
| 16000 | 22000 | 0.15 | 116 | 101 | 111 | M5 | 75 | AX9-16K-116101-154-K |

| 20000VDC, RATED VOLTAGE | | | | | | | | |
|-------------------------|-----------------------|--------------------|-----------------|-----|-------|----------|------------------------------|----------------------|
| VOLTAGE [V] | | CAP ⁽³⁾ | DIMENSIONS [mm] | | | TERMINAL | CURRENT | ORDERING CODE |
| VDC | V-PEAK ⁽¹⁾ | μF | D | L | T - T | | I-PEAK ⁽²⁾ [A] | |
| 20000 | 28000 | 0.015 | 49 | 127 | 137 | M5 | 9 | AX9-20K-049127-153-K |
| 20000 | 28000 | 0.022 | 59 | 127 | 137 | M5 | 13 | AX9-20K-059127-223-K |
| 20000 | 28000 | 0.033 | 71 | 127 | 137 | M5 | 20 | AX9-20K-071127-333-K |
| 20000 | 28000 | 0.047 | 85 | 127 | 137 | M5 | 28 | AX9-20K-085127-473-K |
| 20000 | 28000 | 0.068 | 101 | 127 | 137 | M5 | 41 | AX9-20K-101127-683-K |

**CAPACITANCE AND THREADS TERMINAL AVAILABLE AS CUSTOM.

(1) NON-REPETITIVE PEAK VOLTAGE LESS THAN 00μs TYP.

(2) NON-REPETITIVE PEAK CURRENT LESS THAN 00μs TYP.

(3) MEASURED AT 1kHz ±20Hz AT 25°C

AX9

HIGH VOLTAGE AIR HOLE DC FILM CAPACITORS

HIGH VOLTAGE METALLIZED POLYPROPYLENE
TAPE WRAP AND EPOXY FILLER CASE
CUSTOM DESIGNS AVAILABLE



| 30000VDC, RATED VOLTAGE | | | | | | | | |
|-------------------------|-----------------------|--------------------|-----------------|-----|-------|----------|------------------------------|----------------------|
| VOLTAGE [V] | | CAP ⁽³⁾ | DIMENSIONS [mm] | | | TERMINAL | CURRENT | ORDERING CODE |
| VDC | V-PEAK ⁽¹⁾ | μF | D | L | T - T | | I-PEAK ⁽²⁾ [A] | |
| 30000 | 42000 | 0.01 | 51 | 164 | 174 | M5 | 7 | AX9-30K-051164-103-K |
| 30000 | 42000 | 0.015 | 62 | 164 | 174 | M5 | 11 | AX9-30K-062164-153-K |
| 30000 | 42000 | 0.022 | 74 | 164 | 174 | M5 | 15 | AX9-30K-074164-223-K |
| 30000 | 42000 | 0.033 | 91 | 164 | 174 | M5 | 23 | AX9-30K-091164-333-K |
| 30000 | 42000 | 0.047 | 108 | 164 | 174 | M5 | 33 | AX9-30K-108164-473-K |

| 50000VDC, RATED VOLTAGE | | | | | | | | |
|-------------------------|-----------------------|--------------------|-----------------|-----|-------|----------|------------------------------|----------------------|
| VOLTAGE [V] | | CAP ⁽³⁾ | DIMENSIONS [mm] | | | TERMINAL | CURRENT | ORDERING CODE |
| VDC | V-PEAK ⁽¹⁾ | μF | D | L | T - T | | I-PEAK ⁽²⁾ [A] | |
| 50000 | 65000 | 0.0047 | 51 | 182 | 192 | M5 | 4 | AX9-50K-051182-472-K |
| 50000 | 65000 | 0.0068 | 60 | 182 | 192 | M5 | 5 | AX9-50K-060182-682-K |
| 50000 | 65000 | 0.01 | 72 | 182 | 192 | M5 | 8 | AX9-50K-072182-103-K |
| 50000 | 65000 | 0.015 | 85 | 182 | 192 | M5 | 12 | AX9-50K-085182-153-K |
| 50000 | 65000 | 0.022 | 105 | 182 | 192 | M5 | 18 | AX9-50K-105182-223-K |

**CAPACITANCE AND THREADS TERMINAL AVAILABLE AS CUSTOM.

(1) NON-REPETITIVE PEAK VOLTAGE LESS THAN 00μs TYP.

(2) NON-REPETITIVE PEAK CURRENT LESS THAN 00μs TYP.

(3) MEASURED AT 1kHz ±20Hz AT 25°C

ALL INFORMATION ON THE FILE MAY CHANGE WITHOUT NOTICE

#303 Hyundai I Valley, 149 Gongdanro, Gunpo City, Gyeonggi-do, Korea

VOICE. +82-31-429-6379 FAX. +82-31-429-9127

info@3RLab.com www.3RLab.com 3RLab, Inc.



UPDATE 2023-06-29