

| WV (DC) | Cap. (µF) | Cap. Tol. (%) | DC Leakage µA @ 25°C Max. | DF % @ 25°C 120Hz Max. | ESR Ω @ 25°C 100kHz Max. | Size Code | Digi-Key Part No. | Cut Tape Price Each | | | Digi-Key Part No. | Tape and Reel | | Kemet Part No. |
|---------|-----------|---------------|---------------------------|------------------------|--------------------------|---------------|-------------------|---------------------|------|---------------|-------------------|---------------|--------------------|----------------|
| | | | | | | | | 1 | 10 | 100 | | Qty. | Pricing | |
| 2.5 | 680 ±20 | 170 | 8 | 0.006 | X | 399-4987-1-ND | 8.53 | 7.43 | 6.49 | 399-4987-2-ND | 500 | 1552.55 | T530X687M2R5ATE006 | |
| | 1000 ±20 | 250 | 8 | 0.006 | Y | 399-3471-1-ND | 7.99 | 6.95 | 6.07 | 399-3471-2-ND | 500 | 1453.45 | T530Y687M2R5ATE006 | |
| | 1000 ±20 | 250 | 8 | 0.005 | Y | 399-4749-1-ND | 8.35 | 7.27 | 6.35 | 399-4749-2-ND | 500 | 1519.52 | T530Y108M2R5ATE005 | |
| | 1500 ±20 | 375 | 8 | 0.005 | X | 399-5274-1-ND | 9.80 | 8.53 | 7.45 | 399-5274-2-ND | 500 | 1783.78 | T530X158M2R5ATE005 | |
| | 680 ±20 | 204 | 8 | 0.01 | D | 399-4129-1-ND | 7.44 | 6.48 | 5.66 | 399-4129-2-ND | 500 | 1354.35 | T530D687M003ATE010 | |
| 3 | 1000 ±20 | 300 | 8 | 0.01 | X | 399-4131-1-ND | 8.53 | 7.43 | 6.49 | 399-4131-2-ND | 500 | 1552.55 | T530X108M003ATE010 | |
| | 1500 ±20 | 450 | 8 | 0.008 | X | 399-4133-1-ND | 9.44 | 8.22 | 7.18 | 399-4133-2-ND | 500 | 1717.72 | T530X158M003ATE008 | |
| | 330 ±20 | 132 | 8 | 0.006 | D | 399-4124-1-ND | 7.62 | 6.64 | 5.80 | 399-4124-2-ND | 500 | 1387.39 | T530D337M004ATE006 | |
| | 470 ±20 | 188 | 8 | 0.006 | D | 399-4986-1-ND | 7.80 | 6.79 | 5.94 | 399-4986-2-ND | 500 | 1420.42 | T530D477M004ATE006 | |
| | 470 ±20 | 188 | 8 | 0.01 | D | 399-4126-1-ND | 7.44 | 6.48 | 5.66 | 399-4126-2-ND | 500 | 1354.35 | T530D477M004ATE010 | |
| 4 | 680 ±20 | 272 | 8 | 0.004 | X | 399-4817-1-ND | 9.62 | 8.37 | 7.32 | 399-4817-2-ND | 500 | 1750.75 | T530X687M004ATE004 | |
| | 680 ±20 | 272 | 8 | 0.01 | X | 399-4139-1-ND | 8.53 | 7.43 | 6.49 | 399-4139-2-ND | 500 | 1552.55 | T530X687M004ATE010 | |
| | 680 ±20 | 272 | 8 | 0.006 | X | 399-4138-1-ND | 8.89 | 7.74 | 6.76 | 399-4138-2-ND | 500 | 1618.62 | T530X687M004ATE006 | |
| | 680 ±20 | 272 | 8 | 0.005 | Y | 399-4750-1-ND | 8.35 | 7.27 | 6.35 | 399-4750-2-ND | 500 | 1519.52 | T530Y687M004ATE005 | |
| | 220 ±20 | 139 | 8 | 0.006 | D | 399-4122-1-ND | 7.62 | 6.64 | 5.80 | 399-4122-2-ND | 500 | 1387.39 | T530D227M006ATE006 | |
| 6.3 | 330 ±20 | 208 | 8 | 0.01 | D | 399-4125-1-ND | 7.26 | 6.32 | 5.52 | 399-4125-2-ND | 500 | 1321.32 | T530D337M006ATE010 | |
| | 330 ±20 | 208 | 8 | 0.006 | Y | 399-3472-1-ND | 7.99 | 6.95 | 6.07 | 399-3472-2-ND | 500 | 1453.45 | T530Y337M006ATE006 | |
| | 330 ±20 | 208 | 8 | 0.006 | D | 399-4751-1-ND | 7.62 | 6.64 | 5.80 | 399-4751-2-ND | 500 | 1387.39 | T530D337M006ATE006 | |
| | 470 ±20 | 296 | 8 | 0.005 | Y | 399-4752-1-ND | 8.35 | 7.27 | 6.35 | 399-4752-2-ND | 500 | 1519.52 | T530Y477M006ATE005 | |
| | 470 ±20 | 296 | 8 | 0.01 | X | 399-4137-1-ND | 8.53 | 7.43 | 6.49 | 399-4137-2-ND | 500 | 1552.55 | T530X477M006ATE010 | |
| 10 | 470 ±20 | 296 | 8 | 0.006 | X | 399-4136-1-ND | 8.89 | 7.74 | 6.76 | 399-4136-2-ND | 500 | 1618.62 | T530X477M006ATE006 | |
| | 680 ±20 | 428 | 8 | 0.018 | X | 399-5408-1-ND | 8.53 | 7.43 | 6.49 | 399-5408-2-ND | 500 | 1552.55 | T530X687M006ATE018 | |
| | 150 ±20 | 150 | 8 | 0.006 | D | 399-4121-1-ND | 7.62 | 6.64 | 5.80 | 399-4121-2-ND | 500 | 1387.39 | T530D157M010ATE006 | |
| | 150 ±20 | 150 | 8 | 0.01 | D | 399-4791-1-ND | 6.53 | 6.32 | 5.52 | 399-4791-2-ND | 500 | 1321.32 | T530D157M010ATE010 | |
| | 220 ±20 | 220 | 8 | 0.01 | D | 399-4123-1-ND | 7.26 | 6.32 | 5.52 | 399-4123-2-ND | 500 | 1321.32 | T530D227M010ATE010 | |
| 16 | 220 ±20 | 220 | 8 | 0.006 | D | 399-4747-1-ND | 7.62 | 6.64 | 5.80 | 399-4747-2-ND | 500 | 1387.39 | T530D227M010ATE006 | |
| | 220 ±20 | 220 | 8 | 0.006 | Y | 399-4748-1-ND | 7.99 | 6.95 | 6.07 | 399-4748-2-ND | 500 | 1453.45 | T530Y227M010ATE006 | |
| | 330 ±20 | 330 | 8 | 0.01 | X | 399-4135-1-ND | 8.53 | 7.43 | 6.49 | 399-4135-2-ND | 500 | 1552.55 | T530X337M010ATE010 | |
| | 330 ±20 | 330 | 8 | 0.006 | X | 399-4134-1-ND | 8.89 | 7.74 | 6.76 | 399-4134-2-ND | 500 | 1618.62 | T530X337M010ATE006 | |
| | 150 ±20 | 240 | 8 | 0.015 | X | 399-4663-1-ND | 9.15 | 8.85 | 7.73 | 399-4663-2-ND | 500 | 1849.85 | T530X157M016ATE015 | |
| 16 | 150 ±20 | 240 | 8 | 0.025 | X | 399-4664-1-ND | 8.82 | 8.53 | 7.45 | 399-4664-2-ND | 500 | 1783.78 | T530X157M016ATE025 | |
| | 150 ±20 | 240 | 8 | 0.04 | X | 399-4665-1-ND | 8.49 | 8.22 | 7.18 | 399-4665-2-ND | 500 | 1717.72 | T530X157M016ATE040 | |

Kits – RoHS Compliant

| | |
|--|-------|
| 399-5260-ND (Kemet No. TAN ENG KIT 04) 10 each of values denoted (100 total pieces) | 36.30 |
| 399-5278-ND (Kemet No. TAN ENG KIT 09) 10 each of values denoted (100 total pieces) | 36.30 |
| 399-5270-ND (Kemet No. TAN ENG KIT 08) See Digi-Key website for values included (160 total pieces) | 36.30 |

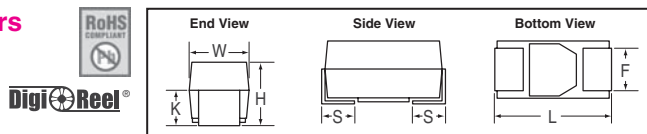
A700 Series AO-CAP Aluminum Organic Capacitors

KEMET's AO-CAP, designated the A700 Series, has been targeted for power management applications. The structure of the AO-CAP uses aluminum as the anode material, aluminum oxide as the dielectric, and a conductive organic polymer for its counter-electrode material. The AO-CAP offers many advantages:

- Extremely low ESR • High capacitance retention for superior performance at high operating frequencies • No voltage derating up to 125°C • Robust to the surface-mount process • No dry-out-related failure mechanism

The A700 Series has a molded case and wraparound terminations. This provides strong protection against cracks (flex) making it an ideal alternative to high-capacitance ceramics, and also offers true surface-mountable solutions to the existing aluminum organic capacitors found in the industry. The high-frequency performance of the AO-CAP can reduce component counts, which allows the designer to save board space and offers a more cost-effective solution.

The AO-CAP has excellent surge current performance and long-term reliability. There is no recommended derating of application voltage to reduce failure rate. **Operating Temperature:** -55°C ~ 125°C. The approximate capacitance shift over the temperature range for -55°C is -15%, and for 125°C is +15%. **Capacitance Tolerance:** ±20%



| Size Code | | L | W | H | K Min. | F ±0.1 | S ±0.2 |
|-----------|---------|-----------|-----------|-----------|--------|--------|--------|
| Kemet | EIA | | | | | | |
| V | 7343-20 | 7.3 ± 0.3 | 4.3 ± 0.3 | 1.9 ± 0.1 | 1.1 | 2.4 | 1.3 |
| D | 7343-31 | 7.3 ± 0.3 | 4.3 ± 0.3 | 2.8 ± 0.3 | 1.3 | 2.4 | 1.3 |
| X | 7343-43 | 7.3 ± 0.3 | 4.3 ± 0.3 | 4.0 ± 0.3 | 2.1 | 2.4 | 1.3 |

| WV (DC) | Cap (µF) | Size Code | DC Leakage µA @ 25°C Maximum | DF % @ 25°C 120Hz Max. | ESR Ω @ 25°C 100kHz Max. | Ripple Current Arms 100kHz, at Max. ESR -55°C ~ 125°C | Digi-Key Part No. | Cut Tape Price Each | | | Digi-Key Part No. | Tape and Reel | | Kemet Part No. |
|---------|----------|-----------|------------------------------|------------------------|--------------------------|---|-------------------|---------------------|------|------|-------------------|---------------|---------|--------------------|
| | | | | | | | | 1 | 10 | 100 | | Qty. | Pricing | |
| 2 | 100 | V | 12 | 6 | 0.028 | 2.1 | 399-3030-1-ND | 1.44 | 1.35 | 1.17 | 399-3030-2-ND | 1,000 | 718.74 | A700V107M002ATE028 |
| | 150 | V | 18 | 6 | 0.028 | 2.1 | 399-3031-1-ND | 1.44 | 1.35 | 1.17 | 399-3031-2-ND | 1,000 | 718.74 | A700V157M002ATE028 |
| | 180 | D | 21.6 | 6 | 0.018 | 2.9 | 399-3032-1-ND | 2.16 | 2.03 | 1.76 | 399-3032-2-ND | 500 | 540.87 | A700D187M002ATE018 |
| | 220 | D | 26.4 | 6 | 0.018 | 2.9 | 399-3033-1-ND | 2.16 | 2.03 | 1.76 | 399-3033-2-ND | 500 | 540.87 | A700D227M002ATE018 |
| | 220 | D | 26.4 | 6 | 0.015 | 3.2 | 399-3034-1-ND | 2.31 | 2.17 | 1.88 | 399-3034-2-ND | 500 | 577.17 | A700D227M002ATE015 |
| | 220 | D | 26.4 | 6 | 0.012 | 3.5 | 399-3035-1-ND | 2.45 | 2.31 | 2.00 | 399-3035-2-ND | 500 | 613.47 | A700D227M002ATE012 |
| 2.5 | 270 | X | 26.4 | 6 | 0.015 | 3.2 | 399-3036-1-ND | 2.90 | 2.73 | 2.36 | 399-3036-2-ND | 500 | 726.00 | A700X277M002ATE015 |
| | 330 | X | 39.6 | 6 | 0.015 | 3.3 | 399-3037-1-ND | 2.90 | 2.73 | 2.36 | 399-3037-2-ND | 500 | 726.00 | A700X337M002ATE015 |
| | 390 | X | 46.8 | 6 | 0.01 | 4.1 | 399-3038-1-ND | 3.05 | 2.86 | 2.48 | 399-3038-2-ND | 500 | 762.30 | A700X397M002ATE010 |
| | 470 | X | 56.4 | 6 | 0.015 | 4.5 | 399-3040-1-ND | 2.90 | 2.73 | 2.36 | 399-3040-2-ND | 500 | 726.00 | A700X477M002ATE015 |
| | 82 | V | 12.3 | 6 | 0.028 | 2.1 | 399-3041-1-ND | 1.44 | 1.35 | 1.17 | 399-3041-2-ND | 1,000 | 718.74 | A700V826M2R5ATE028 |
| | 150 | D | 22.5 | 6 | 0.018 | 2.9 | 399-3042-1-ND | 2.16 | 2.03 | 1.76 | 399-3042-2-ND | 500 | 540.87 | A700D157M2R5ATE018 |
| 4 | 220 | X | 33 | 6 | 0.015 | 3.3 | 399-3043-1-ND | 2.90 | 2.73 | 2.36 | 399-3043-2-ND | 500 | 726.00 | A700X227M2R5ATE015 |
| | 82 | V | 19.7 | 6 | 0.028 | 2.1 | 399-3044-1-ND | 1.44 | 1.35 | 1.17 | 399-3044-2-ND | 1,000 | 718.74 | A700V826M004ATE028 |
| | 120 | D | 28.8 | 6 | 0.018 | 2.9 | 399-3045-1-ND | 2.16 | 2.03 | 1.76 | 399-3045-2-ND | 500 | 540.87 | A700D127M004ATE018 |
| | 150 | D | 36 | 6 | 0.018 | 2.9 | 399-3046-1-ND | 2.16 | 2.03 | 1.76 | 399-3046-2-ND | 500 | 540.87 | A700D157M004ATE018 |
| | 180 | X | 43.2 | 6 | 0.015 | 3.3 | 399-3047-1-ND | 2.90 | 2.73 | 2.36 | 399-3047-2-ND | 500 | 726.00 | A700X187M004ATE018 |
| | 220 | X | 52.8 | 6 | 0.015 | 3.3 | 399-3048-1-ND | 2.90 | 2.73 | 2.36 | 399-3048-2-ND | 500 | 726.00 | A700X227M004ATE015 |
| 6.3 | 270 | X | 64.8 | 6 | 0.015 | 3.3 | 399-3049-1-ND | 2.90 | 2.73 | 2.36 | 399-3049-2-ND | 500 | 726.00 | A700X277M004ATE015 |
| | 33 | V | 8.3 | 6 | 0.028 | 2.1 | 399-3050-1-ND | 1.44 | 1.35 | 1.17 | 399-3050-2-ND | 1,000 | 718.74 | A700V336M006ATE028 |
| | 47 | V | 11.8 | 6 | 0.025 | 3.3 | 399-5277-1-ND | 1.58 | 1.49 | 1.29 | 399-5277-2-ND | 1,000 | 791.34 | A700V476M006ATE025 |
| | 56 | V | 14.1 | 6 | 0.028 | 2.1 | 399-3051-1-ND | 1.44 | 1.35 | 1.17 | 399-3051-2-ND | 1,000 | 718.74 | A700V476M006ATE028 |
| | 68 | V | 17.1 | 6 | 0.028 | 2.1 | 399-3052-1-ND | 1.44 | 1.35 | 1.17 | 399-3052-2-ND | 1,000 | 718.74 | A700V566M006ATE028 |
| | 100 | V | 17.1 | 6 | 0.028 | 2.1 | 399-3053-1-ND | 1.44 | 1.35 | 1.17 | 399-3053-2-ND | 1,000 | 718.74 | A700V686M006ATE028 |
| 8 | 100 | D | 25.2 | 6 | 0.015 | 4.1 | 399-5275-1-ND | 2.31 | 2.17 | 1.88 | 399-5275-2-ND | 500 | 577.17 | A700D107M006ATE015 |
| | 100 | D | 25.2 | 6 | 0.018 | 2.9 | 399-3054-1-ND | 2.16 | 2.03 | 1.76 | 399-3054-2-ND | 500 | 540.87 | A700D107M006ATE018 |
| | 150 | X | 37.8 | 6 | 0.01 | 4.7 | 399-5276-1-ND | 3.05 | 2.86 | 2.48 | 399-5276-2-ND | 500 | 762.30 | A700X157M006ATE010 |
| | 150 | X | 37.8 | 6 | 0.015 | 3.3 | 399-3055-1-ND | 2.90 | 2.73 | 2.36 | 399-3055-2-ND | 500 | 726.00 | A700X157M006ATE015 |
| | 180 | X | 43.2 | 6 | 0.015 | 3.3 | 399-3056-1-ND | 2.90 | 2.73 | 2.36 | 399-3056-2-ND | 500 | 726.00 | A700X187M006ATE015 |
| | 33 | V | 10.6 | 6 | 0.028 | 2.1 | 399-3057-1-ND | 1.44 | 1.35 | 1.17 | 399-3057-2-ND | 1,000 | 718.74 | A700V336M008ATE028 |
| 12.5 | 10 | V | 70.5 | 6 | 0.040 | 2.6 | 399-529 | | | | | | | |