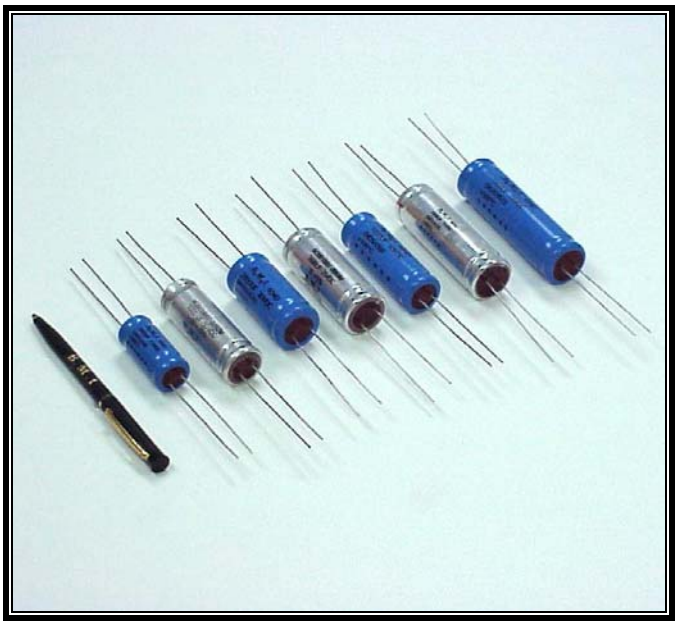
M39018/07

+105°C 4-Terminal Tubular Axial Lead Aluminum Capacitors



M39018/07

- **Style CUR19**

General Specifications-

Operating Temperature:
-55 to +105°C

Voltage Range:
5 – 200 VDC

Capacitance Range:
50µF to 16,000µF

Capacitance Tolerance:
-10%/+75%

Case Size Range:
0.750” X 1.625” – 1.000” X 3.625”

Termination:
4 – Terminal, Axial Leads.

Life Validation Test:
Refer to MIL-PRF-39018/7A for test requirements.

Shelf Test:
Refer to MIL-PRF-39018/7A for test requirements.

Other Test Parameters:
Refer to MIL-PRF-39108/7A for test requirements.

M39018/07

PART NUMBER BREAK-DOWN:

M39018/ 07- 0001 M

FAILURE RATE OR VIBRATION CODE:
M = 1.0%/1000 hours

DASH NUMBER:
(SEE STANDARD RATINGS TABLE.)

DETAIL SPECIFICATION NUMBER:
INDICATES THE DETAIL SPECIFICATION NUMBER (IE. MIL-PRF-39018/7A).

BASIC DOCUMENT NUMBER:
INDICATES THE BASIC SPECTIFICATION NUMBER (IE. MIL-PRF-39018).

Axial 4-Leaded Capacitor Dimensions

STYLE CUR19

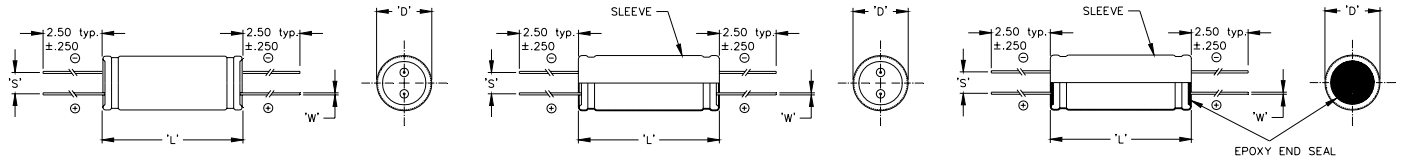


Table 1. Case Dimensions mm(in.)

CASE CODE	NOMINAL		MYLAR SLEEVING		OUTER INSULATION WITH EPOXY COATED		LEAD SPACING	WIRE GAUGE 'W'
	'D'	'L'	'D' MAX.	'L' MAX.	'D' MAX.	'L' MAX.	S ±3.81 (±0.150)	
H1	19.05 (0.750)	41.3 (1.625)	19.9 (0.785)	42.9 (1.689)	19.9 (0.785)	46.8 (1.843)	7.62 (0.300)	No. 18 AWG (0.040")
H2	19.05 (0.750)	54.0 (2.125)	19.9 (0.785)	55.6 (2.189)	19.9 (0.785)	59.5 (2.343)	7.62 (0.300)	No. 18 AWG (0.040")
H3	19.05 (0.750)	66.7 (2.625)	19.9 (0.785)	68.3 (2.689)	19.9 (0.785)	72.2 (2.843)	7.62 (0.300)	No. 18 AWG (0.040")
H4	19.05 (0.750)	79.4 (3.125)	19.9 (0.785)	81.0 (3.189)	19.9 (0.785)	84.9 (3.343)	7.62 (0.300)	No. 18 AWG (0.040")
H5	19.05 (0.750)	92.1 (3.625)	19.9 (0.785)	93.7 (3.689)	19.9 (0.785)	97.6 (3.843)	7.62 (0.300)	No. 18 AWG (0.040")
J1	22.23 (0.875)	41.3 (1.625)	23.1 (0.910)	42.9 (1.689)	23.1 (0.910)	46.8 (1.843)	7.62 (0.300)	No. 18 AWG (0.040")
J2	22.23 (0.875)	54.0 (2.125)	23.1 (0.910)	55.6 (2.189)	23.1 (0.910)	59.5 (2.343)	7.62 (0.300)	No. 18 AWG (0.040")
J3	22.23 (0.875)	66.7 (2.625)	23.1 (0.910)	68.3 (2.689)	23.1 (0.910)	72.2 (2.843)	7.62 (0.300)	No. 18 AWG (0.040")
J4	22.23 (0.875)	79.4 (3.125)	23.1 (0.910)	81.0(3.189)	23.1 (0.910)	84.9 (3.343)	7.62 (0.300)	No. 18 AWG (0.040")
J5	22.23 (0.875)	92.1 (3.625)	23.1 (0.910)	93.7 (3.689)	23.1 (0.910)	97.6 (3.843)	7.62 (0.300)	No. 18 AWG (0.040")
K1	25.40 (1.000)	41.3 (1.625)	26.3 (1.035)	42.9 (1.689)	26.3 (1.035)	46.8 (1.843)	7.62 (0.300)	No. 18 AWG (0.040")
K2	25.40 (1.000)	54.0 (2.125)	26.3 (1.035)	55.6 (2.189)	26.3 (1.035)	59.5 (2.343)	7.62 (0.300)	No. 18 AWG (0.040")
K3	25.40 (1.000)	66.7 (2.625)	26.3 (1.035)	68.3 (2.689)	26.3 (1.035)	72.2 (2.843)	7.62 (0.300)	No. 18 AWG (0.040")
K4	25.40 (1.000)	79.4 (3.125)	26.3 (1.035)	81.0 (3.189)	26.3 (1.035)	84.9 (3.343)	7.62 (0.300)	No. 18 AWG (0.040")
K5	25.40 (1.000)	92.1 (3.625)	26.3 (1.035)	93.7 (3.689)	26.3 (1.035)	97.6 (3.843)	7.62 (0.300)	No. 18 AWG (0.040")

M39018/07

STANDARD RATINGS FOR TYPE M39018/07

Rated Cap. (µF)	Case Size	Max. ESR +25°C 120Hz (Ω)	Max. Imped. +25°C 10k & 1MHz (Ω)	Max. DC Leakage +25°C (A)	Max. DC Leakage +85°C & +105°C (A)	Max. Ripple Current +10°C rise 10k & 1MHz (Arms)	Dash Number CUR19 Low Freq. Vibration	Dash Number CUR19 High Freq. Vibration
5 VOLTS DC WORKING; 7 VOLTS DC SURGE								
2,400	H1	0.146	0.110	0.055	330	1.50	0001-	0201-
3,300	H2	0.106	0.080	0.064	390	1.80	0002-	0202-
3,700	J1	0.095	0.071	0.068	410	1.90	0003-	0203-
4,400	H3	0.080	0.060	0.074	440	2.50	0004-	0204-
5,000	J2	0.070	0.053	0.080	480	2.50	0005-	0205-
5,700	H4	0.062	0.047	0.085	510	3.10	0006-	0206-
6,700	J3	0.052	0.039	0.092	550	3.20	0007-	0207-
7,200	K2	0.049	0.037	0.095	570	3.50	0008-	0208-
8,800	J4	0.040	0.030	0.105	630	4.00	0009-	0209-
10,000	K3	0.035	0.026	0.112	670	4.60	0010-	0210-
13,000	K4	0.027	0.020	0.128	770	5.60	0011-	0211-
16,000	K5	0.022	0.017	0.142	850	7.00	0012-	0212-
7.5 VOLTS DC WORKING; 10 VOLTS DC SURGE								
2,000	H1	0.175	0.130	0.061	370	1.40	0013-	0213-
3,000	J1	0.117	0.087	0.075	450	1.80	0014-	0214-
3,800	J3	0.093	0.070	0.085	510	2.40	0015-	0215-
4,400	J2	0.080	0.059	0.091	550	2.40	0016-	0216-
4,800	K1	0.073	0.055	0.095	570	2.40	0017-	0217-
5,000	H4	0.070	0.053	0.097	580	3.00	0018-	0218-
5,800	J3	0.061	0.046	0.105	630	3.10	0019-	0219-
6,200	K2	0.057	0.043	0.108	650	3.30	0020-	0220-
7,500	J4	0.047	0.035	0.119	710	3.80	0021-	0221-
9,000	K3	0.039	0.029	0.130	780	4.40	0022-	0222-
11,000	K4	0.032	0.024	0.144	860	5.30	0023-	0223-
14,000	K5	0.025	0.019	0.162	970	6.60	0024-	0224-
10 VOLTS DC WORKING; 15 VOLTS DC SURGE								
1,700	H1	0.195	0.144	0.065	390	1.30	0025-	0225-
2,300	H2	0.144	0.107	0.076	460	1.70	0026-	0226-
2,600	J1	0.127	0.094	0.081	490	1.70	0027-	0227-
3,000	H3	0.110	0.082	0.087	520	2.20	0028-	0228-
3,600	J2	0.092	0.068	0.095	570	2.20	0029-	0229-
4,100	H4	0.081	0.060	0.101	605	2.80	0030-	0230-
4,800	J3	0.069	0.051	0.110	660	2.90	0031-	0231-
5,100	K2	0.065	0.048	0.113	680	3.20	0032-	0232-
6,300	J4	0.053	0.039	0.126	760	3.60	0033-	0233-
7,500	K3	0.044	0.033	0.137	820	4.10	0034-	0234-
9,700	K4	0.034	0.025	0.156	940	5.00	0035-	0235-
12,000	K5	0.028	0.021	0.173	1,040	6.20	0036-	0236-

M39018/07

STANDARD RATINGS FOR TYPE M39018/07

Rated Cap. (µF)	Case Size	Max. ESR +25°C 120Hz (Ω)	Max. Imped. +25°C 10k & 1MHz (Ω)	Max. DC Leakage +25°C (A)	Max. DC Leakage +85°C & +105°C (A)	Max. Ripple Current +10°C rise 10k & 1MHz (Arms)	Dash Number CUR19 Low Freq. Vibration	Dash Number CUR19 High Freq. Vibration
16 VOLTS DC WORKING; 20 VOLTS DC SURGE								
1,400	H1	0.207	0.149	0.075	450	1.20	0037-	0237-
1,900	H2	0.153	0.110	0.087	520	1.60	0038-	0238-
2,100	J1	0.138	0.100	0.092	550	1.60	0039-	0239-
2,700	J2	0.107	0.077	0.104	620	2.00	0040-	0240-
3,400	H4	0.085	0.061	0.117	700	2.60	0041-	0241-
4,200	K2	0.069	0.050	0.130	780	2.90	0042-	0242-
5,200	J4	0.056	0.041	0.144	860	3.30	0043-	0243-
6,100	K3	0.048	0.035	0.156	940	3.90	0044-	0244-
6,400	J5	0.046	0.033	0.162	970	4.10	0045-	0245-
8,000	K4	0.036	0.026	0.179	1,070	4.70	0046-	0246-
10,000	K5	0.029	0.021	0.200	1,200	5.90	0047-	0247-
20 VOLTS DC WORKING; 25 VOLTS DC SURGE								
1,200	H1	0.240	0.170	0.078	470	1.20	0048-	0248-
1,800	J1	0.160	0.110	0.095	570	1.50	0049-	0249-
2,200	H3	0.132	0.092	0.105	630	2.00	0050-	0250-
2,400	J2	0.120	0.084	0.110	660	1.90	0051-	0251-
2,900	H4	0.100	0.070	0.120	720	2.50	0052-	0252-
3,400	J3	0.085	0.060	0.130	780	2.60	0053-	0253-
3,700	K2	0.078	0.055	0.136	820	2.70	0054-	0254-
4,500	J4	0.064	0.045	0.150	900	3.30	0055-	0255-
5,300	K3	0.055	0.039	0.163	980	3.50	0056-	0256-
7,000	K4	0.042	0.030	0.187	1,120	4.50	0057-	0257-
8,600	K5	0.034	0.024	0.204	1,200	5.50	0058-	0258-
25 VOLTS DC WORKING; 30 VOLTS DC SURGE								
900	H1	0.320	0.224	0.075	450	1.05	0059-	0259-
1,200	H2	0.240	0.168	0.087	520	1.40	0060-	0260-
1,600	H3	0.180	0.126	0.100	600	1.75	0061-	0261-
2,000	J2	0.145	0.102	0.111	670	1.90	0062-	0262-
2,500	K2	0.116	0.081	0.125	750	2.40	0063-	0263-
2,800	J3	0.103	0.072	0.132	790	3.00	0064-	0264-
3,600	K3	0.080	0.056	0.150	900	3.25	0065-	0265-
4,700	K4	0.062	0.043	0.171	1,030	4.00	0066-	0266-
5,700	K5	0.051	0.036	0.189	1,130	4.65	0067-	0267-
30 VOLTS DC WORKING; 40 VOLTS DC SURGE								
700	H1	0.380	0.262	0.072	430	1.00	0068-	0268-
900	H2	0.295	0.204	0.082	490	1.25	0069-	0269-
1,300	H3	0.204	0.141	0.099	590	1.70	0070-	0270-
1,600	J2	0.165	0.114	0.110	660	1.75	0071-	0271-

M39018/07

STANDARD RATINGS FOR TYPE M39018/07

Rated Cap. (µF)	Case Size	Max. ESR +25°C 120Hz (Ω)	Max. Imped. +25°C 10k & 1MHz (Ω)	Max. DC Leakage +25°C (A)	Max. DC Leakage +85°C & +105°C (A)	Max. Ripple Current +10°C rise 10k & 1MHz (Arms)	Dash Number CUR19 Low Freq. Vibration	Dash Number CUR19 High Freq. Vibration
30 VOLTS DC WORKING; 40 VOLTS DC SURGE CONTINUED								
2,000	K2	0.133	0.092	0.122	730	2.25	0072-	0268-
2,200	J3	0.120	0.083	0.128	770	2.35	0073-	0269-
2,800	K3	0.095	0.066	0.145	870	3.00	0074-	0270-
3,000	J4	0.088	0.061	0.150	900	2.90	0075-	0271-
3,600	K4	0.074	0.051	0.164	980	3.60	0076-	0272-
4,500	K5	0.059	0.041	0.184	1,100	4.40	0077-	0273-
40 VOLTS DC WORKING; 50 VOLTS DC SURGE CONTINUED								
550	H1	0.480	0.322	0.074	440	0.90	0078-	0278-
700	H2	0.380	0.255	0.084	500	1.15	0079-	0279-
900	J1	0.295	0.197	0.095	570	1.20	0080-	0280-
1,200	J2	0.220	0.147	0.110	660	1.55	0081-	0281-
1,500	K2	0.175	0.117	0.120	720	2.05	0082-	0282-
1,700	J3	0.155	0.104	0.130	780	2.15	0083-	0283-
2,300	J4	0.115	0.077	0.150	900	2.60	0084-	0284-
2,900	K4	0.091	0.061	0.170	1,020	3.40	0085-	0285-
3,600	K5	0.074	0.050	0.189	1,130	4.10	0086-	0286-
50 VOLTS DC WORKING; 75 VOLTS DC SURGE CONTINUED								
300	H1	0.430	0.280	0.061	370	0.93	0087-	0287-
400	H2	0.325	0.212	0.071	430	1.15	0088-	0288-
530	J1	0.245	0.160	0.082	490	1.25	0089-	0289-
700	J2	0.185	0.120	0.094	560	1.60	0090-	0290-
870	K2	0.150	0.098	0.104	620	2.10	0091-	0291-
1,000	J3	0.130	0.085	0.112	670	2.15	0092-	0292-
1,200	K3	0.108	0.070	0.122	730	2.80	0093-	0293-
1,600	K4	0.081	0.053	0.141	850	3.40	0094-	0294-
2,000	K5	0.065	0.042	0.159	950	4.25	0095-	0295-
75 VOLTS DC WORKING; 100 VOLTS DC SURGE CONTINUED								
200	H1	0.650	0.384	0.064	380	0.78	0096-	0296-
260	H2	0.500	0.295	0.070	420	1.00	0097-	0297-
350	J1	0.370	0.218	0.081	490	1.10	0098-	0298-
450	J2	0.290	0.171	0.092	550	1.40	0099-	0299-
570	K2	0.230	0.136	0.103	620	1.85	0100-	0300-
650	J3	0.200	0.118	0.110	660	1.95	0101-	0301-
850	J4	0.153	0.090	0.126	760	2.25	0102-	0302-
1,000	K4	0.130	0.077	0.137	820	2.95	0103-	0303-
1,300	K5	0.100	0.059	0.156	940	3.55	0104-	0304-

STANDARD RATINGS FOR TYPE M39018/07

Rated Cap. (µF)	Case Size	Max. ESR +25°C 120Hz (Ω)	Max. Imped. +25°C 10k & 1MHz (Ω)	Max. DC Leakage +25°C (A)	Max. DC Leakage +85°C & +105°C (A)	Max. Ripple Current +10°C rise 10k & 1MHz (Arms)	Dash Number CUR19 Low Freq. Vibration	Dash Number CUR19 High Freq. Vibration
100 VOLTS DC WORKING; 125 VOLTS DC SURGE CONTINUED								
130	H1	1.000	0.530	0.057	340	0.70	0105-	0305-
170	H2	0.765	0.405	0.065	390	0.90	0106-	0306-
230	J1	0.565	0.300	0.076	460	0.93	0107-	0307-
300	J2	0.435	0.230	0.086	520	1.20	0108-	0308-
380	K2	0.340	0.180	0.097	580	1.55	0109-	0309-
430	J3	0.300	0.159	0.104	620	1.60	0110-	0310-
550	K3	0.235	0.125	0.118	710	2.10	0111-	0311-
700	K4	0.185	0.098	0.132	790	2.65	0112-	0312-
850	K5	0.150	0.080	0.147	880	3.15	0113-	0313-
150 VOLTS DC WORKING; 200 VOLTS DC SURGE CONTINUED								
70	H1	1.850	0.780	0.051	310	0.65	0114-	0314-
90	H2	1.450	0.610	0.058	350	0.80	0115-	0315-
120	J1	1.080	0.455	0.067	400	0.83	0116-	0316-
150	K1	0.860	0.362	0.075	450	1.10	0117-	0317-
200	K2	0.650	0.273	0.087	520	1.40	0118-	0318-
300	J4	0.430	0.181	0.106	640	1.80	0119-	0319-
380	K4	0.340	0.143	0.120	720	2.35	0120-	0320-
470	K5	0.280	0.096	0.133	800	2.85	0121-	0321-
200 VOLTS DC WORKING; 250 VOLTS DC SURGE CONTINUED								
50	H1	2.600	0.780	0.050	300	0.60	0122-	0322-
85	J1	1.530	0.460	0.065	390	0.75	0123-	0323-
100	J2	1.300	0.390	0.071	430	0.95	0124-	0324-
150	J3	0.865	0.259	0.087	520	1.25	0125-	0325-
200	K3	0.650	0.195	0.100	600	1.67	0126-	0326-
250	J5	0.520	0.156	0.112	670	1.90	0127-	0327-
320	K5	0.405	0.122	0.126	760	2.50	0128-	0328-