



## Aluminum Electrolytic Capacitors

+105°C Low Profile, Radial Lead

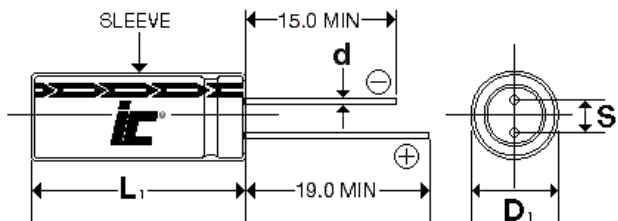
### FEATURES

Low Profile - High Voltage - General Purpose

### APPLICATIONS

Bypass – Coupling – Filter – De-coupling

<b>Operating Temperature Range</b>		<b>-55°C to +105°C (6.3 to 100 WVDC)</b> <b>-40°C to +105°C (160 to 400 WVDC)</b>											
<b>Capacitance Tolerance</b>		<b>+20% at 120 Hz, 20°C</b>											
<b>Surge Voltage</b>	<b>WVDC</b>	6.3	10	16	25	35	50	63	100	160	200	250	400
	<b>SVDC</b>	7.9	13	20	32	44	63	79	125	200	250	300	450
<b>Dissipation Factor</b>	<b>WVDC</b>	6.3	10	16	25	35	50	63	100	160	200	250	400
	<b>Tan δ</b>	.28	.24	.2	.16	.14	.12	.1	.08	.15	.15	.15	.1
Add .02 for every 1000uF above 1000uF													
<b>Leakage Current</b>		<b>6.3 to 100 WVDC</b>						<b>160 to 400 WVDC</b>					
		<b>1 Minutes</b>			<b>2 Minutes</b>			<b>2 Minutes</b>					
		.03CV or 4uA, Whichever is greater			.01CV or 3uA, Whichever is greater			.04CV+100uA					
<b>Low Temperature Stability Impedance Ratio (120 Hz)</b>	<b>WVDC</b>	<b>6.3</b>	<b>10</b>	<b>16</b>	<b>25</b>	<b>35</b>	<b>50</b>	<b>63</b>	<b>100</b>	<b>160</b>	<b>200</b>	<b>250</b>	<b>400</b>
	<b>-25°C to +20°C</b>	5	4	3	2	2	2	2	2	4	4	4	4
	<b>-40°C to +20°C</b>	10	8	6	4	3	3	3	3	15	15	15	10
<b>Load Life</b>		<b>1000 hours at 105°C with rated WVDC and ripple current applied</b>											
		<b>Capacitance Change</b>		≤20% of initial measured value									
		<b>Dissipation Factor</b>		≤150% of maximum specified value									
		<b>Leakage Current</b>		≥100% of maximum specified value									
<b>Shelf Life</b>		<b>1000 hours at 105°C with no voltage applied</b>											
		<b>Capacitance Change</b>		≤20% initial measured value									
		<b>Dissipation Factor</b>		≤200% of maximum specified value									
		<b>Leakage Current</b>		≥100% of maximum specified value									
<b>Ripple Current Multipliers</b>		<b>WVDC</b>	<b>Capacitance (uF)</b>		<b>Frequency (Hz)</b>					<b>Temperature (°C)</b>			
		<b>6.3 to 100V</b>	<b>C≤47</b>		<b>50</b>	<b>120</b>	<b>300</b>	<b>1k</b>	<b>10k</b>	<b>+85</b>	<b>+70</b>	<b>+60</b>	
		<b>6.3 to 100V</b>	<b>47&lt;C≤470</b>		.85	1.0	1.35	1.10	1.20	1.0	1.4	1.75	
		<b>6.3 to 100V</b>	<b>C&gt;470</b>		.8	1.0	1.23	1.15	1.25	1.0	1.4	1.75	
		<b>160 to 400V</b>	<b>all</b>		.75	1.0	1.1	1.25	1.40	1.0	1.4	1.75	
				.7	1.0	1.25	1.30	1.80	1.0	1.4	1.75		



D	5	6.3	8	10	12.5	16	18
S	2.0	2.5	3.5	5.0	5.0	7.5	7.5
d	0.5	0.5	0.6	0.6	0.6	0.8	0.8

$L_1=L+1.5\text{mm Max.}$   
 $D_1=D+0.5\text{mm Max.}$   
 $S_1=S+0.5\text{ mm}$

# FXM

+105°C, Low Profile, 1000 hours

WVDC	Capacitance (µF)	IC PART NUMBER	Maximum ESR (Ω) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +105°C	Dims DxDL (mm)
6.3	220	227FXM6R3M	2.11	145	6.3x9
6.3	330	337FXM6R3M	1.407	180	6.3x9
6.3	470	477FXM6R3M	0.988	235	8x9
6.3	1000	108FXM6R3M	0.464	370	10x9
6.3	2200	228FXM6R3M	0.241	635	12.5x15
6.3	3300	338FXM6R3M	0.171	860	16x15
6.3	4700	478FXM6R3M	0.127	1010	16x15
6.3	6800	688FXM6R3M	0.098	1200	18x15
6.3	10000	109FXM6R3M	0.076	1450	18x20
10	100	107FXM010M	3.979	95	5x9
10	220	227FXM010M	1.809	155	6.3x9
10	330	337FXM010M	1.206	210	8x9
10	470	477FXM010M	0.847	275	8x9
10	1000	108FXM010M	0.398	450	10x12.5
10	2200	228FXM010M	0.211	690	12.5x15
10	3300	338FXM010M	0.151	940	16x15
10	4700	478FXM010M	0.113	1120	18x15
10	6800	688FXM010M	0.088	1330	18x20
10	10000	109FXM010M	0.07	1700	18x25
16	100	107FXM016M	3.316	115	6.3x9
16	220	227FXM016M	1.507	205	8x9
16	330	337FXM016M	1.005	240	10x9
16	470	477FXM016M	0.7055	290	10x9
16	1000	108FXM016M	0.332	520	12.5x12.5
16	2200	228FXM016M	0.181	830	16x15
16	3300	338FXM016M	0.131	1050	18x15
16	4700	478FXM016M	0.099	1260	18x20
16	6800	688FXM016M	0.078	1560	18x25
25	47	476FXM025M	5.644	80	5x9
25	100	107FXM025M	2.653	130	6.3x9
25	220	227FXM025M	1.206	220	10x9
25	330	337FXM025M	0.804	270	10x9
25	470	477FXM025M	0.705	370	10x12.5
25	1000	108FXM025M	0.332	590	12.5x15
25	2200	228FXM025M	0.151	970	18x15
25	3300	338FXM025M	0.111	1220	18x20
25	4700	478FXM025M	0.085	1470	18x25
35	33	336FXM035M	7.033	75	5x9
35	47	476FXM035M	4.938	95	6.3x9
35	100	107FXM035M	2.321	155	8x9
35	220	227FXM035M	1.055	235	10x9
35	330	337FXM035M	0.703	340	10x12.5
35	470	477FXM035M	0.494	420	12.5x12.5
35	1000	108FXM035M	0.232	720	16x15
35	2200	228FXM035M	0.136	1110	18x20
50	1	105FXM050M	198.944	12	5x9
50	2.2	225FXM050M	90.429	18	5x9
50	3.3	335FXM050M	60.286	25	5x9
50	4.7	475FXM050M	42.328	30	5x9

WVDC	Capacitance (µF)	IC PART NUMBER	Maximum ESR (Ω) 120 Hz, +20°C	Maximum RMS Ripple Current (mA) 120 Hz, +105°C	Dims DxDL (mm)
50	10	106FXM050M	19.894	46	5x9
50	22	226FXM050M	9.043	85	5x9
50	33	336FXM050M	6.029	85	6.3x9
50	47	476FXM050M	4.233	100	6.3x9
50	100	107FXM050M	1.989	170	10x9
50	220	227FXM050M	0.904	290	10x12.5
50	330	337FXM050M	0.603	370	12.5x12.5
50	470	477FXM050M	0.423	540	16x15
50	1000	108FXM050M	0.199	830	18x20
63	10	106FXM063M	16.579	50	5x9
63	22	226FXM063M	7.536	80	6.3x9
63	33	336FXM063M	5.024	95	6.3x9
63	47	476FXM063M	3.527	125	8x9
63	100	107FXM063M	1.658	220	10x12.5
63	220	227FXM063M	0.754	330	12.5x12.5
63	330	337FXM063M	0.502	430	12.5x15
63	470	477FXM063M	0.353	600	18x15
63	1000	108FXM063M	0.166	1000	18x25
100	1	105FXM100M	132.629	15	5x9
100	2.2	225FXM100M	60.286	21	5x9
100	3.3	335FXM100M	40.191	29	5x9
100	4.7	475FXM100M	28.219	32	5x9
100	10	106FXM100M	13.263	55	6.3x9
100	22	226FXM100M	6.029	95	8x9
100	33	336FXM100M	4.019	120	10x9
100	47	476FXM100M	2.822	165	10x12.5
100	100	107FXM100M	1.326	260	12.5x15
100	220	227FXM100M	0.603	440	16x15
100	330	337FXM100M	0.402	590	18x20
100	470	477FXM100M	0.282	770	18x25
160	47	476FXM160M	7.055	300	16x15
160	68	686FXM160M	4.876	350	18x15
160	100	107FXM160M	3.316	420	18x20
160	150	157FXM160M	2.21	510	18x25
200	33	336FXM200M	10.048	250	16x15
200	47	476FXM200M	7.055	300	18x15
200	68	686FXM200M	4.876	350	18x20
200	100	107FXM200M	3.316	420	18x25
200	150	157FXM200M	2.21	510	18x25
250	22	226FXM250M	15.071	200	16x15
250	33	336FXM250M	10.048	250	18x15
250	47	476FXM250M	7.055	300	18x20
250	68	686FXM250M	765.93	350	18x20
250	100	107FXM250M	3.316	420	18x25
400	10	106FXM400M	41.447	100	16x15
400	22	226FXM400M	18.836	200	18x15
400	33	336FXM400M	12.56	250	18x20
400	47	476FXM400M	8.818	300	18x25