

# AFA

## Surface Mount Aluminum Polymer Electrolytic Capacitors



### High Ripple Current at High Frequencies

#### FEATURES

- Low Impedance
- High Current
- High Frequency
- Long Life
- High Temperature
- RoHS Compliant

#### SPECIFICATIONS

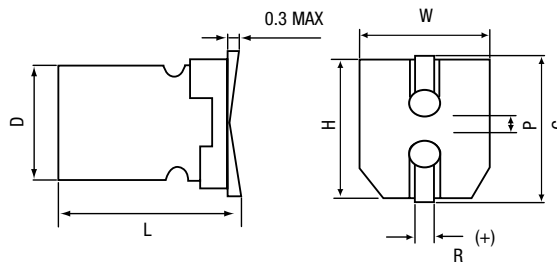
Operating Temperature Range		-55°C to +105°C					
Capacitance Tolerance		±20%, 120Hz and 20°C					
Surge Voltage	WVDC	2.5	4	6.3	10	16	
	SVDC	2.8	4.6	7.2	11.5	18.4	
Dissipation Factor 120Hz, 20°C	WVDC	2.5	4	6.3	10	16	
	tan δ	See Part Listing					
Leakage Current		2 Minutes					
		See Part Listing					
Low temperature stability Impedance ratio (120 Hz)		Rated WVDC	2.5	4	6.3	10	16
		-55°C / +20°C	.75 to 1.25				
		+105°C / +20°C	.75 to 1.25				
Load Life		2000 Hours at rated voltage and +105°C					
		Capacitance change		≤20% of initially measured value			
		Dissipation Factor		≤150% of maximum specified value			
		Leakage Current		<100% of maximum specified value			
Shelf Life		1000 hours at 105°C with no voltage applied					
		Capacitance change		≤25% of initially measured value			
		Dissipation Factor		≤200% of maximum specified value			
		Leakage Current		<100% of maximum specified value			
Moisture Resistance Under No Load Test		1,000 hours at 60°C with 90-95% relative humidity					
		Capacitance change		≤25% of initially measured value			
		Dissipation Factor		≤150% of maximum specified value			
		Leakage Current		≤100% of maximum specified value			

## PHYSICAL DIMENSIONS

WVDC ( $\mu$ F)	2.5 (2.8)	4 (4.6)	6.3 (7.1)	10 (11.5)	16 (18.4)
47	→	6.3x5.4			6.3x5.4
68	→	→	6.3x5.4	6.3x5.4	
82	→	→	6.3x5.4		
100	→	6.3x5.4			
120	6.3x5.4				
180					→ 8x10 8x9
270				8x10 8x9	
330		→	8x10 8x9	→	10x10.2 10x9
390	→	8x10 8x9			
470	8x10 8x9		→	10x10.2 8x9	
560	8x9	8x9	10x10.2 8x9		
680	8x9	10x10.2 8x9	8x9	10x9	
820	10x10.2 8x9	8x9	10x9		
1000	8x9	8x9	10x9	10x9	
1200	8x9	10x9			
1500	10x9	10x9			
1800	10x9				
2200	10x9				

Convert to inches, divide by 25.4

DxL (mm)



D+0.5	L±0.2	W±0.2	H±0.2	C±0.2	P±0.2	R±0.2
5	5.4	5.3	5.3	6.3	1.5	.35
6.3	5.4	6.6	6.6	7.3	2.1	.35
8	9	8.3	8.3	9.9	3.2	.7
8	10	8.3	8.3	9.9	3.2	.7
10	9	10.3	10.3	11.9	4.6	.7
10	10.2	10.3	10.3	11.9	4.6	.7

## STANDARD PARTS LISTING

Capacitance (uF)	VVDC	IC <sup>®</sup> Part Number	D.F. Max tan δ 120Hz, 20°C	Maximum ESR mΩ 100kHz to 300kHz, 20°C	L.C. μA Max, 20°C, 2 min.	Maximum Ripple Current (mA) 100kHz, 105°C	DxL (mm)
47	16	476AFA016M	0.12	50	150	1600	6.3x5.4
47	16	476AFA016MGE	0.05	50	150	1200	6.3x5.4
68	6.3	826AFA6R3M	0.12	45	103	1800	6.3x5.4
68	10	686AFA010M	0.12	50	136	1600	6.3x5.4
68	10	686AFA010MGE	0.05	45	136	1200	6.3x5.4
82	6.3	826AFA6R3M	0.12	45	103	1800	6.3x5.4
82	6.3	826AFA6R3MGE	0.06	40	103	1400	6.3x5.4
100	4	107AFA004M	0.12	45	80	1800	6.3x5.4
100	4	107AFA004MGE	0.06	35	80	1400	6.3x5.4
120	2.5	127AFA2R5M	0.12	45	60	1800	6.3x5.4
120	2.5	127AFA2R5MGE	0.06	35	60	1400	6.3x5.4
180	16	187AFA016M	0.05	15	576	4400	8x9
180	16	187AFA016MJL	0.12	25	576	4500	8x10
270	10	277AFA010M	0.05	10	540	4500	8x9
270	10	277AFA010MJL	0.12	22	540	4500	8x10
330	6.3	337AFA6R3M	0.06	13	416	4800	8x9
330	6.3	337AFA6R3MJL	0.12	17	416	4800	8x10
330	16	337AFA016M	0.05	13	1056	5100	10x9
330	16	337AFA016MLL	0.12	12	1056	5300	10x10.2
390	4	397AFA004M	0.06	8	312	5500	8x9
390	4	397AFA004MJL	0.12	17	312	4800	8x10
470	2.5	477AFA2R5M	0.06	10	235	4800	8x9
470	2.5	477AFA2R5MJL	0.12	17	235	4800	8x10
470	10	477AFA010M	0.05	10	940	4800	8x9
470	10	477AFA010MLL	0.12	10	940	5300	10x10.2
560	2.5	567AFA2R5M	0.06	8	280	5500	8x9
560	4	567AFA004M	0.06	8	448	5500	8x9
560	6.3	567AFA6R3M	0.06	8	706	5500	8x9
560	6.3	567AFA6R3MLL	0.12	8	706	5500	10x10.2
680	2.5	687AFA2R5M	0.06	8	340	5500	8x9
680	4	687AFA004M	0.06	8	544	5500	8x9
680	4	687AFA004MLL	0.12	8	544	5500	10x10.2
680	6.3	687AFA6R3M	0.06	8	857	5500	8x9
680	10	687AFA010M	0.05	8	1360	5500	10x9
820	2.5	827AFA2R5M	0.06	8	410	5500	8x9
820	2.5	827AFA2R5MLL	0.12	8	410	5500	10x10.2
820	4	827AFA004M	0.06	8	656	5500	8x9
820	6.3	827AFA6R3M	0.06	7	1033	6100	10x9
1000	2.5	108AFA2R5M	0.06	8	500	5500	8x9
1000	4	108AFA004M	0.06	8	800	5500	8x9
1000	6.3	108AFA6R3M	0.06	7	1260	6100	10x9
1000	10	108AFA010M	0.05	8	2000	5500	10x9
1200	2.5	128AFA2R5M	0.06	8	600	5500	8x9
1200	4	128AFA004M	0.06	7	960	6100	10x9
1500	2.5	158AFA2R5M	0.06	7	750	6100	10x9
1500	4	158AFA004M	0.06	7	1200	6100	10x9
1800	2.5	188AFA2R5M	0.06	7	900	6100	10x9
2200	2.5	228AFA2R5M	0.06	7	1100	6100	10x9