SMT Aluminum Electrolytic Capacitors - Lowest E.S.R., 105 °C

Low Impedance and Long-Life for Filtering, Bypassing and Power Supply Decoupling



Type AFK Capacitors are the best and by a wide margin. With 40% to 60% lower impedance, 30% to 50% smaller case size and more than twice the life compared to low-ESR type AFC, the Type AFK also excels at cold performance down to -55 °C. In addition, this terrific lowimpedance performance, approaching low-ESR tantalum capacitors, is at a significant cost savings compared to tantalum. The vertical cylindrical cases facilitate automatic mounting and reflow soldering into the same footprint of like-rated tantalum capacitors except without the need for voltage derating.

Highlights -

 +105 °C, Up to 5000 Hour Load Life Capacitance Range: 3.3 μF to 6800 μF Voltage Range: 6.3 Vdc to 100 Vdc

Specifications

Operating Temperature: -55 °C to +105 °C

> Rated Voltage: 6.3, 10, 16, 25, 35, 50, 63, 80 & 100 Vdc

Capacitance: $3.3 \, \mu F$ to $6800 \, \mu F$

±20% @ 120 Hz and +20 °C **Capacitance Tolerance:**

Leakage Current: 0.01 CV or 3 µA @ +20 °C, after two minutes (whichever is greater)

Frequency 50/60 Hz 120 Hz 1 kHz 10 kHz 100 kHz Ripple Current Multiplier:

0.70 .0.75 0.90 0.95 1.00

Dissipation Factor:

								100 V
0.26	0.19	0.16	0.14	0.12	0.1	0.08	0.08	0.07

Outline Drawing

Add 0.02 per 1000 µF for values greater that 1000

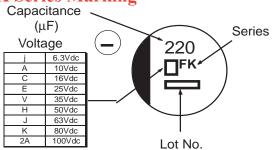
Life Test: 2000 h @ 105 °C, 4.0 — 10.0 mm dia.

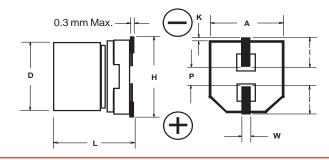
5000 h @ 105 °C, 12.5 — 18.0 mm dia.

 Δ Capacitance ±30% DF: \leq 200% of limit DCL: ≤ 100% of limit

 Δ Capacitance ±30% DF: \leq 200% of limit DCL: ≤ 100% of limit

AFK Series Marking -





Shelf Test: 1000 h @ 105 °C

Case Dimensions

Case	D ± .05	L	A ± 0.2	Н	I	W	Р	K
Code				(max)	(ref)		(ref)	(mm)
В	4.0	5.8 ± 0.3	4.3	5.5	1.8	0.65 ±0.1	1.0	0.35 +0.15/-0.20
С	5.0	5.8 ± 0.3	5.3	6.5	2.2	0.65 ±0.1	1.5	0.35 +0.15/-0.20
D	6.3	5.8 ± 0.3	6.6	7.8	2.6	0.65 ±0.1	1.8	0.35 +0.15/-0.20
×	6.3	7.9 ± 0.3	6.6	7.8	2.6	0.65 ±0.1	1.8	0.35 +0.15/-0.20
E	8.0	6.2 ± 0.3	8.3	9.5	3.4	0.65 ±0.1	2.2	0.35 +0.15/-0.20
F	8.0	10.2 ± 0.3	8.3	10.0	3.4	0.90 ±0.2	3.1	0.70 ±0.20
G	10.0	10.2 ± 0.3	10.3	12.0	3.5	0.90 ±0.2	4.6	0.70 ±0.20
Н	12.5	13.5 ± 0.5	13.5	15.0	4.7	0.90 ±0.3	4.4	0.70 ±0.30
Р	16.0	16.5 ± 0.5	17.0	19.0	5.5	1.2 ±0.3	6.7	0.70 ±0.30
R	18.0	16.5 ± 0.5	19.0	21.0	6.7	1.2 ±0.3	6.7	0.70 ±0.30

Type AFK -55 °C to 105 °C SMT Aluminum Electrolytic Capacitors - Lowest E.S.R., 105 °C

Ratings Table

Cap (µF)	Catalog Part Number	Max. DCL 2 min (μA)	Max. Dissipation Factor @120 Hz/20 °C	Max. ESR @100 kHz/20 °C (Ω)	Impedance @ 100 kHz/20 °((Ω)	Max. Ripple Current C @ 100 kHz/105 °C (mA)	Case Code	Size D x L (mm)	Quantity per Reel
(1 7		(/		6.3 Vdc (8 Vdc S		(**************************************		()	Postalogi
22	AFK226M06B12T	3.0	0.26	1.350	1.350	90	В	4 x 5.8	2000
47	AFK476M06B12T	3.0	0.26	1.350	1.350	90	В	4 x 5.8	2000
47	AFK476M06C12T	3.0	0.26	0.700	0.700	160	С	5 x 5.8	
100	AFK107M06C12T	6.3	0.26	0.700	0.700	160	С	5 x 5.8	
100	AFK107M06D16T	6.3	0.26	0.360	0.360	240	D	6.3 x 5.8	1000
220	AFK227M06D16T	13.9	0.26	0.360	0.360	240	D	6.3 x 5.8	1000
330	AFK337M06X16T	20.8	0.26	0.340	0.340	280	Х	6.3 x 7.7	900
330	AFK337M06E16T	20.8	0.26	0.260	0.260	300	Е	8 x 6.2	
470	AFK477M06F24T	29.6	0.26	0.160	0.160	600	F	8 x 10.2	500
1000	AFK108M06F24T	63.0	0.26	0.160	0.160	600	F	8 x 10.2	500
1500	AFK158M06G24T	94.5	0.26	0.080	0.080	850	G	10 x 10.2	500
3300	AFK338M06H32T	207.9	0.30	0.060	0.060	1100	Н	12.5 x 13.5	200
6800	AFK688M06P44T	428.4	0.36	0.035	0.035	1800	Р	16 x 16.5	
				10 Vdc (13 Vdc S	Surge)				
22	AFK226M10B12T	3.0	0.19	1.350	1.350	90	В	4 x 5.8	2000
33	AFK336M10B12T	3.3	0.19	1.350	1.350	90	В	4 x 5.8	2000
33	AFK336M10C12T	3.3	0.19	0.700	0.700	160	С	5 x 5.8	1000
150	AFK157M10D16T	15.0	0.19	0.360	0.360	240	D	6.3 x 5.8	1000
220	AFK227M10X16T	22.0	0.19	0.340	0.340	280	Χ	6.3 x 7.7	900
220	AFK227M10E16T	22.0	0.19	0.260	0.260	300	Е	8 x 6.2	1000
330	AFK337M10F24T	33.0	0.19	0.160	0.160	600	F	8 x 10.2	500
470	AFK477M10F24T	47.0	0.19	0.160	0.160	600	F	8 x 10.2	500
680	AFK687M10F24T	68.0	0.19	0.160	0.160	600	F	8 x 10.2	500
1000	AFK108M10G24T	100.0	0.19	0.080	0.080	850	G	10 x 10.2	500
2200	AFK228M10H32T	220.0	0.21	0.060	0.060	1100	Н	12.5 x 13.5	200
4700	AFK478M10P44T	470.0	0.25	0.035	0.035	1800	Р	16 x 16.5	125
6800	AFK688M10R44T	680.0	0.29	0.033	0.033	2060	R	18 x 16.5	125
				16 Vdc (20 Vdc S	Surge)				
10	AFK106M16B12T	3.0	0.16	1.350	1.350	90	В	4 x 5.8	2000
22	AFK226M16B12T	3.5	0.16	1.350	1.350	90	В	4 x 5.8	2000
22	AFK226M16C12T	3.5	0.16	0.700	0.700	160	С	5 x 5.8	1000
47	AFK476M16C12T	7.5	0.16	0.700	0.700	160	С	5 x 5.8	1000
47	AFK476M16D16T	7.5	0.16	0.360	0.360	240	D	6.3 x 5.8	1000
68	AFK686M16D16T	10.9	0.19	0.360	0.360	240	D	6.3 x 5.8	1000
100	AFK107M16D16T	16.0	0.16	0.360	0.360	240	D	6.3 x 5.8	1000
150	AFK157M16X16T	24.0	0.16	0.340	0.340	280	Χ	6.3 x 7.7	900
220	AFK227M16X16T	35.2	0.16	0.340	0.340	280	Χ	6.3 x 7.7	900
220	AFK227M16E16T	35.2	0.16	0.260	0.260	300	Е	8 x 6.2	1000
330	AFK337M16F24T	52.8	0.16	0.160	0.160	600	F	8 x 10.2	500
470	AFK477M16F24T	75.2	0.16	0.160	0.160	600	F	8 x 10.2	500
680	AFK687M16G24T	108.8	0.16	0.080	0.080	850	G	10 x 10.2	500
1500	AFK158M16H32T	240.0	0.16	0.060	0.060	1100	Н	12.5 x 13.5	200
3300	AFK338M16P44T	528.0	0.20	0.035	0.035	1800	Р	16 x 16.5	125
4700	AFK478M16R44T	752.0	0.22	0.033	0.033	2060	R	18 x 16.5	125

Type AFK -55 °C to 105 °C

SMT Aluminum Electrolytic Capacitors - Lowest E.S.R., 105 °C

		Max. DCL	Max. Dissipation	Max. ESR	Impedance	Max. Ripple Current		Size	
Сар	Catalog	2 min	Factor	@100 kHz/20 °C	@ 100 kHz/20 °C	@ 100 kHz/105 °C		D x L	Quantity
(μF)	Part Number	(µA)	@120 Hz/20 °C	(Ω)	(Ω)	(mA)	Code	(mm)	per Reel
10	1 F1 (10 0 1 10 F D 10 F		2.1.	25 Vdc (31 Vdc S					
10	AFK106M25B12T	3.0	0.14	1.350	1.350	90	В	4 x 5.8	
22	AFK226M25C12T	5.5	0.14	0.700	0.700	160	С	5 x 5.8	
33	AFK336M25C12T	8.3	0.14	0.700	0.700	160	С	5 x 5.8	
33	AFK336M25D16T	8.3	0.14	0.360	0.360	240	D	6.3 x 5.8	
47 68	AFK476M25D16T	11.8 17.0	0.14	0.360	0.360	240 240	D D	6.3 x 5.8	
100	AFK686M25D16T AFK107M25X16T	25.0	0.14	0.340	0.340	280	X	6.3 x 5.8 6.3 x 7.7	
100	AFK107M25X161 AFK107M25E16T	25.0	0.14	0.340	0.340	300	A E	8 x 6.2	
150	AFK107M25E161 AFK157M25F24T	37.5	0.14	0.260	0.260	600	F	8 x 10.2	
220	AFK227M25F24T	55.0	0.14	0.160	0.160	600	F	8 x 10.2	
330	AFK337M25F24T	82.5	0.14	0.160	0.160	600	 	8 x 10.2	
470	AFK477M25G24T	117.5	0.14	0.080	0.080	850	G	10 x 10.2	
1000	AFK108M25H32T	250.0	0.14	0.060	0.060	1100	Н	12.5 x 13.5	
1500	AFK158M25P44T	375.0	0.14	0.035	0.035	1800	Р	16 x 16.5	
2200	AFK228M25P44T	550.0	0.16	0.035	0.035	1800	Р	16 x 16.5	
3300	AFK338M25R44T	825.0	0.18	0.033	0.033	2060	R	18 x 16.5	
	7.1.1.0002011.1.1	020.0		35 Vdc (44 Vdc S					
4.7	AFK475M35B12T	3.0	0.12	1.350	1.350	90	В	4 x 5.8	2000
10	AFK106M35B12T	3.5	0.12	1.350	1.350	90	В	4 x 5.8	3 2000
10	AFK106M35C12T	3.5	0.12	0.700	0.700	160	С	5 x 5.8	
22	AFK226M35C12T	7.7	0.12	0.700	0.700	160	С	5 x 5.8	1000
33	AFK336M35D16T	11.6	0.12	0.360	0.360	240	D	6.3 x 5.8	3 1000
47	AFK476M35D16T	16.5	0.12	0.360	0.360	240	D	6.3 x 5.8	1000
68	AFK686M35X16T	23.8	0.12	0.340	0.340	280	Х	6.3 x 7.7	900
100	AFK107M35X16T	35.0	0.12	0.340	0.340	280	Х	6.3 x 7.7	900
100	AFK107M35F24T	35.0	0.12	0.160	0.160	600	F	8 x 10.2	
150	AFK157M35F24T	52.5	0.12	0.160	0.160	600	F	8 x 10.2	500
220	AFK227M35F24T	77.0	0.12	0.160	0.160	600	F	8 x 10.2	500
330	AFK337M35G24T	115.5	0.12	0.080	0.080	850	G	10 x 10.2	500
470	AFK477M35H32T	164.5	0.12	0.060	0.060	1100	Н	12.5 x 13.5	200
680	AFK687M35H32T	238.0	0.12	0.060	0.060	1100	Н	12.5 x 13.5	200
1000	AFK108M35P44T	350.0	0.12	0.035	0.035	1800	Р	16 x 16.5	125
1500	AFK158M35P44T	525.0	0.12	0.035	0.035	1800	Р	16 x 16.5	125
				50 Vdc (63 Vdc S	urge)				
4.7	AFK475M50B12T	3.0	0.10	2.900	2.900	60	В	4 x 5.8	2000
10	AFK106M50C12T	5.0	0.10	1.520	1.520	85	С	5 x 5.8	1000
10	AFK106M50D16T	5.0	0.10	0.880	0.880	165	D	6.3 x 5.8	
22	AFK226M50D16T	11.0	0.10	0.880	0.880	165	D	6.3 x 5.8	
33	AFK336M50X16T	16.5	0.10	0.680	0.680	195	Х	6.3 x 7.7	
33	AFK336M50E16T	16.5	0.10	0.680	0.680	195	E	8 x 6.2	
47	AFK476M50X16T	23.5	0.10	0.680	0.680	195	X	6.3 x 7.7	
47	AFK476M50E16T	23.5	0.10	0.680	0.680	195	E	8 x 6.2	
100	AFK107M50F24T	50.0	0.10	0.340	0.340	350	F	8 x 10.2	500

Type AFK -55 °C to 105 °C SMT Aluminum Electrolytic Capacitors - Lowest E.S.R., 105 °C

150 AFK157M50G24T 75.0	Cap (µF)	Catalog Part Number	Max. DCL 2 min (μA)	Max. Dissipation Factor @120 Hz/20 °C	Max. ESR @100 kHz/20 °C (Ω)	Impedance @ 100 kHz/20 °C (Ω)	Max. Ripple Current @ 100 kHz/105 °C (mA)	Case Code	Size D x L (mm)	Quantity per Reel	
220 AFK227M50G24T 110.0					50 Vdc (63 \	Vdc Surge)					
330 AFK337M50H32T 165.0	150	AFK157M50G24T	75.0	0.10	0.180	0.180	670	G	10 x 10.2	500	
390 AFK397M50H32T	220	AFK227M50G24T	110.0	0.10	0.180	0.180	670	G	10 x 10.2	500	
470 AFK477M50P44T 235.0 0.10 0.073 0.073 1610 P 16 x 16.5	330	AFK337M50H32T	165.0	0.10	0.120	0.120	900	Н	12.5 x 13.5	200	
S60 AFK667M50P44T	390	AFK397M50H32T	195.0	0.10	0.120	0.120	900	Н	12.5 x 13.6	200	
B80 AFK687M50P44T 340.0	470	AFK477M50P44T	235.0	0.10	0.073	0.073	1610	Р	16 x 16.5	125	
1000 AFK108MS0P44T 500.0 0.10 0.073 0.073 1610 P 16 x 16.5	560	AFK567M50P44T	280.0	0.10	0.073	0.073	1610	Р	16 x 16.5	125	
68 Vdc (75 Vdc Surge	680	AFK687M50P44T	340.0	0.10	0.073	0.073	1610	Р	16 x 16.5	125	
4.7 AFK475M63C12T 3.0 0.08 3.000 3.000 50 C 5 x 5.8 10 AFK475M63C12T 3.0 0.08 1.500 1.500 80 D 6.3 x 5.8 22 AFK226M63D16T 6.3 0.08 1.200 1.200 120 X 6.3 x 7.7 22 AFK226M63E16T 13.9 0.08 1.200 1.200 120 E 8 x 6.2 23 3 AFK336M63F24T 20.8 0.08 0.650 0.650 250 F 8 x 10.2 47 AFK476M63F24T 29.6 0.08 0.650 0.650 250 F 8 x 10.2 47 AFK476M63F24T 29.6 0.08 0.350 0.350 400 G 10 x 10.2 100 AFK107M63G24T 63.0 0.08 0.350 0.350 400 G 10 x 10.2 100 AFK107M63G24T 63.0 0.08 0.350 0.350 400 G 10 x 10.2 100 AFK157M63H32T 94.5 0.08 0.160 0.160 800 H 12.5 x 13.5 220 AFK227M63H32T 138.6 0.08 0.160 0.160 800 H 12.5 x 13.5 470 AFK477M63P44T 296.1 0.08 0.082 0.082 1410 P 16 x 16.5 680 AFK687M63R44T 428.4 0.08 0.080 0.080 0.080 1690 R 18 x 16.5 80 Vdc (100 Vdc Surge) 3.3 AFK335M80C12T 3.0 0.08 3.00 3.00 3.00 40 D 6.3 x 5.8 10.0 AFK106M80E16T 8.0 0.08 2.40 2.40 60 X 6.3 x 7.7 10.0 AFK106M80E16T 8.0 0.08 2.40 2.40 60 E 8 x 6.2 2.20 AFK226M80F24T 17.6 0.08 1.30 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 0.32 0.32 500 H 12.5 x 13.5 10.00 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 10.00 AFK107M80H32T 37.6 0.08 0.15 0.15 917 R 18 x 16.5 10.00 AFK107M80H34T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 10.00 AFK107M80H34T 376.0 0.08 0.15 0.15 0.15 917 R 18 x 16.5 10.00 AFK107M80H34T 376.0 0.08 0.15 0.15 0.15 917 R 18 x 16.5 10.00 AFK107M80H34T 376.0 0.08 0.15 0.15 0.15 917 R 18 x 16.5 10.00 AFK107M80H34T 376.0 0.08 0.15 0.15 0.15 917 R 18 x 16.5 10.00 AFK107M80H34T 376.0 0.08 0.15 0.15 0.15 917 R 18 x 16.5 10.00 AFK107M80H34T 376.0 0.08 0.15 0.15 0.15 917 R 18 x 16.5 10	1000	AFK108M50P44T	500.0	0.10	0.073	0.073	1610	Р	16 x 16.5	125	
10 AFK106M63D16T 6.3 0.08 1.500 1.500 80 D 6.3 x 5.8					63 Vdc (75 V	Vdc Surge)					
22 AFK226M63X16T 13.9 0.08 1.200 1.200 120 X 6.3 x 7.7 22 AFK226M63E16T 13.9 0.08 1.200 1.200 120 E 8 x 6.2 33 AFK336M63F24T 20.8 0.08 0.650 0.650 250 F 8 x 10.2 47 AFK476M63F24T 29.6 0.08 0.650 0.650 250 F 8 x 10.2 47 AFK476M63F24T 29.6 0.08 0.650 0.650 250 F 8 x 10.2 100 AFK107M63G24T 42.8 0.08 0.350 0.350 400 G 10 x 10.2 100 AFK107M63G24T 63.0 0.08 0.350 0.350 400 G 10 x 10.2 100 AFK157M63H32T 94.5 0.08 0.160 0.160 800 H 12.5 x 13.5 220 AFK227M63H32T 138.6 0.08 0.160 0.160 800 H 12.5 x 13.5 470 AFK477M63P44T 296.1 0.08 0.082 0.082 1410 P 16 x 16.5 680 AFK687M63R44T 42.8 0.08 0.080 0.080 1690 R 18 x 16.5 80 Vdc (100 Vdc Surge) 3.3 AFK335M80C12T 3.0 0.08 5.00 5.00 25 C 5 x 5.8 4.7 AFK475M69D16T 3.8 0.08 3.00 3.00 40 D 6.3 x 5.8 10.0 AFK106M80X16T 8.0 0.08 2.40 2.40 60 E 8 x 6.2 2.0 AFK226M80F24T 17.6 0.08 1.30 1.30 1.30 130 F 8 x 10.2 3.0 AFK336M80F24T 26.4 0.08 1.30 1.30 1.30 130 F 8 x 10.2 3.0 AFK336M80F24T 26.4 0.08 0.32 0.32 500 H 12.5 x 13.5 15.0 AFK106M80X32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 15.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 15.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 15.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 15.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 15.0 AFK107M80H32T 37.0 0.08 0.15 0.15 0.15 0.17 0.17 793 P 16 x 16.5 470.0 AFK407M80H32T 37.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK407M80H32T 37.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK407M80H32T 37.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK407M80H32T 37.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK407M80H32T 37.0 0.08 0.15 0.15 0.15 0.15 0.17 R 18 x 16.5 470.0 AFK407M80H32T 37.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK407M80H32T 37.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK407M80H32T 37.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK407M80H32T 37.0 0.08 0.15 0.15 0.15 0.15 0.15 0.15 0.15 0.15	4.7	AFK475M63C12T	3.0	0.08	3.000	3.000	50	С	5 x 5.8	1000	
22 AFK226M63E16T 13.9 0.08 1.200 1.200 120 E 8 x 6.2 33 AFK336M63F24T 20.8 0.08 0.650 0.650 250 F 8 x 10.2 47 AFK476M63F24T 29.6 0.08 0.650 0.650 250 F 8 x 10.2 68 AFK686M63G24T 42.8 0.08 0.350 0.350 400 G 10 x 10.2 100 AFK107M63G24T 63.0 0.08 0.350 0.350 400 G 10 x 10.2 1100 AFK107M63G24T 94.5 0.08 0.160 0.160 800 H 12.5 x 13.5 1100 AFK157M63H32T 138.6 0.08 0.160 0.160 800 H 12.5 x 13.5 1100 AFK477M63P44T 296.1 0.08 0.082 0.082 1410 P 16 x 16.5 1100 AFK697M63R44T 428.4 0.08 0.080 0.080 1690 R 18 x 16.5 1100 AFK106M80C12T 3.0 0.08 5.00 5.00 25 C 5 x 5.8 1100 AFK106M80X16T 8.0 0.08 2.40 2.40 60 X 6.3 x 7.7 1100 AFK106M80E16T 8.0 0.08 2.40 2.40 60 E 8 x 6.2 1100 AFK106M80F24T 17.6 0.08 1.30 1.30 130 F 8 x 10.2 1100 AFK106M80G24T 37.6 0.08 1.30 1.30 130 F 8 x 10.2 1100 AFK106M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 1100 AFK106M80H32T 54.4 0.08 1.30 1.30 1.30 F 8 x 10.2 1100 AFK106M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 1100 AFK106M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 1100 AFK106M80H32T 37.6 0.08 0.32 0.32 500 H 12.5 x 13.5 1100 AFK106M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 1100 AFK106M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 1100 AFK106M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 1100 AFK106M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 1100 AFK106M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 1100 AFK106M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 1100 AFK107M80H32T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 1100 AFK107M80H32T 37.6 0.08 0.17 0.17 793 P 16 x 16.5 1100 AFK107M80H32T 37.6 0.08 0.17 0.17 793 P 16 x 16.5 1100 AFK107M80H32T 37.6 0.08 0.15 0.15 917 R 18 x 16.5	10	AFK106M63D16T	6.3	0.08	1.500	1.500	80	D	6.3 x 5.8	1000	
33 AFK336M63F24T 20.8 0.08 0.650 0.650 250 F 8 x 10.2	22	AFK226M63X16T	13.9	0.08	1.200	1.200	120	X	6.3 x 7.7	900	
47 AFK476M63F24T 29.6 0.08 0.650 0.650 250 F 8 x 10.2 68 AFK686M63G24T 42.8 0.08 0.350 0.350 400 G 10 x 10.2 100 AFK107M63G24T 63.0 0.08 0.350 0.350 400 G 10 x 10.2 150 AFK157M63H3ZT 94.5 0.08 0.160 0.160 800 H 12.5 x 13.5 220 AFK227M63H3ZT 138.6 0.08 0.160 0.160 800 H 12.5 x 13.5 470 AFK477M63P44T 296.1 0.08 0.082 0.082 1410 P 16 x 16.5 680 AFK687M63R4T 42.84 0.08 0.080 0.080 1690 R 18 x 16.5 80 Vdc (100 Vdc Surge) 3.3 AFK335M80C12T 3.0 0.08 5.00 5.00 25 C 5 x 5.8 4.7 AFK475M80D16T 3.8 0.08 2.40 2.40 60 X 6.3 x 7.7 10.0 AFK106M80Z16T 8.0 0	22	AFK226M63E16T	13.9	0.08	1.200	1.200	120	Е	8 x 6.2	1000	
68 AFK686M63G24T 42.8 0.08 0.350 0.350 400 G 10 x 10.2 100 AFK107M63G24T 63.0 0.08 0.350 0.350 400 G 10 x 10.2 150 AFK157M63H32T 94.5 0.08 0.160 0.160 800 H 12.5 x 13.5 220 AFK227M63H32T 138.6 0.08 0.160 0.160 800 H 12.5 x 13.5 470 AFK477M63P44T 296.1 0.08 0.082 0.082 1410 P 16 x 16.5 680 AFK687M63R44T 428.4 0.08 0.080 0.080 0.080 1690 R 18 x 16.5 80 Vdc (100 Vdc Surge) 3.3 AFK335M80C12T 3.0 0.08 5.00 5.00 25 C 5 x 5.8 4.7 AFK475M80D16T 3.8 0.08 3.00 3.00 40 D 6.3 x 5.8 10.0 AFK106M80X16T 8.0 0.08 2.40 2.40 60 X 6.3 x 7.7 10.0 AFK106M80X16T 8.0 0.08 2.40 2.40 60 E 8 x 6.2 22.0 AFK226M80F24T 17.6 0.08 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 130 F 8 x 10.2 33.0 AFK36M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK107M80H32T 120.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK37M80H32T 26.4 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK37M80H32T 26.4 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK37M80H32T 26.4 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80H34T 264.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge)	33	AFK336M63F24T	20.8	0.08	0.650	0.650	250	F	8 x 10.2	500	
100 AFK107M63G24T 63.0 0.08 0.350 0.350 400 G 10 x 10.2	47	AFK476M63F24T	29.6	0.08	0.650	0.650	250	F	8 x 10.2	500	
150 AFK157M63H32T 94.5 0.08 0.160 0.160 800 H 12.5 x 13.5	68	AFK686M63G24T	42.8	0.08	0.350	0.350	400	G	10 x 10.2	500	
220 AFK227M63H32T 138.6 0.08 0.160 0.160 800 H 12.5 x 13.5	100	AFK107M63G24T	63.0	0.08	0.350	0.350	400	G	10 x 10.2	500	
470 AFK477M63P44T 296.1 0.08 0.082 0.082 1410 P 16 x 16.5 680 AFK687M63R44T 428.4 0.08 0.080 0.080 1690 R 18 x 16.5 80 Vdc (100 Vdc Surge) 3.3 AFK335M80C12T 3.0 0.08 5.00 5.00 25 C 5 x 5.8 4.7 AFK475M80D16T 3.8 0.08 3.00 3.00 40 D 6.3 x 5.8 10.0 AFK106M80X16T 8.0 0.08 2.40 2.40 60 X 6.3 x 7.7 10.0 AFK106M80E16T 8.0 0.08 2.40 2.40 60 E 8 x 6.2 22.0 AFK226M80F24T 17.6 0.08 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 130 F 8 x 10.2 47.0 AFK476M80G24T 37.6 0.08 0.32 0.32 500 </td <td>150</td> <td>AFK157M63H32T</td> <td>94.5</td> <td>0.08</td> <td>0.160</td> <td>0.160</td> <td>800</td> <td>Н</td> <td>12.5 x 13.5</td> <td>200</td>	150	AFK157M63H32T	94.5	0.08	0.160	0.160	800	Н	12.5 x 13.5	200	
680 AFK687M63R44T 428.4 0.08 0.080 0.080 1690 R 18 x 16.5 80 Vdc (100 Vdc Surge) 3.3 AFK335M80C12T 3.0 0.08 5.00 5.00 25 C 5 x 5.8 4.7 AFK475M80D16T 3.8 0.08 3.00 3.00 40 D 6.3 x 5.8 10.0 AFK106M80X16T 8.0 0.08 2.40 2.40 60 X 6.3 x 7.7 10.0 AFK106M80E16T 8.0 0.08 2.40 2.40 60 E 8 x 6.2 22.0 AFK226M80F24T 17.6 0.08 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 130 F 8 x 10.2 47.0 AFK476M80G24T 37.6 0.08 0.70 0.70 200 G 10 x 10.2 68.0 AFK686M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK157M80H32T 120.0 0.08	220	AFK227M63H32T	138.6	0.08	0.160	0.160	800	Н	12.5 x 13.5	200	
S0 Vdc (100 Vdc Surge) S1	470	AFK477M63P44T	296.1	0.08	0.082	0.082	1410	Р	16 x 16.5	125	
3.3 AFK335M80C12T 3.0 0.08 5.00 5.00 25 C 5 x 5.8 4.7 AFK475M80D16T 3.8 0.08 3.00 3.00 40 D 6.3 x 5.8 10.0 AFK106M80X16T 8.0 0.08 2.40 2.40 60 X 6.3 x 7.7 10.0 AFK106M80E16T 8.0 0.08 2.40 2.40 60 E 8 x 6.2 22.0 AFK226M80F24T 17.6 0.08 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 130 F 8 x 10.2 47.0 AFK476M80G24T 37.6 0.08 0.70 0.70 200 G 10 x 10.2 68.0 AFK686M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 100.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 330.0 AFK337M80P44T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 <td>680</td> <td>AFK687M63R44T</td> <td>428.4</td> <td>0.08</td> <td>0.080</td> <td>0.080</td> <td>1690</td> <td>R</td> <td>18 x 16.5</td> <td>125</td>	680	AFK687M63R44T	428.4	0.08	0.080	0.080	1690	R	18 x 16.5	125	
4.7 AFK475M80D16T 3.8 0.08 3.00 3.00 40 D 6.3 x 5.8 10.0 AFK106M80X16T 8.0 0.08 2.40 2.40 60 X 6.3 x 7.7 10.0 AFK106M80E16T 8.0 0.08 2.40 2.40 60 E 8 x 6.2 22.0 AFK226M80F24T 17.6 0.08 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 130 F 8 x 10.2 47.0 AFK476M80G24T 37.6 0.08 0.70 0.70 200 G 10 x 10.2 68.0 AFK686M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 100.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK157M80H32T 120.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) <td colspan<="" td=""><td></td><td></td><td></td><td></td><td>80 Vdc (100</td><td>Vdc Surge)</td><td></td><td></td><td></td><td></td></td>	<td></td> <td></td> <td></td> <td></td> <td>80 Vdc (100</td> <td>Vdc Surge)</td> <td></td> <td></td> <td></td> <td></td>					80 Vdc (100	Vdc Surge)				
10.0 AFK106M80X16T 8.0 0.08 2.40 2.40 60 X 6.3 x 7.7 10.0 AFK106M80E16T 8.0 0.08 2.40 2.40 60 E 8 x 6.2 22.0 AFK226M80F24T 17.6 0.08 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 130 F 8 x 10.2 47.0 AFK476M80G24T 37.6 0.08 0.70 0.70 200 G 10 x 10.2 68.0 AFK686M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 100.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK157M80H32T 120.0 0.08 0.32 0.32 500 H 12.5 x 13.5 330.0 AFK337M80P44T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	3.3	AFK335M80C12T	3.0	0.08	5.00	5.00	25	С	5 x 5.8	1000	
10.0 AFK106M80E16T 8.0 0.08 2.40 2.40 60 E 8 x 6.2 22.0 AFK226M80F24T 17.6 0.08 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 130 F 8 x 10.2 47.0 AFK476M80G24T 37.6 0.08 0.70 0.70 200 G 10 x 10.2 68.0 AFK686M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 100.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK157M80H32T 120.0 0.08 0.32 0.32 500 H 12.5 x 13.5 330.0 AFK337M80P44T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 <t< td=""><td>4.7</td><td>AFK475M80D16T</td><td>3.8</td><td>0.08</td><td>3.00</td><td>3.00</td><td>40</td><td>D</td><td>6.3 x 5.8</td><td>1000</td></t<>	4.7	AFK475M80D16T	3.8	0.08	3.00	3.00	40	D	6.3 x 5.8	1000	
22.0 AFK226M80F24T 17.6 0.08 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 130 F 8 x 10.2 47.0 AFK476M80G24T 37.6 0.08 0.70 0.70 200 G 10 x 10.2 68.0 AFK686M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 100.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK157M80H32T 120.0 0.08 0.32 0.32 500 H 12.5 x 13.5 330.0 AFK337M80P44T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2	10.0	AFK106M80X16T	8.0	0.08	2.40	2.40	60	Χ	6.3 x 7.7	900	
33.0 AFK336M80F24T 26.4 0.08 1.30 1.30 130 F 8 x 10.2 47.0 AFK476M80G24T 37.6 0.08 0.70 0.70 200 G 10 x 10.2 68.0 AFK686M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 100.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK157M80H32T 120.0 0.08 0.32 0.32 500 H 12.5 x 13.5 330.0 AFK337M80P44T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	10.0	AFK106M80E16T	8.0	0.08	2.40	2.40	60	Ε	8 x 6.2	1000	
47.0 AFK476M80G24T 37.6 0.08 0.70 0.70 200 G 10 x 10.2 68.0 AFK686M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 100.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK157M80H32T 120.0 0.08 0.32 0.32 500 H 12.5 x 13.5 330.0 AFK337M80P44T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	22.0	AFK226M80F24T	17.6	0.08	1.30	1.30	130	F	8 x 10.2	500	
68.0 AFK686M80H32T 54.4 0.08 0.32 0.32 500 H 12.5 x 13.5 100.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK157M80H32T 120.0 0.08 0.32 0.32 500 H 12.5 x 13.5 330.0 AFK337M80P44T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	33.0	AFK336M80F24T	26.4	0.08	1.30	1.30	130	F	8 x 10.2	500	
100.0 AFK107M80H32T 80.0 0.08 0.32 0.32 500 H 12.5 x 13.5 150.0 AFK157M80H32T 120.0 0.08 0.32 0.32 500 H 12.5 x 13.5 330.0 AFK337M80P44T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	47.0	AFK476M80G24T	37.6	0.08	0.70	0.70	200	G	10 x 10.2	500	
150.0 AFK157M80H32T 120.0 0.08 0.32 0.32 500 H 12.5 x 13.5 330.0 AFK337M80P44T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	68.0	AFK686M80H32T	54.4	0.08	0.32	0.32	500	Н	12.5 x 13.5	200	
330.0 AFK337M80P44T 264.0 0.08 0.17 0.17 793 P 16 x 16.5 470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	100.0	AFK107M80H32T	80.0	0.08	0.32	0.32	500	Н	12.5 x 13.5	200	
470.0 AFK477M80R44T 376.0 0.08 0.15 0.15 917 R 18 x 16.5 100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	150.0	AFK157M80H32T	120.0	0.08	0.32	0.32	500	Н	12.5 x 13.5	200	
100 Vdc (125 Vdc Surge) 22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	330.0	AFK337M80P44T	264.0	0.08	0.17	0.17	793	Р			
22.0 AFK226M2AF24T 22.0 0.07 1.30 1.30 130 F 8 x 10.2 33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	470.0	AFK477M80R44T	376.0	0.08	0.15	0.15	917	R	18 x 16.5	125	
33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5					100 Vdc (12	5 Vdc Surge)					
33.0 AFK336M2AG24T 33.0 0.07 0.70 0.70 200 G 10 x 10.2 47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	22.0	AFK226M2AF24T	22.0	0.07	•		130	F	8 x 10.2	500	
47.0 AFK476M2AH32T 47.0 0.07 0.32 0.32 500 H 12.5 x 13.5	1										
	1										
,	1		68.0		0.32	0.32	500	Н	12.5 x 13.5	200	
100.0 AFK107M2AP44T 100.0 0.07 0.17 0.17 793 P 16 x 16.5	100.0	AFK107M2AP44T							16 x 16.5		
150.0 AFK157M2AP44T 150.0 0.07 0.17 0.17 793 P 16 x 16.5											
220.0 AFK227M2AR44T 220.0 0.07 0.15 0.15 917 R 18 x 16.5	1										
330.0 AFK337M2AR44T 330.0 0.07 0.15 0.15 917 R 18 x 16.5											

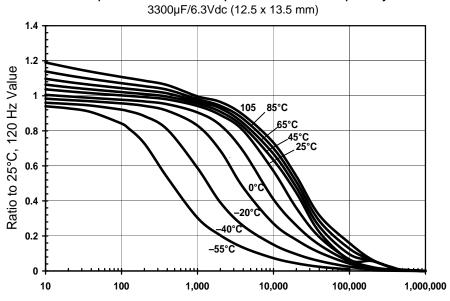
Type AFK -55 °C to 105 °C

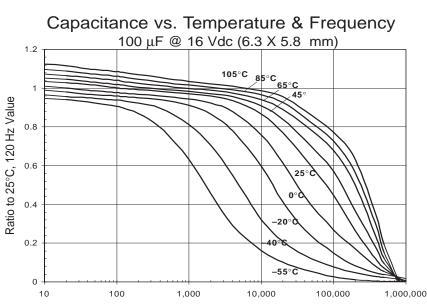
SMT Aluminum Electrolytic Capacitors - Lowest E.S.R., 105 °C

Part Numbering System AFK 106 16 В **12T** Type Capacitance Capacitance **Voltage Code** Case **Packaging Code** $105 = 1.0 \mu F$ Compliant **Tolerance** 06 = 6.3 Vdc 35 = 35 Vdc Code 12 = Carrier tape $106 = 10.0 \mu F$ $M = \pm 20\%$ 10 = 10 Vdc50 = 50 VdcWidth (mm) $107 = 100.0 \, \mu F$ 16 = 16 Vdc 63 = 63 Vdc T = Tape & Reel $108 = 1000.0 \, \mu F$ 25 = 25 Vdc 80 = 90 Vdc B = Bulk2A = 100 Vdc

Typical Performance Curves -

Capacitance vs. Temperature and Frequency





Frequency (Hz)

Type AFK -55 °C to 105 °C

SMT Aluminum Electrolytic Capacitors - Lowest E.S.R., 105 °C

Typical Performance Curves

