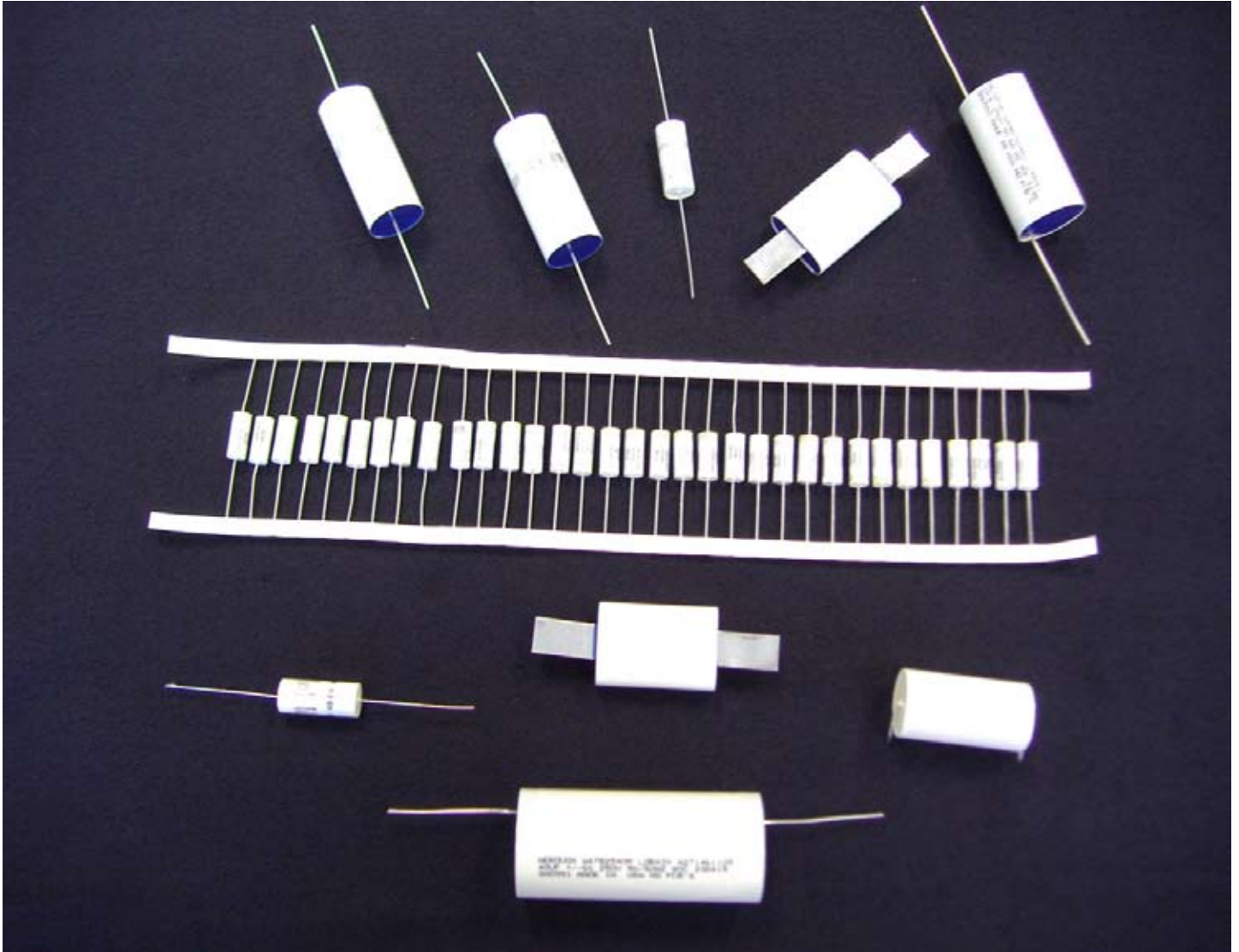


Aerovox Corp.®

Axial Film Capacitors Metallized Polyester and Polypropylene



.... your source for **the Ultimate in Reliability**

RoHS Compliant

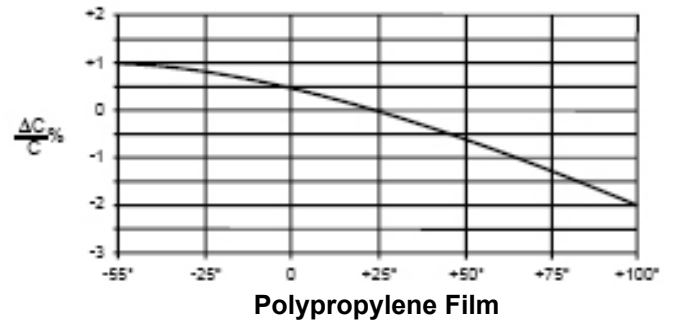
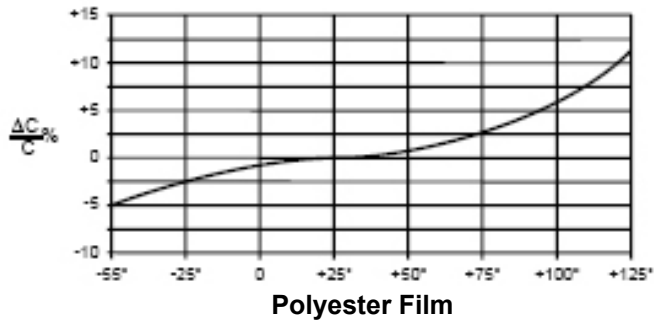
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Part Numbering System

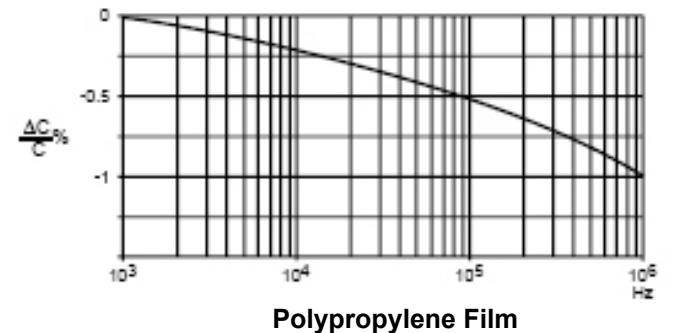
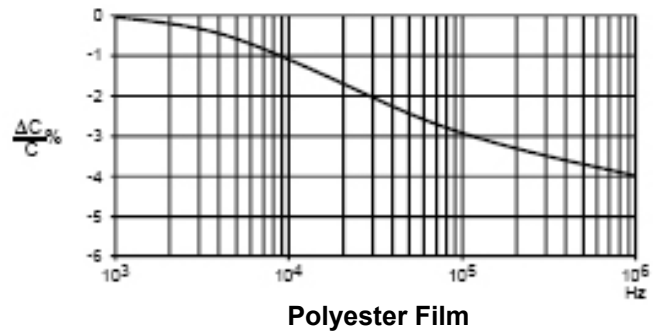
AREM	105	40	K	RP	K	ZZ
Type	Capacitance (μ F)	Voltage (Vdc)	Tolerance (\pm %)	Case Code	Packaging Code	Designation Code
AREM	102 = .002	06 = 63	F = \pm 1%	See	K = Bulk	ZZ = Standard
AFEO	103 = .01	10 = 100	G = \pm 2%	Ratings	M = T&R	Specials are
AFPX	104 = .1	25 = 250	J = \pm 5%	Table	N = T&R	assigned by
ARPM	154 = .15	30 = 300	K = \pm 10%		0 = T&R	factory
ARPS	105 = 1.0	40 = 400	M = \pm 20%			
AFPS		63 = 630				

Polyester and Polypropylene General Dielectric Characteristics

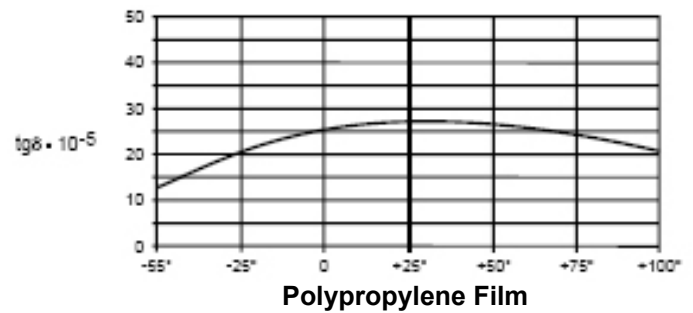
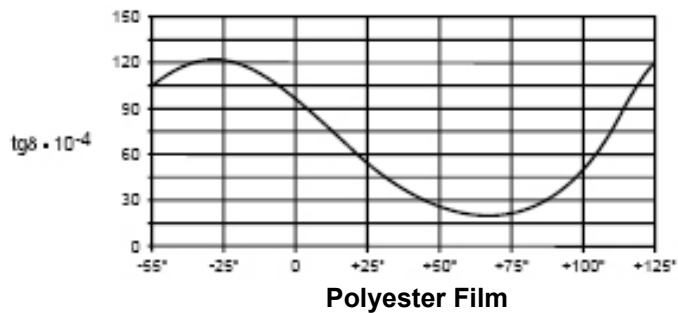
Capacitance Change vs Temperature at 1 kHz



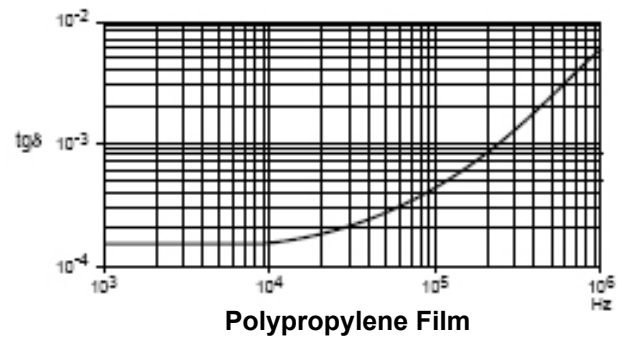
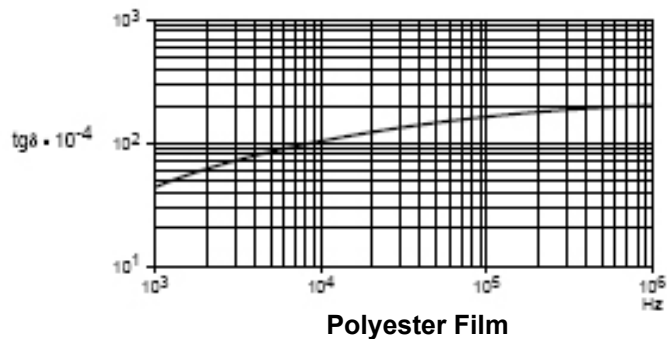
Capacitance Change vs Frequency at 25 °C



Dissipation Factor (DF) Change vs Temperature at 1 kHz



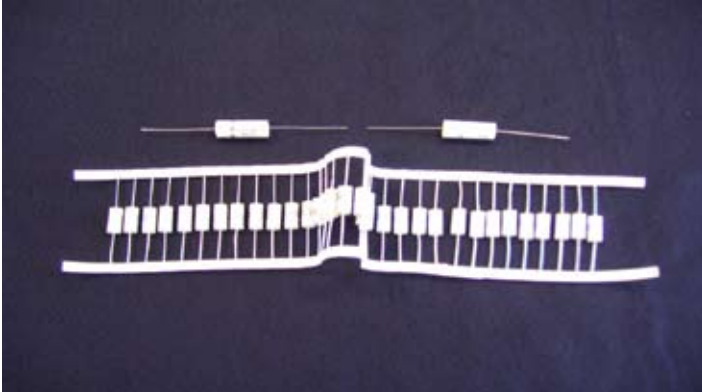
Dissipation Factor (DF) Change vs Frequency at 25 °C



Types AREM, AFEO Round and Flat Axial Leaded Capacitors

Axial Leaded Wrap & Fill Metallized Polyester

RoHS Compliant



Types AREM and AFEO are axial leaded metallized polyester capacitors for general purpose use in blocking, coupling and filtering applications. They offer a high CV value for such a small size.

Highlights

- High CV for small size
- Bulk or T&R for AREM; bulk for AFEO
- UL 94 VO and IEC 695-2-2

Specifications

Capacitance Range:	.001 μ F to 20.0 μ F
Voltage Range:	63 Vdc (40 Vac) to 630 Vdc (220 Vac)
Capacitance Tolerance:	\pm 10% (K) Standard; \pm 5% (J) Special
Operating Temperature Range:	-55 °C +125 °C Full rated voltage @ 85°C - derate linearly to 50% rated voltage at 125 °C
Dissipation Factor (DF)	\leq 0.8% @ 1 kHz
Dielectric Absorption:	.30% typical

Insulation Resistance:

Category	\leq 100Vdc	>100Vdc
MegOhms $\times \leq \mu$ F	1,000	5,000
MegOhms Maximum - Need not exceed	10,000	30,000
Test voltage	50 Vdc	100 Vdc
Electrification Time	1 Min.	1 Min

Accelerated Dry life: 1.25 x rated Vdc @ 85 °C for 1000 hours; delta of \leq 5.0%; DF \leq 1.0% @ 1 kHz; IR \geq 30% of initial limit

Humidity: Zero voltage @ 40 °C \pm 2 °C; 93% \pm 2% RH for 500 hr; Capacitance delta \leq 5.0%; DF \leq 1.0% @ 1kHz; IR 50% of initial limit

Resistance To Solder Heat: Solder Temperature 260 °C \pm 5 °C for 10 sec \pm 1 sec; capacitance delta \leq 2.0%

Lead Pull: Must withstand a tensile force of 5 lbs applied to each lead for 5 seconds

Long Term Stability: +2.0% (AREM), +1.5% (AFEO) over two years at a temperature of between 20 °C & 40 °C and RH of between 40% and 60%

Aerovox Corp.®

Type AREM Round Metallized Polyester

Ratings

RoHS Compliant

Cap (µF)	Catalog Part Number	Dimensions D x L Inches (mm)	Case Code	AWG d Inches. (mm)
63 Vdc (40 Vac)				
.15	AREM15406KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.22	AREM22406KCEKZZ	.236x.650 (6x16.5)	CE	.025 (7)
.33	AREM33406KCEKZZ	.236x.650 (6x16.5)	CE	.025 (7)
.47	AREM47406KEEKZZ	.276x.650 (7x16.5)	EE	.025 (7)
.68	AREM68406KEIKZZ	.276x.807 (7x20.5)	EI	.025 (7)
1.0	AREM10506KGIKZZ	.315x.807 (8x20.5)	GI	.032 (8)
1.5	AREM15506KJKZZ	.374x.807 (9.5x20.5)	JI	.032 (8)
2.2	AREM22506KJOKZZ	.374x1.10 (9.5x28)	JO	.032 (8)
3.3	AREM33506KKOKZZ	.394x1.10 (10x28)	KO	.032 (8)
4.7	AREM47506KPOKZZ	.512x1.10 (13x28)	PO	.032 (8)
6.8	AREM68506KOPKZZ	.472x1.30 (12x33)	OP	.032 (8)
10	AREM10606KTPKZZ	.571x1.30 (14.5x33)	TP	.032 (8)
100 Vdc (63 Vac)				
.068	AREM68310KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.10	AREM10410KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.15	AREM15410KCEKZZ	.236x.650 (6x16.5)	CE	.025 (7)
.22	AREM22410KDEKZZ	.256x.650 (6x16.5)	DE	.025 (7)
.33	AREM33410KFEKZZ	.295x.650 (7.5x16.5)	FE	.032 (8)
.47	AREM47410KGEKZZ	.315x.650 (8x16.5)	GE	.032 (8)
.68	AREM68410KHIKZZ	.335x.807 (8.5x20.5)	HI	.032 (8)
1.00	AREM10510KKIKZZ	.394x.807 (10x20.5)	KI	.032 (8)
1.50	AREM15510KKOKZZ	.394x1.10 (10x28)	KO	.032 (8)
2.20	AREM22510KNOKZZ	.453x1.10 (11.5x28)	NO	.032 (8)
3.30	AREM33510KPOKZZ	.512x1.10 (13x28)	PO	.032 (8)
4.70	AREM47510KRPKZZ	.512x1.30 (13x33)	RP	.032 (8)
6.80	AREM68510KWPKZZ	.630x1.30 (16x33)	WP	.032 (8)
10.00	AREM10610K2PKZZ	.729x1.30 (18.5x33)	2P	.040 (1.02)
250 Vdc (160 Vac)				
.015	AREM15325KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.022	AREM22325KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.033	AREM33325KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.047	AREM47325KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.068	AREM68325KCEKZZ	.236x.650 (6x16.5)	CE	.025 (7)
.10	AREM10425KDEKZZ	.256x.650 (6x16.5)	DE	.025 (7)
.15	AREM15425KFEKZZ	.296x.650 (7.5x16.5)	FE	.032 (8)
.22	AREM22425KHEKZZ	.335x.650 (8.5x16.5)	HE	.032 (8)
.33	AREM33425KGFKZZ	.312x.750 (8x19)	GF	.032 (8)
.47	AREM47425KIFKZZ	.354x.750 (9x19)	IF	.032 (8)
.68	AREM68525KIOKZZ	.354x1.10 (9x28)	IO	.032 (8)
1.00	AREM10525KLOKZZ	.431x1.10 (10.5x28)	LO	.032 (8)
1.50	AREM15525KOOKZZ	.472x1.10 (16x46)	OO	.032 (8)
2.20	AREM22525KPOKZZ	.512x1.10 (13x28)	PO	.032 (8)
3.30	AREM33525KWPKZZ	.630x1.30 (16x33)	WP	.032 (8)

Cap (µF)	Catalog Part Number	Dimensions D x L Inches (mm)	Case Code	AWG d Inches (mm)
250 Vdc (160 Vac)				
4.70	AREM47525KYPKZZ	.669x1.30 (17x33)	YP	.032 (8)
6.80	AREM68525KYUKZZ	.669x1.81 (17x46)	YU	.032 (8)
10.00	AREM10625K2UKZZ	.807x1.81 (20.5x46)	2U	.040 (1.02)
12.00	AREM12625K5UKZZ	.885x1.81 (22.5x46)	3U	.040 (1.02)
15.00	AREM15625K4UKZZ	.965x1.81 (24.5x46)	4U	.040 (1.02)
20.00	AREM20625K5UKZZ	1.08x1.81 (27.4x46)	5U	.040 (1.02)
400 Vdc (200 Vac)				
.010	AREM10340KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.015	AREM15340KCEKZZ	.236x.650 (6x16.5)	CE	.025 (7)
.022	AREM22340KCEKZZ	.236x.650 (6x16.5)	CE	.025 (7)
.033	AREM33340KCEKZZ	.236x.650 (6x16.5)	CE	.025 (7)
.047	AREM47340KEEKZZ	.276x.650 (7x16.5)	EE	.025 (7)
.068	AREM68340KEIKZZ	.276x.807 (7x20.5)	EI	.025 (7)
.10	AREM10440KFIKZZ	.295x.807 (7.5x20.5)	FI	.032 (8)
.15	AREM15440KIIKZZ	.394x.807 (9x20.5)	II	.032 (8)
.22	AREM22440KHOKZZ	.335x1.10 (8.5x28)	HO	.032 (8)
.33	AREM33440KSOKZZ	.394x1.10 (14x28)	SO	.032 (8)
.47	AREM47440KNOKZZ	.453x1.10 (11.5x28)	NO	.032 (8)
.68	AREM68440KNPKZZ	.453x1.30 (11.5x33)	NP	.032 (8)
1.0	AREM10540KRPKZZ	.531x1.30 (13x33)	RP	.032 (8)
1.5	AREM15540KUUKZZ	.591x1.81 (15x46)	UU	.032 (8)
2.2	AREM22540KYUKZZ	.669x1.81 (17x46)	YU	.032 (8)
630 Vdc (220 Vac)				
.0010	AREM10263KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.0015	AREM15263KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.0022	AREM22263KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.0033	AREM33263KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.0047	AREM47263KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.0068	AREM68263KABKZZ	.197x.433 (5x11)	AB	.025 (7)
.010	AREM10363KCEKZZ	.236x.650 (6x16.5)	CE	.025 (7)
.015	AREM15363KCEKZZ	.236x.650 (6x16.5)	CE	.025 (7)
.022	AREM22363KEEKZZ	.276x.650 (7x16.5)	EE	.025 (7)
.033	AREM33363KFIKZZ	.295x.807 (7.5x20.5)	FI	.032 (8)
.047	AREM47363KFIKZZ	.295x.807 (7.5x20.5)	FI	.032 (8)
.068	AREM68363KIIKZZ	.354x.807 (9x20.5)	II	.032 (8)
.10	AREM10463KHOKZZ	.335x1.10 (8.5x28)	HO	.032 (8)
.15	AREM15463KKOKZZ	.394x1.10 (10x28)	KO	.032 (8)
.22	AREM22463KNOKZZ	.453x1.10 (11.5x28)	NO	.032 (8)
.33	AREM33463KSOKZZ	.551x1.10 (14x28)	SO	.032 (8)
.47	AREM47463KUPKZZ	.591x1.10 (15x33)	UP	.032 (8)
.68	AREM68463KUUKZZ	.591x1.81 (15x46)	UU	.032 (8)
1.00	AREM10563KRPKZZ	.709x1.81 (18x46)	1U	.032 (8)

Aerovox Corp.®

Type AFEO Flat Axial Metallized Polyester

Ratings

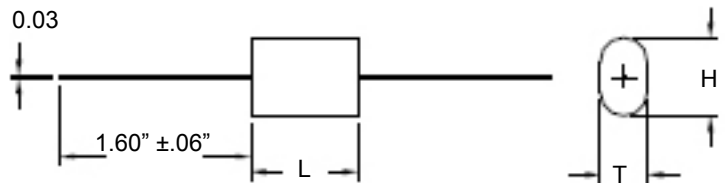
RoHS Compliant

Cap (μ F)	Catalog Part Number	Dimensions T x H x L Inches (mm)	Case Code	AWG d Inches (mm)
100 Vdc (63 Vac)				
2.20	AFEO22510KNLKZZ	.32x.60x.94 (8.1x15.2x23.0)	NL	.032 (.80)
3.00	AFEO30519KTOKZZ	.33x.65x1.05 (8.4x16.5x26.7)	TO	.032 (.80)
3.30	AFEO33510KKOKZZ	.39x.67x1.05 (9.9x17.0x26.7)	KO	.032 (.80)
4.00	AFEO40510KLRKZZ	.35x.65x1.25 (8.9x16.5x31.8)	LR	.032 (.80)
4.70	AFEO47510KRRKZZ	.42x.75x1.25 (10.7x19.1x31.8)	KR	.032 (.80)
5.00	AFEO50510KRRKZZ	.42x.75x1.25 (10.7x19.1x31.8)	KR	.032 (.80)
6.00	AFEO60510KMRKZZ	.45x.75x1.25 (11.4x19.1x31.8)	MR	.032 (.80)
6.80	AFEO68510KPRKZZ	.55x.85x1.25 (14.0x21.6x31.8)	PR	.032 (.80)
250 Vdc (160 Vac)				
.100	AFEO10425KCEKZZ	.25x.48x.56 (6.4x12.2x14.2)	CE	.025 (.60)
.150	AFEO15425KCEKZZ	.25x.48x.56 (6.4x12.2x14.2)	CE	.025 (.60)
.220	AFEO22425KBLKZZ	.20x.52x.94 (5.1x13.2x23.9)	BL	.025 (.60)
.330	AFEO33425KJLKZZ	.22x.52x.94 (5.6x13.2x23.9)	JL	.025 (.60)
.470	AFEO47425KCLKZZ	.25x.55x.94 (6.4x14.0x23.9)	CL	.025 (.60)
.680	AFEO68425KHLKZZ	.27x.55x.94 (6.9x14.0x23.9)	HL	.025 (.60)
1.00	AFEO10525KILKZZ	.30x.55x.94 (7.6x14.0x23.9)	IL	.032 (.80)
1.50	AFEO15525KJKKZZ	.37x.85x.94 (9.4x16.0x23.9)	JK	.032 (.80)
2.00	AFEO20525KKOKZZ	.39x.67x1.05 (9.9x17.0x26.7)	KO	.032 (.80)
2.20	AFEO22525KLOKZZ	.41x.67x1.05 (10.4x17.0x26.7)	LO	.032 (.80)
3.00	AFEO30525KKPKZZ	.39x.78x1.25 (9.9x19.8x31.8)	KP	.032 (.80)
3.30	AFEO33525KLPKZZ	.41x.80x1.25 (10.4x20.3x31.8)	LP	.032 (.80)
4.00	AFEO40525KNPKZZ	.45x.94x1.25 (11.4x23.9x31.8)	NP	.032 (.80)
4.70	AFEO47525KPPKZZ	.49x.98x1.25 (12.4x24.9x31.8)	PP	.032 (.80)
5.00	AFEO50525KPPKZZ	.49x.98x1.25 (12.4x24.9x31.8)	PP	.032 (.80)
6.00	AFEO60625KLUKZZ	.39x.90x1.76 (9.9x22.9x44.7)	KU	.032 (.80)
6.80	AFEO68525KPUKZZ	.49x.90x1.76 (12.4x22.9x44.7)	PU	.032 (.80)
7.00	AFEO70525KNUKZZ	.45x.95x1.76 (11.4x24.1x44.7)	NU	.032 (.80)
8.00	AFEO80525KRUKZZ	.49x.98x1.76 (12.4x24.9x44.7)	RU	.032 (.80)
9.00	AFEO90525KSUKZZ	.53x1.02x1.76 (13.5x25.9x44.7)	SU	.032 (.80)
10.0	AFEO10625KXUKZZ	.55x1.05x1.76 (14.0x26.7x44.7)	XU	.032 (.80)
12.0	AFEO12625KRXKZZ	.51x1.02x2.26 (13.0x25.9x57.4)	RX	.032 (.80)
15.0	AFEO15625KUXKZZ	.60x1.08x2.26 (15.2x27.4x57.4)	UX	.032 (.80)
18.0	AFEO18625KYXKZZ	.67x1.20x2.26 (17.0x30.5x57.4)	YX	.032 (.80)
20.0	AFEO20625K2XKZZ	.73x1.25x2.26 (18.5x31.8x57.4)	2X	.032 (.80)

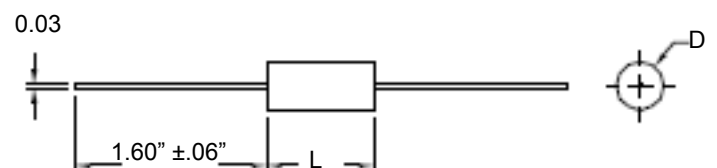
Cap (μ F)	Catalog Part Number	Dimensions T x H x L Inches (mm)	Case Code	AWG d Inches (mm)
400 Vdc (200 Vac)				
.047	AFEO47340KADKZZ	.20x.35x.56 (5.1x8.9x14.2)	AD	.025 (.60)
.068	AFEO68340KHEKZZ	.27x.47x.56 (6.9x11.9x14.2)	HE	.025 (.60)
.100	AFEO10440KHEKZZ	.25x.60x.94 (6.4x15.2x23.9)	DL	.025 (.60)
.150	AFEO15440KDLKZZ	.25x.60x.94 (6.4x15.2x23.9)	DL	.025 (.60)
.220	AFEO22440KFLKZZ	.32x.60x.94 (8.1x15.2x23.9)	FL	.032 (.80)
.330	AFEO33440KFLKZZ	.32x.60x.94 (8.1x15.2x23.9)	FL	.032 (.80)
.470	AFEO4740KGLKZZ	.35x.65x.94 (8.9x16.5x23.9)	GL	.032 (.80)
.680	AFEO68440KLRKZZ	.35x.65x1.25 (8.9x16.5x31.8)	LR	.032 (.80)
1.00	AFEO10540KMRKZZ	.45x.75x1.25 (11.4x19.1x31.8)	MR	.032 (.80)
1.50	AFEO15540KPRKZZ	.55x.85x1.25 (14.0x21.6x31.8)	PR	.032 (.80)
2.00	AFEO20540KPRKZZ	.55x.85x1.25 (14.0x21.6x31.8)	PR	.032 (.80)
2.20	AFEO22540KTUKZZ	.60x.90x1.76 (15.2x22.9x44.7)	TU	.032 (.80)
3.00	AFEO30540KXUKZZ	.80x1.15x1.76 (16.2x27.4x57.4)	XU	.032 (.80)

Outline Drawings

AFEO



AREM



Aerovox Corp.®

Type AFPX Across-the-Line Capacitors

Flat Axial Leaded Metallized Polypropylene Capacitors

RoHS Compliant



Type AFPX is a rugged TUV certified across-the-line capacitor for the value range 2.2 μF to 4.7 μF . The AFPX also goes up to 10.0 μF for those applications that require a high value across-the-line capacitor

Highlights

- TUV certified for the value range 2.2 μF to 4.7 μF
- Low ESR and high Current
- UL 94 VO and IEC 695-2-2

Specifications

Capacitance Range:	2.2 μF to 10.0 μF
Voltage Range:	600 Vdc (275 Vac)
Capacitance Tolerance:	$\pm 10\%$ (K) Standard; $\pm 5\%$ (J) Special
Operating Temperature Range:	$-55\text{ }^\circ\text{C}$ to $+105\text{ }^\circ\text{C}$ Full rated voltage @ $85\text{ }^\circ\text{C}$ - from 85 to $105\text{ }^\circ\text{C}$ derate 1.25%/°C

Dissipation Factor (DF)	$\leq 0.8\%$ @ 1 kHz
Dielectric Absorption:	.30% typical

Insulation Resistance:

Category	600 Vdc, 275 Vac
MegOhms x μF	200,000
MegOhms Maximum - Need not exceed	1,000,000
Test voltage	100 Vdc
Electrification Time	1 Min.

Accelerated Dry life: 1.25 x rated Vdc @ $85\text{ }^\circ\text{C}$ for 1000 hours; delta of $\leq 5.0\%$; ESR $\leq 125\%$ of initial limit; IR $\geq 50\%$ of initial limit

Humidity: Zero voltage @ $40\text{ }^\circ\text{C} \pm 3\text{ }^\circ\text{C}$; 93% $\pm 5\%$ RH for 500 hr; Capacitance delta $\leq 3.0\%$; ESR $\leq 125\%$ of initial limit; IR 10% of initial limit

Resistance To Solder Heat: Solder Temperature $260\text{ }^\circ\text{C} \pm 5\text{ }^\circ\text{C}$ for 10 sec ± 1 sec; capacitance delta of $\leq 2.0\%$

Lead Pull: Must withstand a tensile force of 5 lbs applied to each lead for 5 seconds

Long Term Stability: +1.0% (AREM), +1.5% (AFEO) over two years at a temperature of between $20\text{ }^\circ\text{C}$ & $40\text{ }^\circ\text{C}$ and RH of between 40% and 60%

dv/dt:

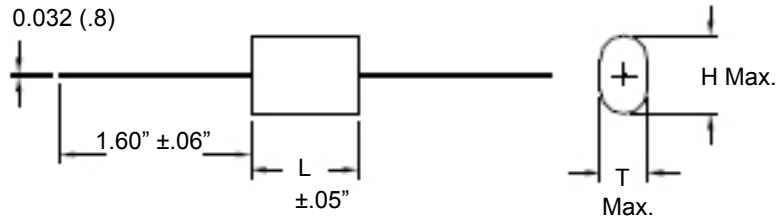
Capacitance	V/ μ
$\leq 4.7\text{ } \mu\text{F}$	100
$> 4.7\text{ } \mu\text{F}$	60

Aerovox Corp.®

Type AFPX TUV Certified Across-the-Line Capacitors

Outline Drawing

RoHS Compliant



Ratings

Cap (μ F)	Catalog Part Number	Dimensions T x H x L Inches (mm)	Case Code	ESR Max 20-100 kHz (Ω)	Current (A)	Wire d (AWG)
600 Vdc (275 Vac)						
* 2.2	AFPX22560K1UK	.70x1.00x1.75 (17.8x25.4x44.5)	IU	8	11	20
* 3.0	AFPX30560K2UK	.72x1.05x1.75 (18.3x26.7x44.5)	2U	8	12	20
* 3.3	AFPX33560K2UK	.72x1.05x1.75 (18.3x26.7x44.5)	2U	7	12	20
* 4.0	AFPX40560K3UK	.75x1.25x1.75 (19.1x31.8x44.5)	3U	7	14	20
* 4.7	AFPX47560K9UK	.98x1.50x1.75 (24.9x38.1x44.5)	9U	7	14	20
5.0	AFPX50560K2XK	.80x1.35x2.25 (20.3x34.3x57.2)	2X	7	15	18
5.6	AFPX56560K3XK	.90x1.40x2.25 (22.9x35.6x57.2)	3X	7	15	18
6.0	AFPX60560K3XK	.90x1.40x2.25 (22.9x35.6x57.2)	3X	7	15	18
6.3	AFPX63560K4XK	1.00x1.50x2.25 (25.4x38.1x57.2)	4X	7	17	18
6.8	AFPX68560K4XK	1.00x1.50x2.25 (25.4x38.1x57.2)	4X	7	17	18
8.0	AFPX80560K9XK	1.05x1.50x2.25 (26.7x38.1x57.2)	9X	7	18	18
10.0	AFPX10660K5XK	1.20x1.80x2.25 (30.5x45.7x57.2)	5X	7	18	18

* TUV Certified

Aerovox Corp.®

Type ARPM Axial Metallized Polypropylene Capacitors

High dv/dt Round Axials

RoHS Compliant



Type ARPM is a stable metallized polypropylene capacitor that is ideal for pulsing applications that require a high dv/dt rating with low DF and ESR. ARPM fits well into switching power supply applications

Highlights

- High dv/dt
- Low ESR
- Low DF
- UL 94 VO and IEC 695-2-2

Specifications

Capacitance Range: .0033 μ F to 10.0 μ F
Voltage Range: 150 Vdc (90 Vac) to 630 Vdc (280 Vac)
Capacitance Tolerance: \pm 10% (K) Standard; \pm 5% (J); \pm 2% (G) Special
Operating Temperature Range: -55 °C +105 °C
Full rated voltage @ 85°C - from 85 to 105 °C derate 1.25%/°C

Dissipation Factor (DF) \leq 0.1% @ 1 kHz
Dielectric Absorption: .05% typical

Insulation Resistance:

Category	150 Vdc to 630 Vdc
MegOhms x μ F	200,000
MegOhms Maximum - Need not exceed	500,000
Test voltage	100 Vdc
Electrification Time	1 Min.

Accelerated Dry life: 1.25 x rated Vdc or 1.1 x rated Vac @ 85 °C for 1000 hours; capacitance delta of \leq 5.0%; ESR \leq 125% of initial limit; IR \geq 50% of initial limit;

Humidity: Zero voltage @ 40 °C \pm 3 °C; 93% \pm 5% RH for 500 hr; Capacitance delta \leq 3.0%; ESR \leq 125% of initial limit; IR 10% of initial limit

Resistance To Solder Heat: Solder Temperature 260 °C \pm 5 °C for 10 sec \pm 1 sec; capacitance delta of \leq 2.0%

Lead Pull: Must withstand a tensile force of 5 lbs applied to each lead for 5 seconds

Long Term Stability: +1.0% (AREM), +1.5% (AFEO) over two years at a temperature of between 20 °C & 40 °C and RH of between 40% and 60%

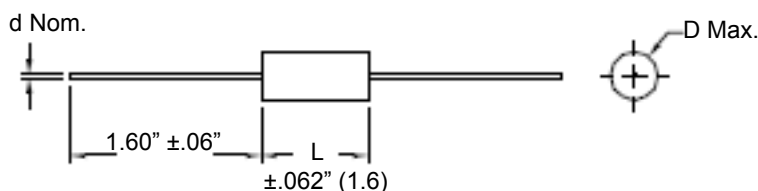
dv/dt (Maximum Pulse Rise Time V/ μ Sec.):

Volts	In. (mm)	In. (mm)	In. (mm)	In. (mm)	In. (mm)	In. (mm)
	.562 (14.3)	.718 (18.2)	.938 (23.8)	1.25 (31.8)	1.75 (44.4)	2.25 (57.2)
150	20	12	12	10	10	
250	30	20	15	12	10	10
400	40	30	16	14	12	
630	40	30	16	16	14	

Type ARPM Axial Metallized Polypropylene Capacitors

Outline Drawing

RoHS Compliant



Ratings

Cap (μ F)	Catalog Part Number	Dimensions D x L Inches (mm)	Case Code	AWG d Inches (mm)
150 Vdc (90 Vac)				
.10	ARPM10415KCCKZZ	.236x.562 (6.0x14.3)	CC	.025 (6.0)
.15	ARPM15415KDCKZZ	.256x.562 (6.5x14.3)	DC	.025 (6.0)
.22	ARPM22415KDFKZZ	.256x.718 (6.5x18.3)	DF	.025 (6.0)
.33	ARPM33415KFFKZZ	.295x.718 (7.5x18.3)	FF	.032 (8.0)
.47	ARPM47415KHFKZZ	.335x.718 (8.5x18.3)	HF	.032 (8.0)
.68	ARPM68415KHKKZZ	.335x.938 (8.5x23.8)	HK	.032 (8.0)
1.00	ARPM10515KKKKZZ	.394x.938 (10.0x23.8)	KK	.032 (8.0)
1.50	ARPM15515KCKKZZ	.482x.938 (12.0x23.8)	CK	.032 (8.0)
2.00	ARPM20515KSKKZZ	.551x.938 (14.0x23.8)	SK	.032 (8.0)
3.00	ARPM30515KKKKZZ	.650x.938 (16.5x23.8)	KK	.032 (8.0)
4.00	ARPM40515KXJKZZ	.600x1.25 (16.2x31.8)	XJ	.032 (8.0)
5.00	ARPM50515KCCKZZ	.709x1.25 (18.0x31.8)	1P	.032 (8.0)
10.00	ARPM10615K9UKZZ	1.00x1.75 (25.4x44.5)	9U	.032 (8.0)
250 Vdc (200 Vac)				
.047	ARPM47325KDCKZZ	.256x.562 (6.5x14.3)	DC	.025 (6.0)
.068	ARPM68325KFCKZZ	.295x.562 (7.5x14.3)	FC	.025 (6.0)
.10	ARPM10425KDFKZZ	.256x.718 (6.5x18.3)	DF	.025 (6.0)
.15	ARPM15425KGFKZZ	.315x.718 (8.0x18.3)	GF	.032 (8.0)
.22	ARPM22425KGGKZZ	.315x.938 (8.0x24.0)	GK	.032 (8.0)
.33	ARPM33425KIKKZZ	.354x.938 (9.0x24.0)	IK	.032 (8.0)
.47	ARPM47425KLKKZZ	.413x.938 (10.5x24.0)	LK	.032 (8.0)
.68	ARPM68425KPKKZZ	.492x.938 (12.5x24.0)	PK	.032 (8.0)
1.00	ARPM10525KNPKZZ	.472x1.25 (11.5x31.8)	NP	.032 (8.0)
1.50	ARPM15525KUPKZZ	.591x1.25 (15.0x31.8)	UP	.032 (8.0)
2.00	ARPM20525KYPKZZ	.669x1.25 (17.0x31.8)	YP	.032 (8.0)
3.00	ARPM30525KYUKZZ	.669x1.75 (17.0x44.5)	YU	.032 (8.0)
4.00	ARPM40525K2UKZZ	.787x1.75 (20.0x45.7)	2U	.032 (8.0)
5.00	ARPM50525K8UKZZ	.827x1.75 (31.8x44.5)	8U	.032 (8.0)
10.00	ARPM10625K9XKZZ	1.00x2.25 (25.4x57.0)	9X	.032 (8.0)

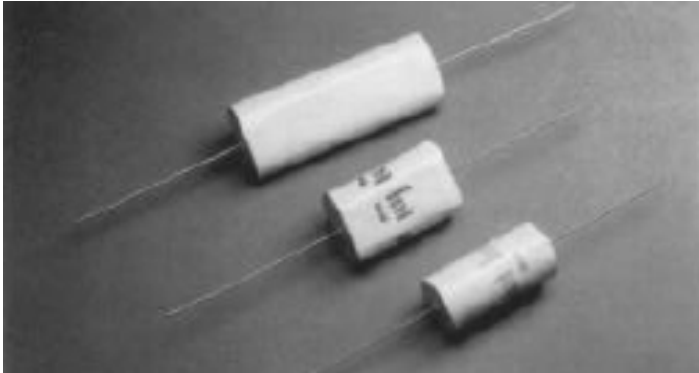
Cap (μ F)	Catalog Part Number	Dimensions D x L Inches (mm)	Case Code	AWG d Inches (mm)
400 Vdc (280 Vac)				
.022	ARPM22340KCCKZZ	.236x.562 (6.0x14.3)	CC	.025 (6.0)
.033	ARPM33340KECKZZ	.276x.562 (7.0x14.3)	EC	.032 (8.0)
.047	ARPM47340KDFKZZ	.256x.718 (6.5x18.3)	DF	.032 (8.0)
.068	ARPM68340KEFKZZ	.276x.718 (7.0x18.3)	EF	.032 (8.0)
.10	ARPM10440KHFKZZ	.335x.718 (8.5x18.3)	HF	.032 (8.0)
.15	ARPM15440KIKKZZ	.354x.938 (9.0x24.0)	IK	.032 (8.0)
.22	ARPM22440KKKKZZ	.394x.938 (10.0x24.0)	KK	.032 (8.0)
.33	ARPM33440KOKKZZ	.472x.938 (12.0x24.0)	OK	.032 (8.0)
.47	ARPM47440KSJKZZ	.511x.938 (14.0x24.0)	SK	.032 (8.0)
.68	ARPM68440KSPKZZ	.551x1.25 (14.0x31.8)	SP	.032 (8.0)
1.00	ARPM10540KWPKZZ	.630x1.25 (16.0x31.8)	WP	.032 (8.0)
1.50	ARPM15540KWUKZZ	.630x1.75 (16.0x44.5)	WU	.032 (8.0)
2.00	ARPM20540K1UKZZ	.709x1.75 (18.0x44.5)	1U	.032 (8.0)
3.00	ARPM30540K3UKZZ	.900x1.75 (22.9x44.5)	3U	.032 (8.0)
4.00	ARPM40540K9UKZZ	1.00x1.75 (25.4x44.5)	9U	.032 (8.0)
5.00	ARPM50540K8UKZZ	1.25x1.75 (31.8x44.5)	8U	.032 (8.0)
630 Vdc (280 Vac)				
.0033	ARPM33263KCBKZZ	.236x.433 (6.0x11.0)	CB	.025 (6.0)
.0047	ARPM47263KCDKZZ	.254x.433 (6.5x11.0)	CD	.025 (6.0)
.0068	ARPM68263KEBKZZ	.276x.433 (7.0x11.0)	EB	.032 (8.0)
.010	ARPM10363KCCKZZ	.236x.562 (6.0x14.3)	CC	.025 (6.0)
.015	ARPM15363KFCKZZ	.295x.562 (7.5x14.3)	FC	.032 (8.0)
.022	ARPM22363KDFKZZ	.256x.718 (6.5x18.3)	DF	.025 (6.0)
.033	ARPM33363KGFKZZ	.276x.718 (7.0x18.3)	EF	.032 (8.0)
.047	ARPM47363KGFKZZ	.315x.718 (8.0x18.3)	GF	.032 (8.0)
.068	ARPM68363KFKKZZ	.394x.718 (10.0x18.3)	KF	.032 (8.0)
.10	ARPM10463KIKKZZ	.354x.938 (9.0x24.0)	IK	.032 (8.0)
.15	ARPM15463KMKKZZ	.433x.938 (11.0x24.0)	MK	.032 (8.0)
.22	ARPM22463KKKKZZ	.394x.938 (10.0x24.0)	KK	.032 (8.0)
.33	ARPM33463KOKKZZ	.472x.938 (12.0x24.0)	OK	.032 (8.0)
.47	ARPM47463KTPKZZ	.571x1.25 (14.5x31.8)	TP	.032 (8.0)
.68	ARPM68463KTUKZZ	.571x1.75 (14.5x44.5)	TU	.032 (8.0)
1.00	ARPM10563KYUKZZ	.669x1.75 (17.0x44.5)	YU	.032 (8.0)

Aerovox Corp.®

Types ARPS, AFPS Axial Metallized Polypropylene Capacitors

High Current Round Axials

RoHS Compliant



Types ARPS and AFPS are designed for high current AC applications and give the designer a choice of round or flat construction. The robust design has the inherent qualities of low DF and low ESR.

Highlights

- High Current
- Low ESR
- Low DF
- UL 94 VO and IEC 695-2-2

Specifications

Capacitance Range:	.47 μ F to 20.0 μ F
Voltage Range:	300 Vdc (220 Vac) to 600 Vdc (300 Vac)
Capacitance Tolerance:	\pm 10% (K); \pm 5% (J)
Operating Temperature Range:	-55 °C +105 °C Full rated voltage @ 85°C - from 85 to 105 °C derate 1.25%/°C

Dissipation Factor (DF)	\leq 0.1% @ 1 kHz
Dielectric Absorption:	.05% typical
Dielectric Strength:	1.6 x rated voltage for 2 seconds
Insulation Resistance:	

Category	300 Vdc	400 Vdc to 600 Vdc
MegOhms x μ F	100,000	200,00
MegOhms Maximum	\leq 100,000	\leq 500,000
Test voltage	100 Vdc	100 Vdc
Electrification Time	2 Min.	2 Min.

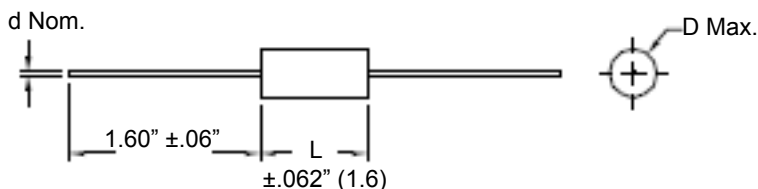
Accelerated Dry life:	1.25 x rated Vdc or 1.1 x rated Vac @ 85 °C for 1000 hours; capacitance delta of \leq 5.0%; ESR \leq 125% of initial limit; IR \geq 50% of initial limit;
Humidity:	Zero voltage @ 40 °C \pm 3 °C; 93% \pm 5% RH for 500 hr; Capacitance delta \leq 3.0%; ESR \leq 125% of initial limit; IR 10% fo initial limit
Resistance To Solder Heat:	Solder Temperature 260 °C \pm 5 °C for 10 sec \pm 1 sec; capacitance delta of \leq 2.0%
Lead Pull:	Must withstand a tensile force of 5 lbs applied to each lead for 5 seconds
Long Term Stability:	+1.0% (AREM), +1.5% (AFEO) over two years at a temperature of between 20 °C & 40 °C and RH of between 40% and 60%

Aerovox Corp.®

Type ARPS Round Axial Metallized Polypropylene Capacitors

Outline Drawing

RoHS Compliant



Ratings

Cap (µF)	Catalog Part Number	Dimensions D x L Inches (mm)	Case Code	Current (A)	Wire d (AWG)
300 Vdc (220 Vac)					
1.00	ARPS10530KROKZZ	.50x1.05 (12.7x26.7)	RO	0.7	20
1.50	ARPS15530KTOKZZ	.57x1.05 (14.5x26.7)	TO	1.0	20
2.00	ARPS20530KUPKZZ	.59x1.25 (15.0x31.8)	UP	1.3	20
2.20	ARPS22530KVPKZZ	.62x1.25 (15.7x31.8)	VP	1.5	20
3.00	ARPS30530K1PKZZ	.71x1.25 (18.0x31.8)	1P	2.0	20
3.30	ARPS33530K2PKZZ	.75x1.25 (19.1x31.8)	2P	2.2	20
4.00	ARPS40530K2PKZZ	.80x1.25 (20.3x31.8)	2P	2.7	20
4.70	ARPS47530K1UKZZ	.72x1.75 (18.3x44.5)	1U	3.1	20
5.00	ARPS50530K2UKZZ	.74x1.75 (18.8x44.5)	2U	3.3	20
6.00	ARPS60530K2UKZZ	.80x1.75 (20.3x44.5)	2U	3.6	20
6.80	ARPS68530K3UKZZ	.85x1.75 (21.6x44.5)	3U	4.5	20
7.00	ARPS70530K3UKZZ	.87x1.75 (22.1x44.5)	3U	4.6	20
8.00	ARPS80530K4UKZZ	.91x1.75 (23.1x44.5)	4U	5.3	20
9.00	ARPS90530K4UKZZ	.96x1.75 (24.4x44.5)	4U	6.0	20
10.0	ARPS10630K4UKZZ	1.00x1.75 (25.4x44.5)	4U	6.6	20
11.0	ARPS11630K5UKZZ	1.05x1.75 (26.7x44.5)	5U	7.3	18
12.0	ARPS12630K5UKZZ	1.09x1.75 (27.7x44.5)	5U	8.0	18
13.0	ARPS13630K5VKZZ	1.20x1.89 (30.5x48.0)	5V	8.6	18
14.0	ARPS14630K6VKZZ	1.22x1.89 (31.0x48.0)	6V	9.3	18
15.0	ARPS15630K6VKZZ	1.26x1.89 (31.8x48.0)	6V	10.0	18
16.0	ARPS16630K6VKZZ	1.29x1.89 (32.8x48.0)	6V	10.6	18
17.0	ARPS10530KROKZZ	1.34x1.89 (34.0x48.0)	6V	11.3	18
18.0	ARPS18630K6VKZZ	1.36x1.89 (34.5x48.0)	6V	12.0	18
19.0	ARPS19630K6VKZZ	1.40x1.89 (35.6x48.0)	6V	12.6	18
20.0	ARPS20630K7VKZZ	1.43x1.89 (36.3x48.0)	7V	13.0	18

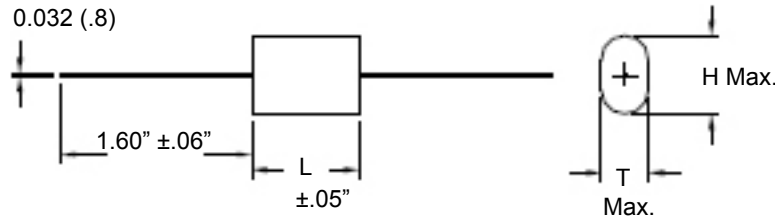
DF < 0.1% @ 1 kHz

Cap (µF)	Catalog Part Number	Dimensions D x L Inches (mm)	Case Code	ESR Max 20-100kHz (mΩ)	Current (A)	Wire d (AWG)
400 Vdc (250 Vac)						
.47	ARPS47440KAAKZZ	.37x1.25 (9.4x31.8)	AA	21	4	20
.68	ARPS68440KBAKZZ	.45x1.25 (11.4x31.8)	BA	13	6	20
1.00	ARPS10540KCAKZZ	.50x1.25 (12.7x31.8)	CA	11	9	20
1.50	ARPS15540KDAKZZ	.60x1.25 (15.2x31.8)	DA	9	10	20
2.00	ARPS20540KEAKZZ	.68x1.25 (.17.3x31.8)	EA	9	10	20
2.20	ARPS22540K1AKZZ	.71x1.25 (18.0x31.8)	1A	8	11	20
3.00	ARPS30540K1AKZZ	.71x1.75 (18.0x44.5)	1U	8	14	20
3.30	ARPS33540K2UKZZ	.73x1.75 (18.5x44.5)	2U	7	15	20
4.00	ARPS40540K2UKZZ	.78x1.75 (19.8x44.5)	2U	7	16	20
4.70	ARPS47540K3UKZZ	.84x1.75 (21.3x44.5)	3U	7	17	18
5.00	ARPS50540K3UKZZ	.86x1.75 (21.8x44.5)	3U	7	17	18
6.00	ARPS60540K4UKZZ	.94x1.75 (23.9x44.5)	4U	7	17	18
6.80	ARPS68540K3XKZZ	.86x2.25 (21.8x57.2)	3X	7	18	18
7.00	ARPS70540K3XKZZ	.87x2.25 (22.1x57.2)	3X	7	18	18
8.00	ARPS80540K4XKZZ	.92x2.25 (23.4x57.2)	4X	7	18	18
9.00	ARPS90540K4XKZZ	.97x2.25 (24.6x57.2)	4X	7	18	18
10.0	ARPS10640K9XKZZ	1.00x2.25 (25.4x57.2)	9X	7	18	18
11.0	ARPS11640K5XKZZ	1.06x2.25 (26.9x57.2)	5X	7	18	18
12.0	ARPS12640K5XKZZ	1.12x2.25 (28.5x57.2)	5X	7	20	18
600 Vdc (300 Vac)						
.47	ARPS47460KFAKZZ	.55x1.25 (14.0x31.8)	FA	13	4	20
.68	ARPS68460KGAZZ	.65x1.25 (16.5x31.8)	GA	10	6	20

DF < 0.1% @ 1 kHz

Type AFPS Flat Axial Metallized Polypropylene Capacitors

Outline Drawing

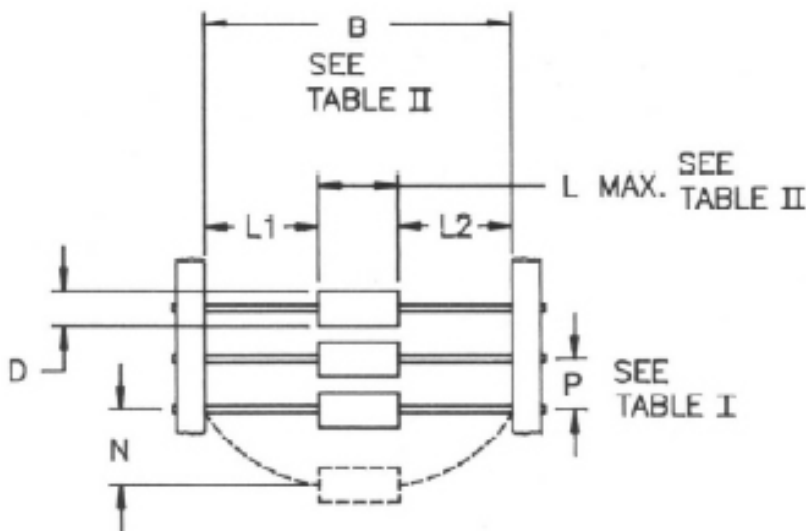
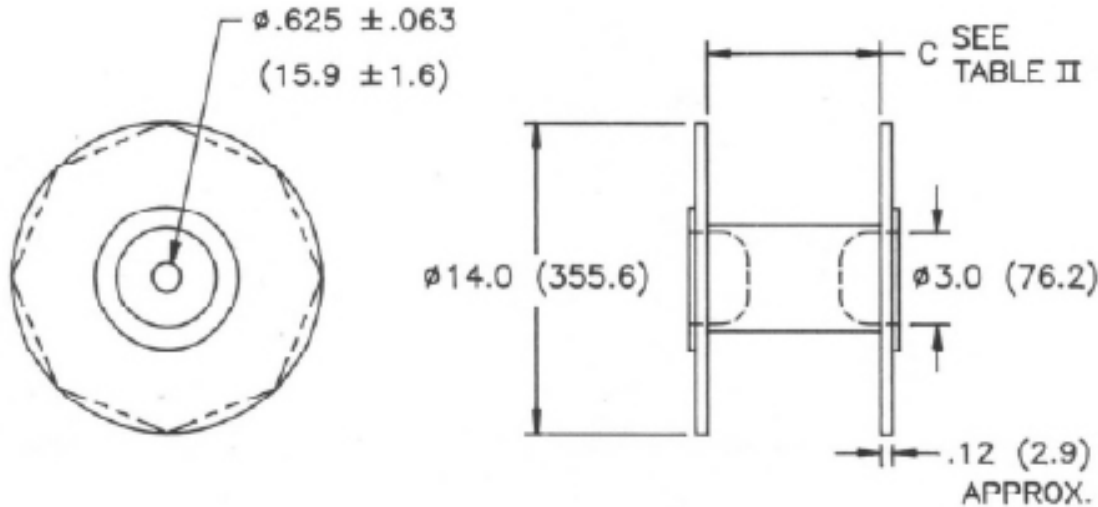


Ratings

RoHS Compliant

Cap (μF)	Catalog Part Number	Dimensions T x H x L Inches (mm)	Case Code	Current (A)	Wire d (AWG)
300 Vdc (220 Vac)					
1.00	AFPS10530KFPKZZ	.30x.55x1.25 (7.6x14.0x31.8)	FP	0.7	20
1.50	AFPS15530KJPKZZ	.37x.63x1.25 (9.4x16.0x31.8)	JP	1.0	20
2.00	AFPS20530KkPKZZ	.40x.75x1.25 (10.2x19.1x31.8)	KP	1.3	20
2.20	AFPS22530KNPKZZ	.45x.78x1.25 (11.4x19.8x31.8)	NP	1.5	20
3.00	AFPS30530KRPKZZ	.50x.87x1.25 (12.7x22.1x31.8)	RP	2.0	20
3.30	AFPS33530KSPKZZ	.55x.88x1.25 (14.0x22.4x31.8)	SP	2.2	20
4.00	AFPS40530KUPKZZ	.60x.98x1.25 (15.2x24.9x31.8)	UP	2.7	20
4.70	AFPS47530KYPKZZ	.65x1.04x1.25 (16.5x26.4x31.8)	VP	3.1	20
5.00	AFPS50530KYPKZZ	.66x1.05x1.25 (16.8x26.7x31.8)	YP	3.3	20
6.00	AFPS30530KSRKZZ	.55x1.02x1.70 (14.0x25.9x43.2)	SR	3.6	20
6.80	AFPS68530KTRKZZ	.58x1.07x1.70 (14.7x27.2x43.2)	TR	4.5	20
7.00	AFPS70530KURKZZ	.59x1.08x1.70 (15.0x27.4x43.2)	UR	4.6	20
8.00	AFPS80530KVRKZZ	.63x1.15x1.70 (16.0x29.2x43.2)	VR	5.3	20
9.00	AFPS90530KYRKZZ	.70x1.18x1.70 (17.8x30.0x43.2)	YR	6.0	20
10.0	AFPS10630KWWKZZ	.64x1.15x2.10 (16.3x29.2x53.3)	WW	6.6	20
11.0	AFPS11630KYWKZZ	.68x1.15x2.10 (17.3x29.2x53.3)	YW	7.3	20
12.0	AFPS12630K1WKZZ	.72x1.22x2.10 (18.3x40.0x53.3)	1W	8.0	20
13.0	AFPS13630K2WKZZ	.74x1.25x2.10 (18.8x31.8x53.3)	2W	8.6	20
14.0	AFPS14630K1XKZZ	.72x1.22x2.26 (18.3x40.0x57.4)	1X	9.3	18
15.0	AFPS15630K2XKZZ	.76x1.25x2.26 (19.3x31.8x57.4)	2X	10.0	18
16.0	AFPS16630K2XKZZ	.80x1.29x2.26 (20.3x32.8x57.4)	2X	10.6	18
17.0	AFPS17630K3XKZZ	.82x1.32x2.26 (20.8x33.5x57.4)	3X	11.3	18
18.0	AFPS18630K3XKZZ	.85x1.35x2.26 (21.6x34.3x57.4)	3X	12.0	18
19.0	AFPS19630K3XKZZ	.89x1.37x2.26 (22.6x34.8x57.4)	3X	12.6	18
20.0	AFPS20630K3XKZZ	.90x1.40x2.26 (22.9x35.6x57.4)	3X	13.0	18

Cap (μF)	Catalog Part Number	Dimensions T x H x L Inches (mm)	Case Code	ESR Max 20-100 kHz (mΩ)	Current (A)	Wire d (AWG)
400 Vdc (250 Vac)						
1.00	AFPS10540KJPKZZ	.36x.62x1.25 (9.1x15.7x31.8)	JP	11	9	20
1.50	AFPS15540KNPKZZ	.45x.75x1.25 (11.4x20.8x31.8)	NP	9	10	20
2.00	AFPS20540K2PKZZ	.50x.82x1.25 (12.7x20.8x31.8)	2P	9	10	20
2.20	AFPS22540KFBKZZ	.54x.84x1.25 (13.7x21.3x31.8)	FB	8	11	20
3.00	AFPS30540KGBKZZ	.64x.94x1.25 (16.3x23.9x31.8)	GB	8	14	20
3.30	AFPS33540KGBKZZ	.69x.93x1.25 (17.5x23.6x31.8)	GB	7	15	20
4.00	AFPS40540KADKZZ	.59x.90x1.75 (15.0x22.9x44.5)	AD	7	16	20
4.70	AFPS47540KADKZZ	.64x.95x1.75 (16.3x24.1x44.5)	AD	7	17	18
5.00	AFPS50540KFDKZZ	.67x1.00x1.75 (17.0x25.4x44.5)	FD	7	17	18
6.00	AFPS60540KGDKZZ	.72x1.09x1.75 (18.3x27.7x44.5)	GD	7	17	18
6.80	AFPS68540KAEKZZ	.67x.96x2.25 (14.5x24.4x57.2)	AE	7	18	18
7.00	AFPS70540KAEKZZ	.60x1.09x2.25 (15.2x27.7x57.2)	AE	7	18	18
8.00	AFPS80540KBEKZZ	.62x1.15x2.25 (15.8x29.2x57.2)	BE	7	18	18
9.00	AFPS90540KBEKZZ	.70x1.18x2.25 (17.8x29.5x57.2)	BE	7	18	18
10.0	AFPS10640KBEKZZ	.75x1.28x2.25 (19.1x32.5x57.2)	BE	7	18	18
11.0	AFPS11640KCEKZZ	.80x1.28x2.25 (20.3x32.5x57.2)	CE	7	18	18
12.0	AFPS12640KCEKZZ	.82x1.32x2.25 (20.8x33.5x57.2)	CE	7	20	18
600 Vdc (300 Vac)						
1.00	AFPS10560KHBKZZ	.60x.80x1.25 (15.2x20.3x31.8)	HB	8	9	20
1.50	AFPS15560KCBKZZ	.63x.97x1.50 (16.0x24.6x38.1)	CB	7	11	20
2.20	AFPS22560KCEKZZ	.55x.90x2.25 (14.0x22.9x57.2)	CE	7	13	18
3.30	AFPS33560KHEEZ	.70x1.05x2.25 (17.8x26.7x57.2)	EE	7	16	18
4.70	AFPS47560KFEKZZ	.80x1.30x2.25 (20.3x33.0x57.2)	FE	7	17	18
5.00	AFPS50560KDEKZZ	.95x1.25x2.25 (24.1x31.8x57.2)	DE	7	18	18



According to EIA-296-E
Dimensions are in Inches (mm)

Table I

D Inches (mm)	P Inches (mm)
≤ .20 (5.0)	.20 (5.0) ± .02 (.50)
.20 (5.0) - .37 (9.5)	.40 (10.0) ± .02 (.50)
.38 (9.6) - .58 (14.7)	.60 (15.0) ± .02 (.50)

Table II

L Max Inches (mm)	Code*	B Inches (mm)	C Inches (MM)
≤ .43 (11.0)	R1	2.06 (52.4) ± .06 (1.5)	2.95 (75)
.42(11)<L ≤.81(20.5)	R2	2.50 (63.6) ± .06 (1.5)	3.39 (86)
≤.81(20.5)	R3	2.87 (73.0) ± .06 (1.5)	3.74 (95)

Table III

Component Diameter D Inches (mm)	Components per Reel
D ≤ .20 (5)	3000
.20 (5) <D ≤ .26 (6.5)	1200
.26 (6.5) <D ≤ .28 (7.0)	1100
.28 (7.0) <D ≤ .30 (7.5)	1000
.30 (7.0) <D ≤ .33 (8.5)	800
.33 (8.5) <D ≤ .41 (10.5)	500
.41 (10.5) <D ≤ .51 (13.0)	300
.51 (13.0) <D ≤ .58 (14.7)	250

*According to EIA 296-E