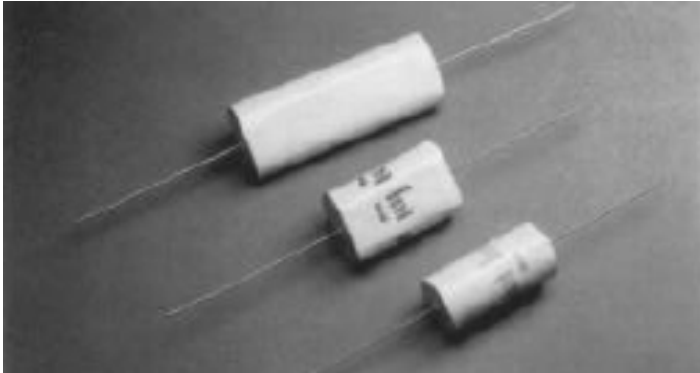


Aerovox Corp.®

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.

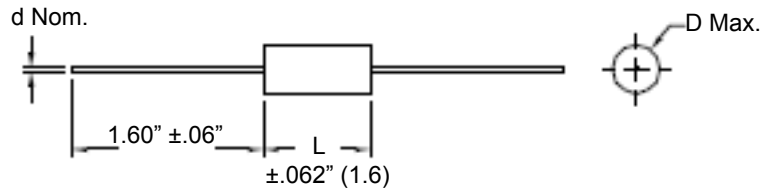
Accelerated Dry life:	1.25 x rated Vdc or 1.1 x rated Vac @ 85 °C for 1000 hours; capacitance delta of \leq 5.0%; ESR \leq 125% of initial limit; IR \geq 50% of initial limit;
Humidity:	Zero voltage @ 40 °C \pm 3 °C; 93% \pm 5% RH for 500 hr; Capacitance delta \leq 3.0%; ESR \leq 125% of initial limit; 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

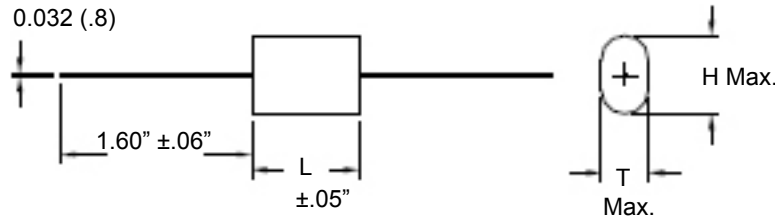
DF < 0.1% @ 1 kHz

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	ARPS68460KGAKZZ	.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 (μ F)	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	AFPS20530kPKZZ	.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 (μ F)	Catalog Part Number	Dimensions T x H x L Inches (mm)	Case Code	ESR Max 20-100 kHz (m Ω)	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