Aerovox®

Axial Leaded Film Capacitors

METALLIZED POLYESTER AND POLYPROPYLENE FOR MULTIPLE APPLICATIONS

RoHS COMPLIANT

Intelligent Capacitor Solutions

Aerovox can address all your capacitor needs. Our lines of rugged, reliable axial leaded film capacitors are available as standard items in many configurations to address a wide range of applications.

Aerovox maintains manufacturing facilities in China and India to enable quick turn-around for shipping and delivery worldwide. All capacitors are built using Lean Six Sigma manufacturing practices and undergo rigorous quality assurance testing. If you have specialized needs, our flexible manufacturing processes allow us to quickly provide custom configurations.

Aerovox provides intelligent capacitor solutions.

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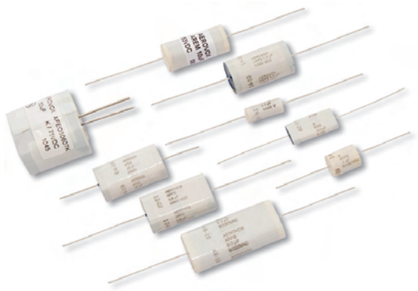

With their wide range of configurations and types, Aerovox's axial leaded film capacitors are suitable for many different applications. They are available round or flat, and in AC and DC voltage ratings. Wrap and fill capacitors are available in custom packages. All axial leaded film capacitors are UL 94 VO and IEC 695-2-2 certified and RoHS compliant.

Applications

- Blocking, coupling and filtering (Types AREM and AFEO)
- UPS (Uninterruptible Power Supplies)
- Switching power supply (Type ARPM)
- Pulsing requiring high dV/dt ratings with low DF and ESR (Type ARPM)
- High current AC (Types ARPS and AFPS)

AREM Round and AFEO Flat Axial Metallized Polyester

Types AREM and AFEO are axial leaded metallized polyester capacitors for general purpose use in blocking, coupling and filtering applications.

Highlights

- High CV for small size
- Bulk or T&R for AREM; bulk only for AFEO

ARPS Round and AFPS Flat Axial Metallized Polypropylene Capacitors

Types ARPS and AFPS are designed for high current AC applications.

Highlights

- High Current
- Low ESR
- Low DF

ARPM Axial Metallized Polypropylene Capacitors

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

"W" Wrap & Fill

Type W is a tape wrapped axial leaded dry capacitor designed for use in a variety of permanent split-phase capacitor motor applications widely used in ventilating fans, appliances and refrigeration. The AC capacitors provide starting direction by shifting the current in the windings so that the motor simulates the operation of a two-phase motor.

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Specifications

Capacitance Range: .001 µF to 20.0 µF (Types AREM and AFEO)
.0033 µF to 10.0 µF (Type ARPM)
0.47 µF to 20.0 µF (Types ARPS and AFPS)

Capacitance Tolerance: ±10% (K) Standard
±5% (J) Special
±2% (G) Special

Voltage Range: 63 VDC (40 VAC) to 630 VDC (220 VAC) (Types AREM and AFEO)
150 VDC (90 VAC) to 630 VDC (280 VAC) (Type ARPM)
300 VDC (220 VAC) to 600 VDC (300VAC) (Types ARPS and AFPS)

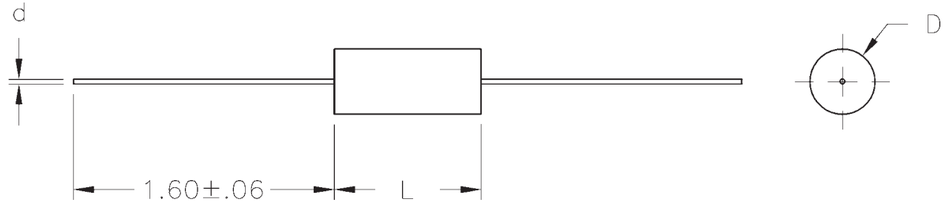
Dissipation Factor: ≤0.8% @ 1 kHz (Types AREM and AFEO)
≤0.1% @ 1 kHz (Types ARPM, ARPS, and AFPS)

Operating Temperature Range: -55°C to +125°C. Full rated voltage @ 85°C, derating linearly to 50% rated voltage at 125°C (Types AREM and AFEO)
-55°C to +105°C. Full rated voltage @ 85°C, derating 1.25%/°C from 85°C to 105°C (Types ARPM, ARPS and AFPS)

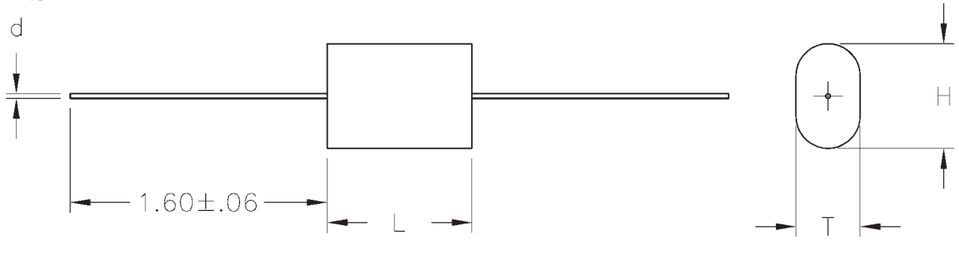
Dielectric Absorption: 0.30% typical (Types AREM and AFEO)
0.05% typical (Types ARPM, ARPS and AFPS)

Outline Drawings

Types ARPS, ARPM and AREM



Types AFEO and AFPS



Axial Leaded Film Capacitors
METALLIZED POLYESTER AND POLYPROPYLENE FOR MULTIPLE APPLICATIONS

Axial Leaded Tape & Reel Specification

According to EIA-296-E

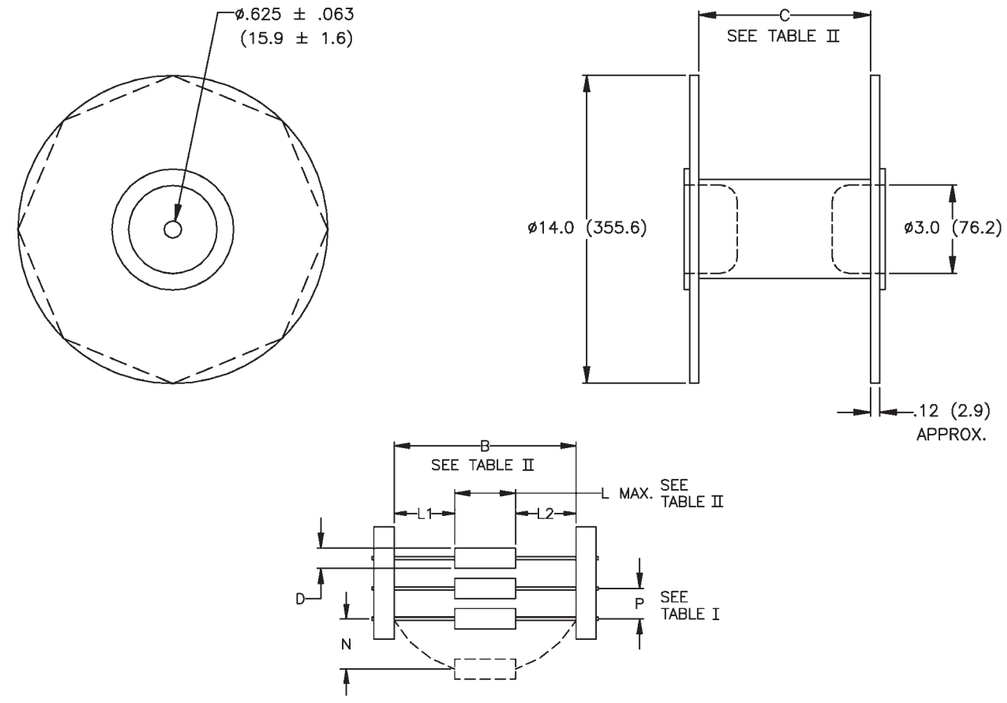


Table I

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)
.43 (11.0) < L ≤ .81 (20.5)	R2	2.50 (63.6) ± .06 (1.5)	3.39 (86)
>.81 (20.5)	R3	2.87 (73) ± .06 (1.5)	3.74 (95)

** According to EIA-296-E*

Table III

Component Diameter D Inches (mm)	Components per Reel
D ≤ .20 (5.0)	3000
.20 (5.0) < D ≤ .26 (6.5)	1200
.26 (6.5) < D ≤ .28 (7.0)	1100
.28 (7.0) < D ≤ .30 (7.5)	1000
.30 (7.5) < 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

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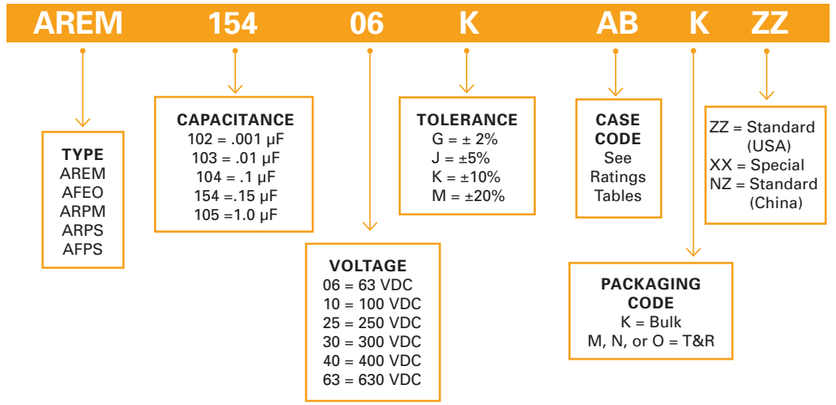
Part Numbering System Round and Flat Axials

Aerovox's part numbering system is a descriptive part number made up of several different components such as voltage rating, capacitance, etc.
The descriptors are explained here using AREM15406KABKZZ as a representative part number:



Type AFEO Flat Axial Metallized Polyester

CAP (µF)	AEROVOX P/N	DIMENSIONS T x H x L Inches (mm)	CASE CODE	WIRE DIAMETER Inches (mm)
100 VDC (63 VAC)				
5.0	AFEO50510KKRKZZ	.42 x .75 x 1.25 (10.7 x 19.1 x 31.8)	KR	.032 (.8)
250 VDC (160 VAC)				
1.0	AFEO10525KILKZZ	.30 x .55 x .94 (7.6 x 14.0 x 23.9)	IL	.032 (.8)
5.0	AFEO50525KPPKZZ	.49 x .98 x 1.25 (12.4 x 24.9 x 31.8)	PP	.032 (.8)
10.0	AFEO10625KXUKZZ	.55 x 1.05 x 1.76 (14.0 x 26.7 x 44.7)	XU	.032 (.8)
20.0	AFEO20625K2XKZZ	.73 x 1.25 x 2.26 (18.5 x 31.8 x 57.4)	2X	.032 (.8)
400 VDC (200 VAC)				
.047	AFEO47340KADKZZ	.20 x .35 x .56 (5.1 x 8.9 x 14.2)	AD	.025 (.6)
.22	AFEO22440KFLKZZ	.32 x .60 x .94 (8.1 x 15.2 x 23.9)	FL	.032 (.8)
1.0	AFEO10540KMRKZZ	.45 x.75 x 1.25 (11.4 x 19.1 x 31.8)	MR	.032 (.8)
3.0	AFEO30540KXUKZZ	.80 x 1.15 x 1.76 (16.2 x 27.4 x 57.4)	XU	.032 (.8)

Inquire regarding custom ratings, sizes, and configurations.

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Type AREM Round Axial Metallized Polyester

CAP (µF)	AEROVOX P/N	DIMENSIONS D x L Inches (mm)	CASE CODE	WIRE DIAMETER Inches (mm)
63 VDC (40 VAC)				
1.0	AREM10506KGIKZZ	.315 x .807 (8 x 20.5)	GI	.032(.8)
100 VDC (63 VAC)				
1.5	AREM15510KKOKZZ	.394 x 1.10 (10 x 28)	KO	.032 (.8)
10.0	AREM10610K2PKZZ	.729 x 1.30 (18.5 x 33)	2P	.040 (1.02)
250 VDC (160 VAC)				
.10	AREM10425KDEKZZ	.256 x .650 (6 x 16.5)	DE	.025 (.6)
2.2	AREM22525KPOKZZ	.512 x 1.10 (13 x 28)	PO	.032 (.8)
15.0	AREM15625K4UKZZ	.965 x 1.81 (24.5 x 46)	4U	.040 (1.02)
400 VDC (200 VAC)				
1.0	AREM10540KRPKZZ	.531 x 1.30 (13 x 33)	RP	.032 (.8)
630 VDC (280 VAC)				
1.0	AREM10563KRPKZZ	.709 x 1.81 (18 x 46)	1U	.032 (.8)

Inquire regarding custom ratings, sizes, and configurations.

Type ARPS Round Axial Metallized Polypropylene

CAP (µF)	AEROVOX P/N	DIMENSIONS D x L Inches (mm)	CASE CODE	CURRENT (A)	WIRE DIAMETER (AWG)
300 VDC (220 VAC)					
1.0	ARPS10530KROKZZ	.50 x 1.05 (12.7 x 26.7)	RO	0.7	20
3.0	ARPS30530K1PKZZ	.71 x 1.25 (18.0 x 31.8)	1P	2.0	20
5.0	ARPS50530K2UKZZ	.74 x 1.75 (18.8 x 44.5)	2U	3.3	20
10.0	ARPS10630K4UKZZ	1.00 x 1.75 (25.4 x 44.5)	4U	6.6	20

CAP (µF)	AEROVOX P/N	DIMENSIONS D x L Inches (mm)	CASE CODE	ESR MAX 20 –100 kHz (mΩ)	CURRENT (A)	WIRE DIAMETER (AWG)
400 VDC (250 VAC)						
1.0	ARPS10540KCAKZZ	.50 x 1.25 (12.7 x 31.8)	CA	11	9	20
5.0	ARPS50540K3UKZZ	.86 x 1.75 (21.8 x 44.5)	3U	7	17	18
10.0	ARPS10640K9XKZZ	1.00 x 2.25 (25.4 x 57.2)	9X	7	18	18

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Type ARPM Round Axial Metallized Polypropylene

CAP (µF)	AEROVOX P/N	DIMENSIONS D x L Inches (mm)	CASE CODE	WIRE DIAMETER Inches (mm)
150 VDC (90 VAC)				
.22	ARPM22415KDFKZZ	.256 x .718 (6.5 x 18.3)	DF	.025 (.6)
.33	ARPM33415KFFKZZ	.295 x .718 (7.5 x 18.3)	FF	.032 (.8)
1.0	ARPM10515KKKKZZ	.394 x .938 (10.0 x 23.8)	KK	.032 (.8)
3.0	ARPM30515KKKKZZ	.650 x .938 (16.5 x 23.8)	KK	.032 (.8)
250 VDC (200 VAC)				
.22	ARPM22425KGKKZZ	.315 x .938 (8.0 x 24.0)	GK	.032 (.8)
.33	ARPM33425KIKKZZ	.354 x .938 (9.0 x 24.0)	IK	.032 (.8)
.47	ARPM47425KLKKZZ	.413 x .938 (10.5 x 24.0)	LK	.032 (.8)
.68	ARPM68425KPKKZZ	.492 x .938 (12.5 x 24.0)	PK	.032 (.8)
3.0	ARPM30525KYUKZZ	.669 x 1.75 (17.0 x 44.5)	YU	.032 (.8)
10.0	ARPM10625K9XKZZ	1.00 x 2.25 (25.4 x 57.0)	9X	.032 (.8)

Inquire regarding custom ratings, sizes, and configurations.

Type ARPM Round Axial Metallized Polypropylene (cont.)

CAP (µF)	AEROVOX P/N	DIMENSIONS D x L Inches (mm)	CASE CODE	WIRE DIAMETER Inches (mm)
400 VDC (250 VAC)				
.047	ARPM47340KDFKZZ	.256 x .718 (6.5 x 18.3)	DF	.032 (.8)
.10	ARPM10440KHFKZZ	.335 x .718 (8.5 x 18.3)	HF	.032 (.8)
.47	ARPM47440KSKKZZ	.511 x .938 (14.0 x 24.0)	SK	.032 (.8)
2.0	ARPM20540K1UKZZ	.709 x 1.75 (18.0 x 44.5)	1U	.032 (.8)
5.0	ARPM50540K8UKZZ	1.25 x 1.75 (31.8 x 44.5)	8U	.032 (.8)
630 VDC (280 VAC)				
.10	ARPM10363KCCKZZ	.236 x .562 (6.0 x 14.3)	CC	.025 (.6)

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AFPS Flat Axial Metallized Polypropylene

CAP (µF)	AEROVOX P/N	DIMENSIONS T x H x L Inches (mm)	CASE CODE	CURRENT (A)	WIRE DIAMETER (AWG)
300 VDC (220 VAC)					
3.0	AFPS30530KRPKZZ	.50 x .87 x 1.25 (12.7 x 22.1 x 31.8)	RP	2.0	20
10.0	AFPS10630KWWKZZ	.64 x 1.15 x 2.10 (16.3 x 29.2 x 53.3)	WW	6.6	20
12.0	AFPS12630K1WKZZ	.72 x 1.22 x 2.10 (18.3 x 40.0 x 53.3)	1W	8.0	20

Inquire regarding custom ratings, sizes, and configurations.

AFPS Flat Axial Metallized Polypropylene (cont.)

CAP (µF)	AEROVOX P/N	DIMENSIONS T x H x L Inches (mm)	CASE CODE	ESR MAX 20 –100 kHz (mΩ)	CURRENT (A)	WIRE DIAMETER (AWG)
400 VDC (250 VAC)						
2.0	AFPS20540K2PKZZ	.50 x .82 x 1.25 (12.7 x 20.8 x 31.8)	2P	9	10	20
3.3	AFPS33540KGBKZZ	.69 x .93 x 1.25 (17.5 x 23.6 x 31.8)	GB	7	15	20
4.7	AFPS47540KADKZZ	.64 x .95 x 1.75 (16.3 x 24.1 x 44.50	AD	7	17	18
5.0	AFPS50540KFDKZZ	.67 x 1.00 x 1.75 (17.0 x 25.4 x 44.5)	FD	7	17	18
10.0	AFPS10640KBEKZZ	.75 x 1.28 x 2.25 (19.1 x 32.5 x 57.2)	BE	7	18	18
600 VDC (300 VAC)						
1.0	AFPS10560KHBKZZ	.60 x .80 x 1.25 (15.2 x 20.3 x 31.8)	HB	8	9	20
5.0	AFPS50560KDEKZZ	.95 x 1.25 x 2.25 (24.1 x 31.8 x 57.2)	DE	7	18	18

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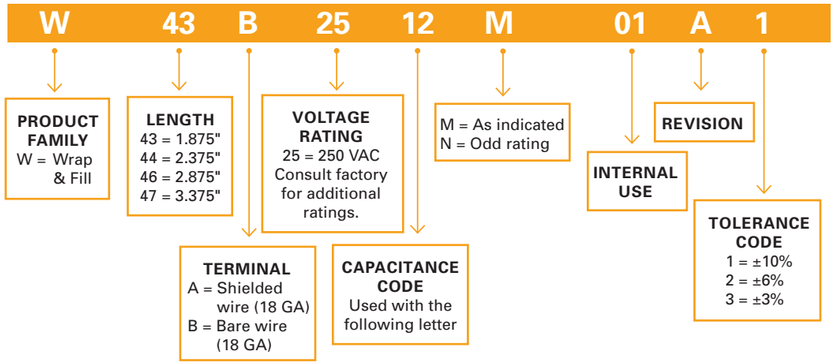
Part Numbering System Wrap & Fill

Aerovox's part numbering system is a descriptive part number made up of several different components such as voltage rating, capacitance, etc.
The descriptors are explained below using W43B2512M01A1 as a representative part number:



Type W Wrap & Fill

CAP (µF)	AEROVOX P/N	DIAMETER (Inches)	LENGTH (Inches)
Up to 250 VAC 90°C			
5	W43x2505M	0.88	1.88
7	W43x2507M	0.87	1.88
8	W43x2508M	0.92	1.88
10	W43x2510M	1.00	1.88
12	W43x2512M	1.08	1.88
13	W43x2513M	1.11	1.88
14	W43x2514M	1.15	1.88
15	W43x2515M	1.18	1.88
16	W44x2516M	1.06	2.38
17	W44x2517M	1.09	2.38
17.5	W44x2517N	1.10	2.38
20	W44x2520M	1.16	2.38
22.5	W44x2522N	1.22	2.38
24	W44x2524M	1.26	2.38
26	W44x2526M	1.30	2.38
28	W44x2528M	1.34	2.38

CAP (µF)	AEROVOX P/N	DIAMETER (Inches)	LENGTH (Inches)
Up to 250 VAC 90°C (cont.)			
30	W44x2530M	1.39	2.38
32	W46x2532M	1.28	2.88
34	W46x2534M	1.32	2.88
35	W46x2535M	1.33	2.88
36	W46x2536M	1.35	2.88
40	W46x2540M	1.41	2.88
42	W47x2542M	1.32	3.38
45	W47x2545M	1.36	3.38
48	W47x2548M	1.40	3.38
52	W47x2552M	1.45	3.38
55	W47x2555M	1.49	3.38
56	W47x2556M	1.50	3.38
60	W47x2560M	1.55	3.38
65	W47x2565M	1.61	3.38

Inquire regarding custom ratings, sizes, and configurations.

About Aerovox

Aerovox is a leading manufacturer of capacitors for industrial, medical and specialized applications, with world-class design, manufacturing and testing facilities in New Bedford, MA. Global manufacturing facilities in China and India enable quick turn-around for shipping and delivery worldwide.

Aerovox capacitors are among the world's most reliable components. Our extensive custom design and development capabilities coupled with broad, standardized product offerings allow us to provide intelligent capacitor solutions that meet or exceed customers' application requirements.

Our aim is to be the best and most sought after provider of capacitor solutions for specialty markets in the world by achieving the highest level of customer satisfaction with extraordinary emphasis on the creation of value and speed to market.

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Aerovox®

Defibrillator Capacitors

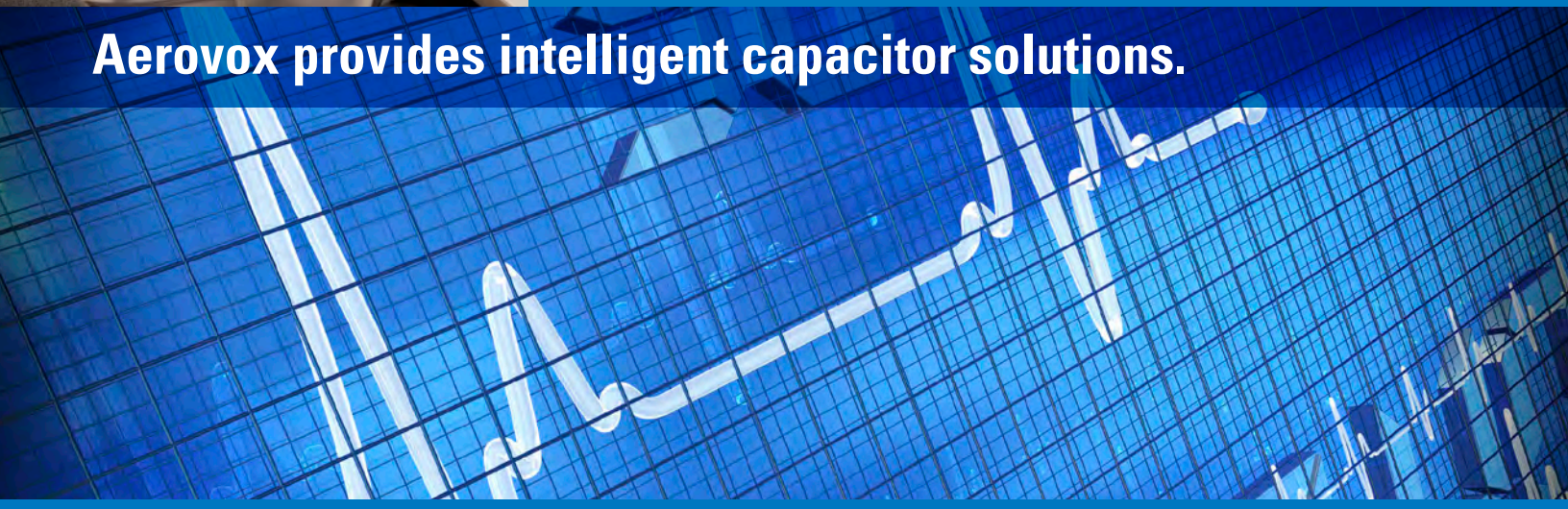
FILM CAPACITORS FOR EXTERNAL DEFIBRILLATOR APPLICATIONS

RoHS COMPLIANT

Intelligent Capacitor Solutions

Reliability and high level performance position Aerovox as the industry leader in film capacitors for external defibrillator applications. Aerovox's defibrillator capacitors are designed with extensive process validation and manufactured under a rigorous quality management system to provide high reliability, long life and complete traceability. Their small size makes them ideally suited for use in hospital, emergency room, first responder and public access defibrillators.

If your product or application requires a specialized capacitor, our expert Custom Applications Group engineers are ready to assist you.



Aerovox provides intelligent capacitor solutions.

Defibrillator Capacitors

RoHS COMPLIANT

FILM CAPACITORS FOR EXTERNAL DEFIBRILLATOR APPLICATIONS

Aerovox defibrillator capacitors are designed specifically to meet the reliability demands of a Class III medical device. In fact, leading medical device manufacturers choose Aerovox because they can count on 100% field reliability when it really matters.

These capacitors are housed in round or oval metal, oil-filled cases; or in a dry, epoxy-filled plastic housing version. Plastic cases offer excellent design flexibility, and can be customized to specific requirements. They are available in voltage ranges from 800 VDC to 6,000 VDC, delivering in excess of 500 joules at full charge.

Applications

- External Defibrillator
- Pulse Power Applications

Highlights

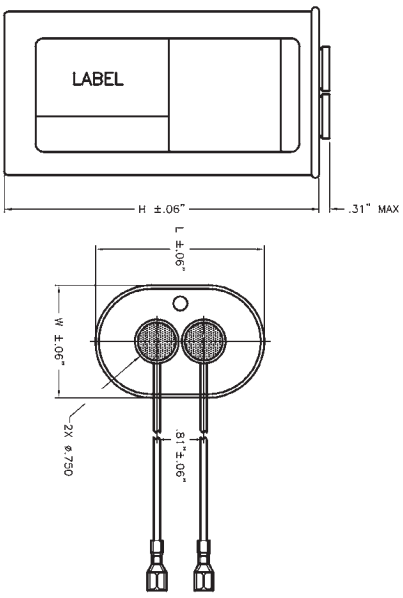
- Aluminum, steel or plastic case options
- Round and oval designs
- Available with wire harness
- High energy density
- Monophasic or bi-phasic designs
- Custom designs available
- RoHS compliant

Specifications

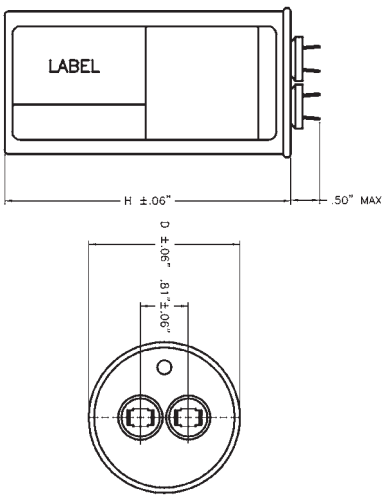
Capacitance Range:	32 to 500 µF
Capacitance Tolerance:	±5% Standard
DC Voltage Range:	800 VDC to 6,000 VDC

Outline Drawings

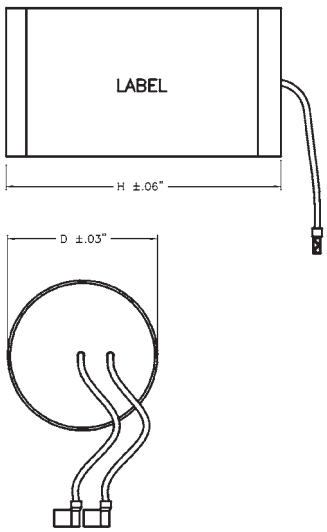
Metal – Oval



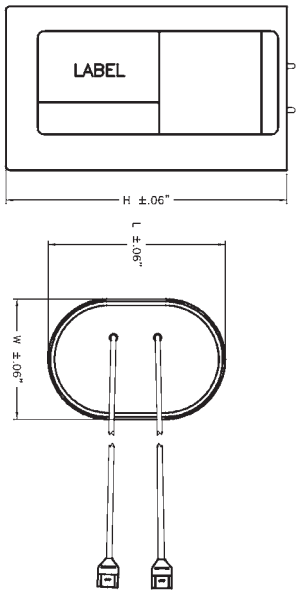
Metal – Round



Plastic – Round



Plastic – Oval



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Defibrillator Capacitors

FILM CAPACITORS FOR EXTERNAL DEFIBRILLATOR APPLICATIONS

Part Numbering System

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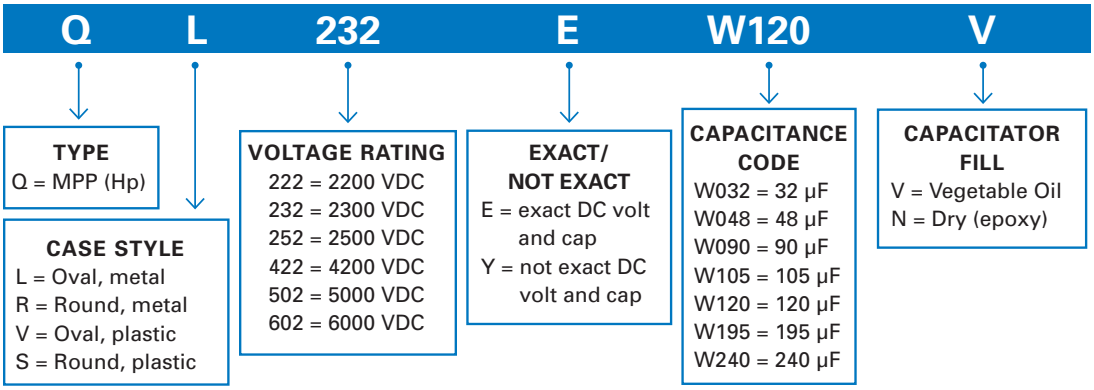

CAP (µF)	AEROVOX P/N	VOLTAGE RATING (VDC)	JOULES (J)	STYLE (FILL)	SIZE W x L x H OR D x H (Inches)
120	QL232EW120V	2300	317	Oval, Metal (Oil)	1.91 x 2.91 x 3.75
32	QL502EW032V	5000	400	Oval, Metal (Oil)	1.91 x 2.91 x 6.75
48	QL422YW048V	4200	423	Oval, Metal (Oil)	1.91 x 2.91 x 5.75
195	QL232EW195V	2300	516	Oval, Metal (Oil)	1.91 x 2.91 x 5.75
195	QV232EW195N	2300	516	Oval, Plastic (Dry)	1.77 x 2.75 x 5.75
32	QL602EW032V	6000	576	Oval, Metal (Oil)	1.97 x 3.66 x 6.88
240	QL232EW240V	2300	635	Oval, Metal (Oil)	1.97 x 3.66 x 5.88
105	QR172YW105V	1760	163	Round, Metal (Oil)	1.88 x 4.75
105	QR222EW105V	2200	254	Round, Metal (Oil)	2.13 x 4.75
90	QR252EW090V	2500	281	Round, Metal (Oil)	2.63 x 4.75
195	QR222EW195V	2200	472	Round, Metal (Oil)	2.63 x 4.75
195	QS222EW195N	2200	472	Round, Plastic (Dry)	2.57 x 4.69
195	QR232EW195V	2300	516	Round, Metal (Oil)	2.38 x 5.60

About Aerovox

Aerovox is a leading manufacturer of capacitors for industrial, medical and specialized applications, with world-class design, manufacturing and testing facilities in New Bedford, MA. Global manufacturing facilities in China and India enable quick turn-around for shipping and delivery worldwide.

Aerovox capacitors are among the world's most reliable components. Our extensive custom design and development capabilities coupled with broad, standardized product offerings allow us to provide intelligent capacitor solutions that meet or exceed customers' application requirements.

Our aim is to be the best and most sought after provider of capacitor solutions for specialty markets in the world by achieving the highest level of customer satisfaction with extraordinary emphasis on the creation of value and speed to market.

Aerovox®

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India

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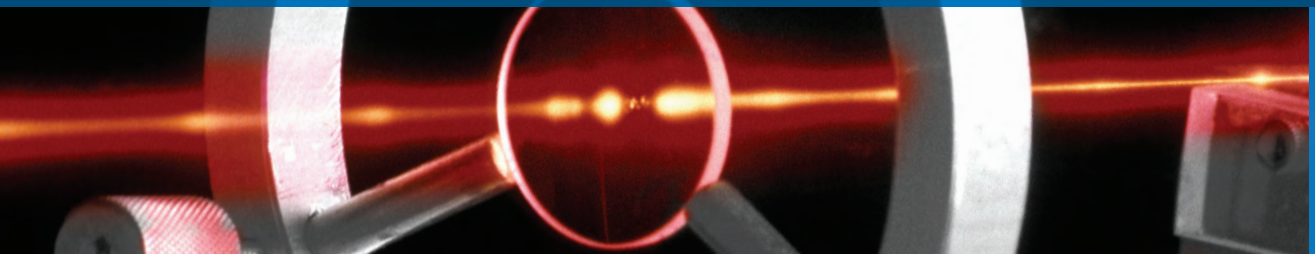
Aerovox®

Pulse & Custom Capacitors

CAPACITORS FOR PULSE, FLASH LAMP, LASER AND CUSTOM AC OR DC APPLICATIONS

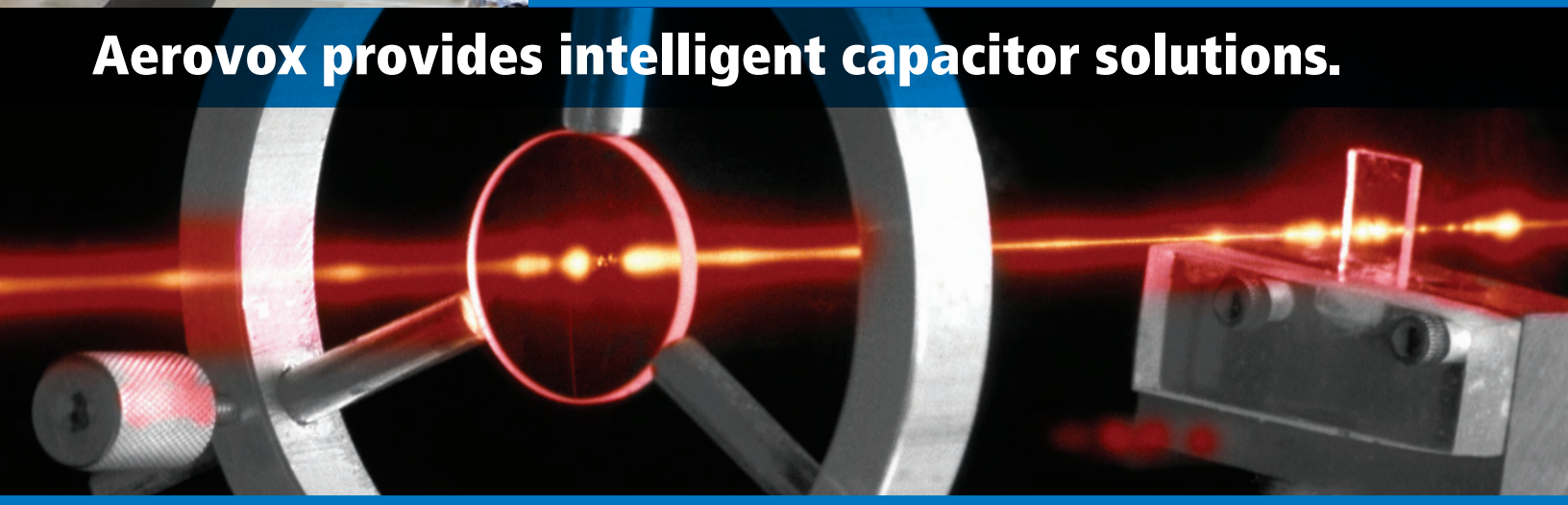
Intelligent Capacitor Solutions



Aerovox's deep technical capabilities and flexible manufacturing processes enable us to meet the unique requirements of demanding pulse, flash lamp, laser and other custom applications. We have a long history in the pulse power area where different capacitor technologies are needed to satisfy the particularly stringent requirements of pulsing applications.

Our custom capacitors are designed and built using state-of-the-art technologies and computer-integrated manufacturing systems under an ISO 9001-certified quality management system. They undergo rigorous quality assurance testing, including 100% electrical and visual testing to further ensure reliability and high level performance.

Aerovox provides intelligent capacitor solutions.



Aerovox®

Main cover image courtesy of lod.org. Photo by C. Hooper.

Pulse & Custom Capacitors

CAPACITORS FOR PULSE, FLASH LAMP, LASER AND CUSTOM AC OR DC APPLICATIONS

Aerovox offers aluminum foil and polypropylene capacitor construction as well as single-sided metallized polypropylene for use in pulse-forming and DC filtering applications.

Highlights

- High voltage up to 50,000 VDC
- Designed for user specified life
- Dry or oil-filled with an environmentally “green” fluid
- Multiple terminal configurations
- Metal or plastic case designs
- Low inductance

Specifications

Capacitance Range:	0.01 µF to 50,000 µF
Capacitance Tolerance:	±3% to ±10%
DC Voltage Range:	Up to 50 kV
Operating Life:	Up to 100 million shots
Operating Temperature Range:	-40°C to +55°C typical Higher temperature limit available

Applications

- Utility UPS
- Magnetic Forming
- MARX Generator Banks
- Strobe Lights
- Flash Lamps
- Particle Accelerators
- Pulsed Lasers
- High Energy Dynodes
- DC Filters

Typical Specifications

AEROVOX TYPE	TYPE S	TYPE Z	TYPE Q	TYPE C
Electrodes	Aluminum foil	Single side	Single side	Single side
Dielectric	Polypropylene	Polypropylene	Polypropylene	PET (high energy density)
Impregnated	Yes	Yes	Yes	Yes
Dry	No	Yes	Yes	Yes
Capacitance Range	0.1 to 1,000 µF	1 to 4,000 µF	10 to 6,000 µF	100 to 10,000 µF
Voltage Levels	0.5 to 50 kV	0.5 to 50 kV	1 to 50 kV	0.3 to 1.5 kV
Peak Current Levels	Up to 150 kA	Up to 60 kA	Up to 30 kA	Up to 10 kA
Pulse Life, Nominal	250K to 10 million	100 million	250K	250K
Rep Rate	1 to 120 per minute	1 to 120 per minute	1 to 4 per minute	Up to 2 per minute

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Typical Specifications (cont.)

AEROVOX TYPE	TYPE S	TYPE Z	TYPE Q	TYPE C
Reversal	Up to 95%	Up to 90%	Up to 80%	Up to 20%
DC Life	20,000 hours	N/A	N/A	N/A
DF% @ 120 Hz	N/A	0.10%	0.60%	1.50%
DF% @ 1 kHz	0.50%	1.0%	N/A	N/A
Energy Density (J/gm)	0.08	0.19	1.0	0.7
Energy Density (J/cc)	0.12	0.21	1.1	1.0
Package: Metal Case, Oil-Filled				
Round	No	Yes	Yes	Yes
Oval	Yes	Yes	Yes	Yes
Rectangular	Yes	Yes	Yes	Yes
Package: Metal Case, Epoxy-Filled				
Oval	No	Yes	No	No
Rectangular	No	Yes	Yes	Yes
Package: Plastic Case, Epoxy-Filled				
Round	No	Yes	Yes	Yes
Oval	No	Yes	Yes	Yes
Box	No	Yes	Yes	Yes
Tubular	No	Yes	Yes	Yes
Function	Pulse forming and DC filtering			

About Aerovox

Aerovox is a leading provider of film capacitors for industrial, medical and specialized applications serving original equipment manufacturers (OEM) and distributors. The company has world-class design, manufacturing and testing facilities in New Bedford, Massachusetts and global manufacturing facilities in China and India to enable quick turn-around for shipping and delivery worldwide.

Aerovox capacitors are among the world's most reliable components. Our extensive custom design and development capabilities coupled with broad, standardized product offerings allow us to provide intelligent capacitor solutions that meet or exceed our customers' application requirements.

Our aim is to be the best and most sought after provider of capacitor solutions for specialty markets.

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Aerovox®

High Voltage AC & DC Film Capacitors

FOR POWER ELECTRONICS APPLICATIONS

RoHS COMPLIANT

Intelligent Capacitor Solutions

Aerovox can address all your capacitor needs. The higher voltage ratings and rugged construction of our high voltage AC & DC film capacitors make them suitable for applications beyond the capabilities of general purpose units. They are available as standard items in many configurations to address a wide range of needs.

All capacitors are built using Lean Six Sigma manufacturing practices and undergo rigorous quality assurance testing. If you have specialized needs, our flexible manufacturing processes allow us to quickly provide custom configurations.

Aerovox provides intelligent capacitor solutions.

High Voltage AC & DC Film Capacitors

RoHS COMPLIANT

FOR POWER ELECTRONICS APPLICATIONS

Aerovox high voltage capacitors are constructed with metallized polypropylene film and are available in round or oval aluminum cases with four-blade quick disconnect terminals as standard. Special terminals and steel cases are available on request.

Highlights

- High voltage up to 1,200 VAC (2,000 VDC)
- UL and cUL file number E51176
- Designed for >60,000 hours operational life
- Oil-filled with an environmentally “green” fluid
- Pressure interrupter meets UL810 requirements

c UL us

Applications

- Switching Power Supply
- Inverters / Converters
- Heavy Duty Motor Run
- High Current Lighting
- UPS Systems

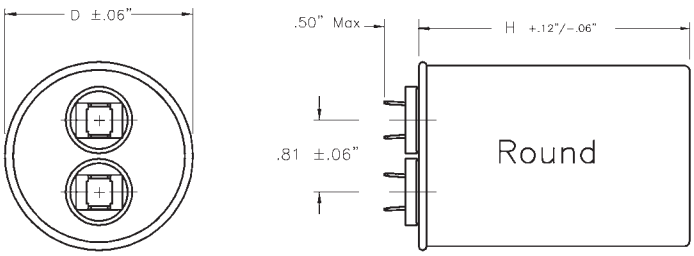
Specifications

Capacitance Range:	0.25 µF to 80 µF*
Capacitance Tolerance:	±3% to ±10%
AC Voltage Range:	660 VAC to 1,200 VAC*
DC Voltage Range:	1,200 VDC to 2,000 VDC
Operating Temperature:	-40°C to +90°C
Dissipation Factor:	0.1% max @ 60 Hz and 25°C
Insulation Resistance (IR):	>1,000 MΩ x µF
Withstand Voltage:	Terminal to terminal 1.75 x WVAC Terminal to case 2.0 WVAC + 1 kVAC
Capacitance Stability:	±3% throughout life
Insulated Bushings:	High cup standard over 1,000 VAC (1,750 VDC)
Approval Recognition:	UL, cUL, File# E51176

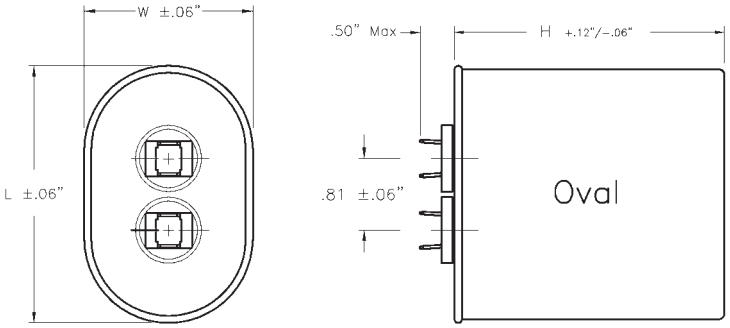
*Inquire about special ratings

Outline Drawings

Round Can – Low Cup



Oval Can – Low Cup



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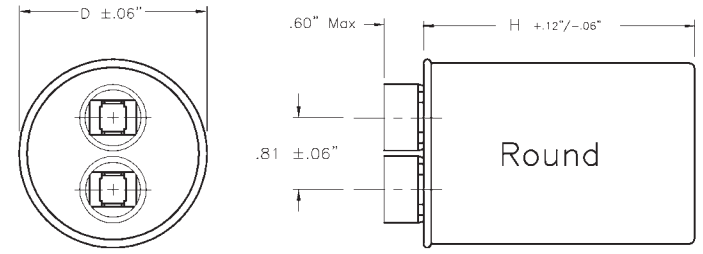
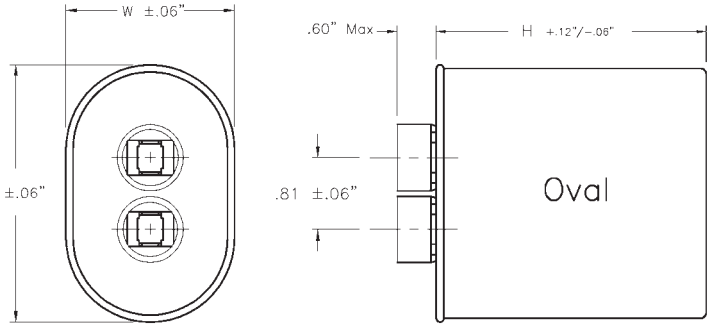
Outline Drawings

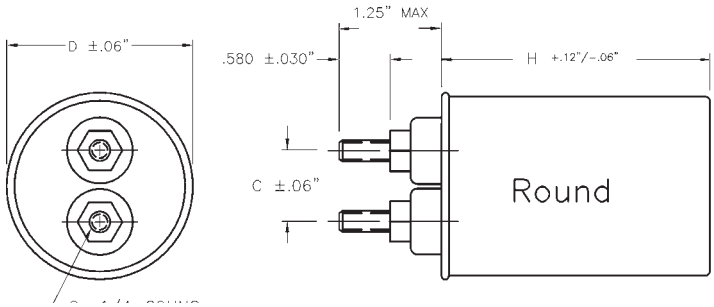
Round Can – High Cup



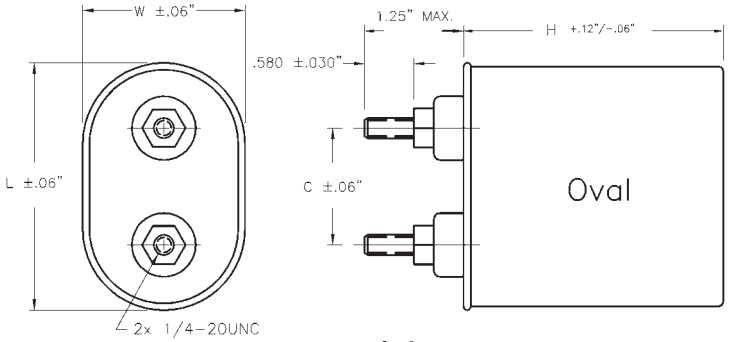
Oval Can – High Cup



Round Can – Studs



Oval Can – Studs



Round Size	C
1¾" Round	0.81"
2" Round	0.81"
2½" Round	1.25"

Oval Size	C
1¼" Oval	0.81"
1½" Oval	0.81"
1¾" Oval	1.38"
2" Oval	1.38"

Part Numbering System

Aerovox's part numbering system is a descriptive part number made up of several different components such as voltage rating, capacitance, etc. The descriptors are explained below using H24S6625A0AF as a representative part number:

H 24 S 66 25A0 A F

TYPE
H = High voltage

CASE STYLE
70°C
23 = 1.75" Round
24 = 2" Round
26 = 2.5" Round
50 = 1.25" Oval
42 = 1.5" Oval
64 = 1.75" Oval
62 = 2" Oval

90°C
73 = 1.75" Round
74 = 2" Round
76 = 2.5" Round
91 = 1.25" Oval
92 = 1.5" Oval
93 = 1.75" Oval
94 = 2" Oval

IMPREGNATE
S = Epoxidized soy bean oil

VOLTAGE CODE
(1st two digits of AC voltage)
66 = 660 VAC/ 1200 VDC
75 = 750 VAC/ 1350 VDC
85 = 850 VAC/ 1500 VDC
10 = 1000 VAC/ 1750 VDC
12 = 1200 VAC/ 2000 VDC

CAPACITY VALUE, 4 DIGITS
(A = Decimal Point)
2A75 = 2.75 µF
07A0 = 7.0 µF
75A0 = 75.0 µF
125A = 125 µF

TOLERANCE CODES
A = ±10%
B = ± 5%
C = ± 3%

TERMINAL CONFIGURATION/CASE
F = 4 Blade QC/Alum case
G = Solder Eyelet/Alum case
H = 2 Blade & Fork QC/ Alum case
T = Studs/Alum case

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Oval Cases

Rated for 60,000 hour duty @ 70°C

CAP (µF)	AEROVOX P/N	CASE CODE	WIDTH (Inches)	LENGTH (inches)	CASE HEIGHT (Inches)	I_{RMS} (A_{RMS})	I_{PEAK} (A)	I_S SURGE (A)	DV/dt RATES (V/µs)	DV/dt MAX (V/µs)	ESR @ 60 HZ (mΩ)	DF (%)	WEIGHT (Pounds)
660 VAC (1,200 VDC)													
5	H50S6605A0AF	A	1.31	2.16	2.88	2.3	427	534	85	107	32	0.10	0.29
10	H50S6610A0AF	A	1.31	2.16	3.25	4.0	741	925	74	93	21	0.13	0.32
15	H50S6615A0AF	A	1.31	2.16	4.25	4.2	770	962	51	64	22	0.21	0.42
20	H64S6620A0AF	C	1.91	2.91	3.75	4.9	910	1136	45	57	15	0.19	0.68
25	H64S6625A0AF	C	1.91	2.91	4.25	6.6	1213	1515	49	61	15	0.23	0.76
30	H64S6630A0AF	C	1.91	2.91	4.75	7.2	1336	1668	45	56	17	0.32	0.65
40	H62S6640A0AF	D	1.97	3.66	3.75	13.1	2426	3030	61	76	10	0.25	0.97
50	H62S6650A0AF	D	1.97	3.66	4.75	12.0	2227	2781	45	56	12	0.30	1.19
750 VAC (1,350 VDC)													
10	H42S7510A0AF	B	1.56	2.69	3.75	4.3	788	984	79	98	35	0.22	0.56
20	H62S7520A0AF	D	1.97	3.66	4.25	10.4	1919	2397	96	120	14	0.18	0.85
30	H62S7530A0AF	D	1.97	3.66	4.25	10.8	2006	2506	67	84	15	0.29	1.08
40	H62S7540A0AF	D	1.97	3.66	5.88	10	1855	2316	46	58	24	0.59	1.44
850 VAC (1,500 VDC)													
5	H42S8505A0AF	B	1.56	2.69	2.75	4.0	735	918	147	184	32	0.10	0.42
10	H64S8510A0AF	C	1.91	2.91	3.75	5.1	938	1171	94	117	30	0.19	0.60
15	H62S8515A0AF	D	1.97	3.66	3.75	7.6	1406	1756	94	117	21	0.20	0.97
20	H62S8520A0AF	D	1.97	3.66	4.25	8.6	1587	1982	79	99	19	0.24	1.08
25	H62S8525A0AF	D	1.97	3.66	4.75	9.3	1720	2148	69	86	22	0.34	1.19
1000 VAC (1,750 VDC)													
10	H62S1010A0AF	D	1.97	3.66	3.75	6.6	1213	1515	121	152	26	0.16	0.97
15	H62S1015A0AF	D	1.97	3.66	4.75	7.2	1336	1668	89	111	28	0.26	1.19
1200 VAC (2,000 VDC)													
10	H62S1210A0AF	D	1.97	3.66	4.25	6.2	1144	1429	114	143	27	0.17	1.08
15	H62S1215A0AF	D	1.97	3.66	5.88	6.4	1175	1468	78	98	36	0.34	1.44

Round Cases

Rated for 60,000 hour duty @ 70°C

CAP (µF)	AEROVOX P/N	CASE CODE	BASE DIAMETER (Inches)	CASE HEIGHT (Inches)	I_{RMS} (A_{RMS})	I_{PEAK} (A)	I_S SURGE (A)	dV/dt RATES (V/µs)	dV/dt MAX (V/µs)	ESR @ 60 HZ (mΩ)	DF (%)	WEIGHT (Pounds)
660 VAC (1,200 VDC)												
10	H24S6610A0AF	S	2.00	2.38	7.2	1329	1659	133	166	11	0.07	0.33
15	H23S6615A0AF	P	1.75	3.25	6.0	1111	1388	74	93	15	0.14	0.36
20	H24S6620A0AF	S	2.00	3.25	8.0	1481	1850	74	93	12	0.15	0.45
25	H24S6625A0AF	S	2.00	3.75	8.2	1517	1894	61	76	13	0.20	0.51
30	H26S6630A0AF	T	2.50	3.75	9.8	1820	2273	61	76	12	0.22	0.78
40	H26S6640A0AF	T	2.50	3.75	13.1	2427	3031	61	76	10	0.24	0.78
50	H26S6650A0AF	T	2.50	4.75	12.0	2226	2781	45	56	12	0.38	0.94
60	H26S6660A0AF	T	2.50	5.88	11.4	2110	2636	35	44	11	0.41	0.94
750 VAC (1,350 VDC)												
10	H23S7510A0AF	P	1.75	4.25	9.2	1698	2120	170	212	16	0.10	0.47
15	H26S7515A0AF	T	2.50	4.25	13.8	2546	3180	170	212	12	0.11	0.86
20	H26S7520A0AF	T	2.50	4.25	13.3	2452	3062	123	153	15	0.19	1.11
25	H26S7525A0AF	T	2.50	4.75	15.0	3065	3828	123	153	13	0.21	1.11
30	H26S7530A0AF	T	2.50	4.75	15.0	3678	4594	123	153	12	0.23	1.11
850 VAC (1,500 VDC)												
10	H24S8510A0AF	S	2.00	4.25	5.1	938	1171	94	117	14	0.57	0.09
15	H26S8515A0AF	T	2.50	4.25	10.7	1980	2473	132	165	17	0.16	1.11
20	H26S8520A0AF	T	2.50	4.75	14.3	2640	3298	132	165	14	0.18	1.11
25	H26S8525A0AF	T	2.50	5.88	15.0	3300	4122	132	165	13	0.20	1.11
1000 VAC (1,750 VDC)												
5	H24S1005A0AF	S	2.00	4.25	7.0	1329	1659	266	332	22	0.07	0.57
10	H26S1010A0AF	T	2.50	5.88	9.0	1708	2134	171	213	19	0.12	1.11
15	H26S1015A0AF	T	2.50	5.88	14.0	2562	3200	171	213	15	0.14	1.11

Oval Cases

Rated for 60,000 hour duty @ 90°C

CAP (µF)	AEROVOX P/N	CASE CODE	WIDTH (Inches)	LENGTH (inches)	CASE HEIGHT (Inches)	I_{RMS} (A_{RMS})	I_{PEAK} (A)	I_S SURGE (A)	dV/dt RATES (V/µs)	dV/dt MAX (V/µs)	ESR @ 60 HZ (mΩ)	DF (%)	WEIGHT (Pounds)
660 VAC (1,200 VDC)													
5	H91S6605A0AF	A	1.31	2.16	3.25	2.59	480	599	96	120	48	0.15	0.32
10	H92S6610A0AF	B	1.56	2.69	3.75	4.26	788	984	79	98	35	0.22	0.56
15	H93S6615A0AF	C	1.91	2.91	3.75	6.39	1183	1477	79	98	24	0.23	0.68
20	H94S6620A0AF	D	1.97	3.66	3.25	10.37	1919	2397	96	120	14	0.18	0.85
25	H94S6625A0AF	D	1.97	3.66	3.75	10.65	1971	2461	79	98	16	0.25	0.97
30	H94S6630A0AF	D	1.97	3.66	4.25	10.84	2006	2506	67	84	15	0.29	1.08
40	H94S6640A0AF	D	1.97	3.66	5.88	10.02	1855	2316	46	58	24	0.59	1.44
750 VAC (1,350 VDC)													
10	H93S7510A0AF	C	1.91	2.91	3.75	5.07	938	1171	94	117	30	0.19	0.68
15	H94S7515A0AF	D	1.97	3.66	3.75	7.60	1406	1756	94	117	21	0.20	0.97
20	H94S7520A0AF	D	1.97	3.66	4.25	8.58	1587	1982	79	99	19	0.24	1.08
25	H94S7525A0AF	D	1.97	3.66	4.75	9.30	1720	2148	69	86	22	0.34	1.19
850 VAC (1,500 VDC)													
5	H93S8505A0AF	C	1.91	2.91	2.75	4.56	843	1053	169	211	29	0.09	0.51
10	H94S8510A0AF	D	1.97	3.66	3.25	7.10	1313	1640	131	164	21	0.13	0.85
15	H94S8515A0AF	D	1.97	3.66	4.25	7.38	1366	1706	91	114	22	0.21	1.08

Round Cases

Rated for 60,000 hour duty @ 90°C

CAP (µF)	AEROVOX P/N	CASE CODE	BASE DIAMETER (Inches)	CASE HEIGHT (Inches)	I_{RMS} (A_{RMS})	I_{PEAK} (A)	I_S SURGE (A)	dV/dt RATES (V/µs)	dV/dt MAX (V/µs)	ESR @ 60 HZ (mΩ)	DF (%)	WEIGHT (Pounds)
660 VAC (1,200 VDC)												
5	H73S6605A0AF	P	1.75	4.25	4.59	849	1060	170	212	26	0.08	0.47
10	H73S6610A0AF	P	1.75	4.25	9.17	1698	2120	170	212	16	0.10	0.47
15	H76S6615A0AF	T	2.50	3.25	13.76	2546	3180	170	212	12	0.11	0.86
20	H76S6620A0AF	T	2.50	4.25	13.25	2452	3062	123	153	15	0.19	1.11
25	H76S6625A0AF	T	2.50	4.25	15.0	3065	3828	123	153	13	0.21	1.11
30	H76S6630A0AF	T	2.50	5.88	15.0	3678	4594	123	153	12	0.23	1.11
750 VAC (1,350 VDC)												
10	H74S7510A0AF	S	2.00	4.75	5.1	938	1171	94	117	14	0.09	0.57
15	H76S7515A0AF	T	2.50	3.75	10.7	1980	2473	132	165	17	0.16	1.11
20	H76S7520A0AF	T	2.50	4.75	14.3	2640	3298	132	165	14	0.18	1.11
25	H76S7525A0AF	T	2.50	5.88	15.0	3300	4122	132	165	13	0.20	1.11
850 VAC (1,500 VDC)												
5	H73S8505A0AF	P	1.75	4.25	6.4	1178	1471	236	294	22	0.07	0.47
10	H76S8510A0AF	T	2.50	3.75	8.2	1514	1891	151	189	22	0.14	1.10
15	H76S8515A0AF	T	2.50	4.75	12.3	2272	2837	151	189	17	0.16	1.11

About Aerovox

Aerovox is a leading provider of film capacitors for industrial, medical and specialized applications serving original equipment manufacturers (OEM) and distributors. The company has world-class design, manufacturing and testing facilities in New Bedford, Massachusetts and global manufacturing facilities in China and India to enable quick turn-around for shipping and delivery worldwide.

Aerovox capacitors are among the world's most reliable components. Our extensive custom design and development capabilities coupled with broad, standardized product offerings allow us to provide intelligent capacitor solutions that meet or exceed our customers' application requirements.

Our aim is to be the best and most sought after provider of capacitor solutions for specialty markets.

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Aerovox®

Lighting Capacitors

FILM CAPACITORS FOR HIGH INTENSITY DISCHARGE (HID) AND SIGN BALLAST LIGHTING

RoHS COMPLIANT

Intelligent Capacitor Solutions

High quality and long life characterize Aerovox film capacitors for HID and sign ballast lighting applications. Like all Aerovox products, our rugged, reliable capacitors are constructed using high quality materials and Lean Six Sigma manufacturing practices. These capacitors undergo 100% outgoing electrical and visual testing, and representative UL fault current, environmental and accelerated life testing (ALT)* as part of our quality assurance process.

Aerovox maintains manufacturing facilities in China and India to enable quick turn-around for shipping and delivery worldwide. If you have specialized needs, our flexible manufacturing processes allow us to quickly provide custom configurations. For emergency lighting applications, please see our axial wrap and fill capacitor line.

*Accelerated life testing (ALT) is performed for 2000 hours at 125% voltage rating and temperature at 105°C.

Aerovox provides intelligent capacitor solutions.

RoHS COMPLIANT

Lighting Capacitors

FILM CAPACITORS FOR HIGH INTENSITY DISCHARGE (HID) AND SIGN BALLAST LIGHTING

Aerovox produces both oil-filled and dry capacitors for the HID and sign ballast lighting markets. Constructed with film designed to withstand the rigors of the application, these units are built to operate up to 105°C.

HID lighting capacitors are built with a ±3% tolerance on capacitance, and are designed to operate for a minimum of 60,000 hours. Sign ballast capacitors are constructed with film/foil technology and have tolerances based on application requirements.

Applications

- Area Lighting
- HID Magnetic Ballast Kits for Greenhouses or Hydroponics
- High / Low Bay / Warehousing
- Horticultural Lighting
- Parking Lot Installations
- Sign Ballast Kits
- Sports Lighting
- Street Lamp Fixtures
- Street Lighting

Highlights

- Made to EIA-456-A standards
- Metal or plastic case
- Wet or dry construction
- Life test temperature to 105°C
- 18 AWG wire lead termination
- RoHS compliant
- Dual rated HID
- Dual or triple value caps for sign ballasts
- UL-810 fault current protection

Specifications

Capacitance Range:	1 to 75 µF for HID; 1.4 to 2.6 µF with dual or triple rating for sign ballasts
HID Capacitance Tolerance:	±3%
AC Voltage Range:	120 VAC to 660 VAC for HID; 550 VAC to 1,200 VAC for sign ballasts
Temperature Range:	-40°C to +105°C for HID; 0°C to +85°C for sign ballasts
Approval Certification:	UL, cUL UL construction only for dry HID

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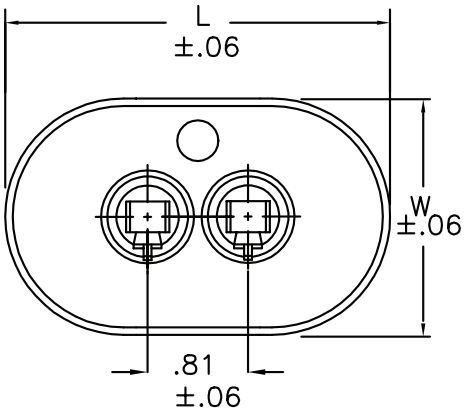
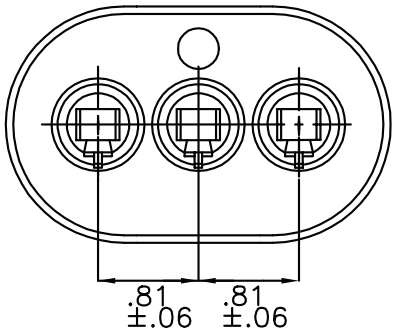
Oval Oil-Filled Case Sizes

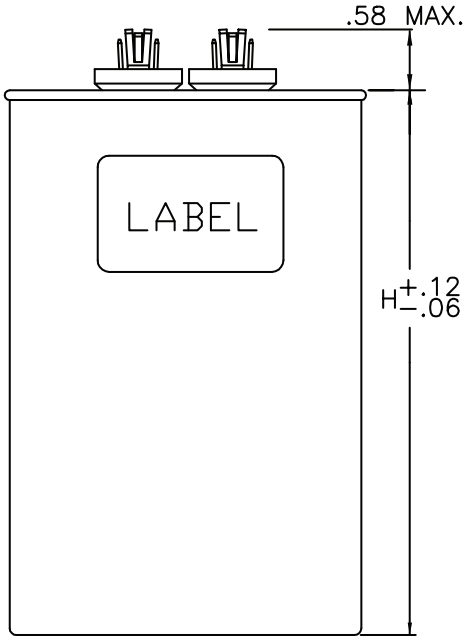
Base Size	Description	L Inches	W Inches
A	1¼" Oval	2.16	1.31
B	1½" Oval	2.69	1.56
C	1¾" Oval	2.91	1.91
D	2" Oval	3.66	1.97

Oval Single Cover Configuration



Oval Dual Cover Configuration

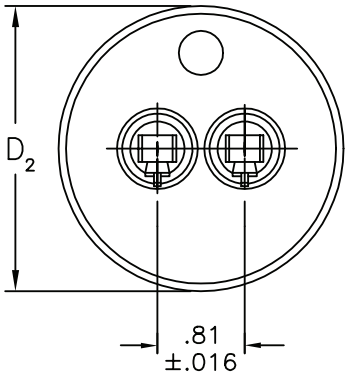




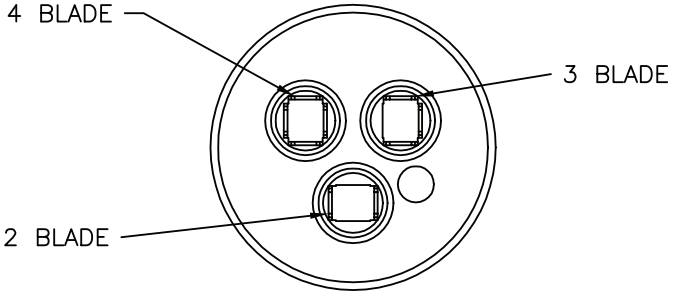
Round Oil-Filled Case Sizes

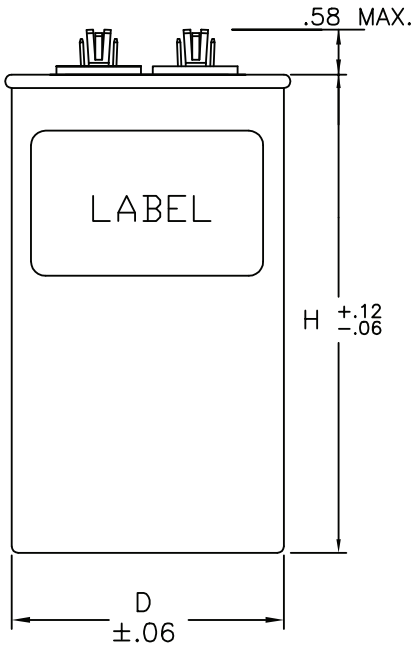
Base Size	Description	D Inches	D_2 Inches
P	1¾" Round	1.75	1.87
S	2" Round	2.00	2.12
T	2½" Round	2.50	2.62

Round Single Cover Configuration



Round Dual Cover Configuration

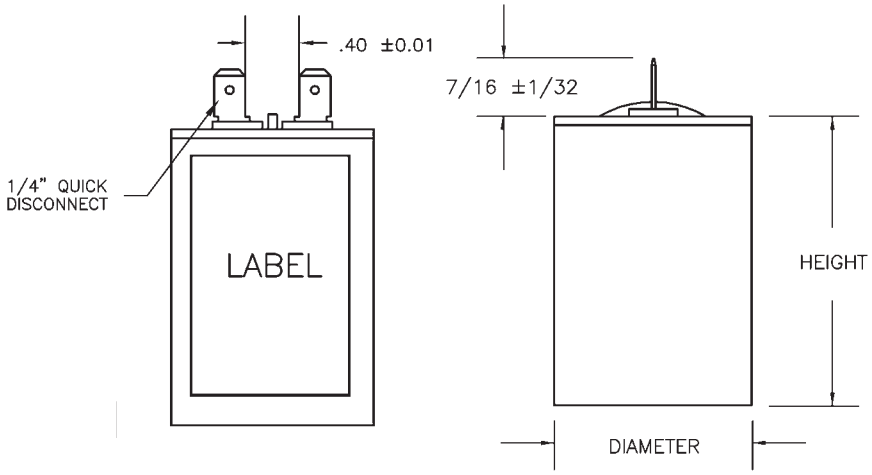




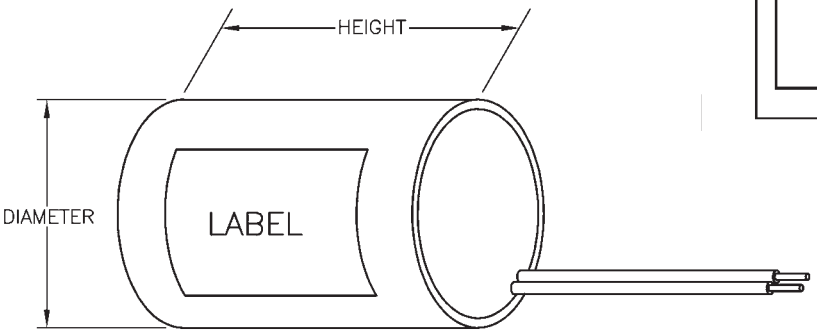
Dry Plastic Case Sizes

Base Size	Diameter Inches (mm)
AA	1.18 (30)
BB	1.58 (40)
CC	1.77 (45)
DD	1.97 (50)

Quick Connect



Wire Lead



Part Numbering System

Aerovox's part numbering system is a descriptive part number made of several different components such as can size, voltage rating, etc. The descriptors are explained below using Z73S4026MN as a representative part number:

Z73S4026MN

Z — TYPE
Z = Wet metal case
D = Dry plastic case

73 — CAN SIZE
73 = 1.75" Rd
74 = 2" Rd
76 = 2.50" Rd
91 = 1.25" Oval
92 = 1.50" Oval
93 = 1.75" Oval
94 = 2.00" Oval
81 = 30 mm Rd
83 = 40 mm Rd
84 = 45 mm Rd
85 = 50 mm Rd

S — IMPREGNANT
S = Epoxidized Soy Bean Oil
W = Dry w/ wire
A = Dry w/ QC

40 — VOLTAGE RATING
33 = 330 VAC
40 = 400 VAC

26 — CAPACITANCE CODE
26 = 26 µF
40 = 40 µF

M — VOLTAGE / CAPACITY DESCRIPTOR
90°C Full Life
M = As indicated
N = Odd rating
W = Dual rating

100°C Full Life
B = Rating as indicated
J = Odd Voltage/Cap
F = Dual Capacitor

100°C Reduced Life
P = Rating as indicated
H = Odd Voltage/Cap
T = Dual Capacitor

N — AEROVOX FACTORY
H = India
N = China
"XX" = US

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Oil-Filled, Oval Metal Case

Rated for 60,000 hours

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
240 VAC, 90°C Case Temperature			
35	Z92S2435MN	B	3.75 (95.3)
40	Z92S2440MN	B	3.75 (95.3)
45	Z92S2445MN	B	3.75 (95.3)
52	Z92S2452MN	B	3.75 (95.3)
55	Z92S2455MN	B	3.75 (95.3)
300 VAC, 90°C Case Temperature			
5	Z91S3005MN	A	2.19 (55.6)
6	Z91S3006MN	A	2.19 (55.6)
12	Z91S3012MN	A	2.88 (73.2)
14	Z92S3014MN	B	2.75 (69.9)
28	Z93S3028MN	C	3.13 (79.5)
40	Z93S3040MN	C	3.25 (82.6)
55	Z93S3055MN	C	3.88 (98.6)
64	Z93S3064MN	C	4.25 (108)
330 VAC, 90°C Case Temperature			
7	Z91S3307MN	A	2.19 (55.6)
8	Z91S3308MN	A	2.19 (55.6)
10	Z91S3310MN	A	2.69 (68.3)
12	Z91S3312MN	A	2.88 (73.2)
14	Z91S3314MN	A	2.88 (73.2)
16	Z91S3316MN	A	3.75 (95.3)
17.5	Z92S3317NN	B	3.13 (79.5)
24	Z93S3324MN	C	2.75 (69.9)
26	Z93S3326MN	C	3.13 (79.5)
29	Z93S3329MN	C	3.13 (79.5)
30	Z93S3330MN	C	3.13 (79.5)
34	Z93S3334MN	C	3.13 (79.5)
35	Z93S3335MN	C	3.13 (79.5)
48	Z93S3348MN	C	3.88 (98.6)

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
400 VAC, 90°C Case Temperature			
10	Z92S4010MN	B	2.75 (69.9)
15	Z93S4015MN	C	2.75 (69.9)
21	Z93S4021MN	C	3.13 (79.5)
22.5	Z93S4022NN	C	3.13 (79.5)
24	Z93S4024MN	C	3.13 (79.5)
480 VAC, 90°C Case Temperature			
3	Z91S4803MN	A	2.25 (57.2)
4	Z91S4804MN	A	2.69 (68.3)
5	Z91S4805MN	A	2.88 (73.2)
6	Z92S4806MN	B	2.75 (69.9)
10	Z92S4810MN	B	2.75 (69.9)
12	Z93S4812MN	C	3.13 (79.5)
15	Z92S4815MN	B	3.75 (95.3)
20	Z93S4820MN	C	3.75 (95.3)
21	Z93S4821MN	C	3.75 (95.3)
22	Z93S4822MN	C	3.88 (98.6)
24	Z93S4824PN	C	3.88 (98.6)
26	Z93S4826MN	C	3.88 (98.6)
28	Z93S4828PN	C	3.88 (98.6)
525 VAC, 90°C Case Temperature			
16	Z93S5216NN	C	3.13 (79.5)
24	Z93S5224NN	C	4.25 (108.0)
26	Z93S5226NN	C	4.25 (108.0)
26	Z94S5226NN	D	2.88 (73.2)
32	Z93S5232NN	C	4.75 (120.7)
32	Z94S5232NN	D	3.75 (95.3)

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)	VAC
400-525 VAC, 100°C Case Temperature				
24	Z94S4024BN	D	3.25 (82.6)	400
24	Z94S4824BN	D	3.75 (95.3)	480
21	Z94S5221JN	D	3.75 (95.3)	525
26	Z94S5226JN	D	3.75 (95.3)	525

Oil-Filled, Round Metal Case

Rated for 60,000 hours

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
300 VAC, 90°C Case Temperature			
8	Z73S3008MN	P	2.17 (55.1)
14	Z73S3014MN	P	2.38 (60.5)
22.5	Z73S3022NN	P	2.88 (73.2)
330 VAC, 90°C Case Temperature			
5	Z73S3305MN	P	2.25 (57.2)
7	Z73S3307MN	P	2.88 (73.2)
12	Z73S3312MN	P	2.38 (60.5)
14	Z73S3314MN	P	2.88 (73.2)
28	Z73S3328MN	P	3.15 (80.0)
400 VAC, 90°C Case Temperature VAC			
10	Z73S4010MN	P	2.38 (60.5)
15	Z73S4015MN	P	2.88 (73.2)
22.5	Z73S4022NN	P	3.75 (95.3)
24	Z73S4024MN	P	3.75 (95.3)
480 VAC, 90°C Case Temperature			
10	Z73S4810MN	P	2.88 (73.2)
24	Z74S4824MN	S	3.25 (82.6)
24	Z76S4824MN	T	3.15 (80.0)
525 VAC, 90°C Case Temperature			
26	Z74S5226NN	S	4.75 (120.7)
32	Z74S5232NN	S	4.92 (125.0)
32	Z76S5232NN	T	3.55 (90.2)

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)	VAC
400-480 VAC, 100°C Case Temperature				
10	Z73S4010BN	P	2.38 (60.5)	400
15	Z73S4015BN	P	3.25 (82.6)	400
24	Z74S4024BN	S	3.75 (95.3)	400
24	Z74S4824BN	S	4.25 (108.0)	480

Dry, Unprotected, Round Plastic Case

Rated for 60,000 hours

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
240 VAC, 105°C Max Operating Case Temperature			
14	D81W2414M	AA	2.68 (68.1)
15	D81W2415M	AA	2.68 (68.1)
17.5	D83W2417N	BB	2.68 (68.1)
20	D83W2420M	BB	2.68 (68.1)
22.5	D83W2422N	BB	2.68 (68.1)
28	D83W2428M	BB	2.68 (68.1)
30	D83W2430M	BB	2.68 (68.1)
34	D83W2434M	BB	3.62 (92.0)
35	D83W2435M	BB	3.62 (92.0)
36	D83W2436M	BB	3.62 (92.0)
40	D83W2440M	BB	3.62 (92.0)
45	D83W2445M	BB	3.62 (92.0)
48	D84W2448M	CC	3.62 (92.0)
52	D84W2452M	CC	3.62 (92.0)
55	D84W2455M	CC	3.62 (92.0)
56	D84W2456M	CC	3.62 (92.0)
62	D84W2462M	CC	3.62 (92.0)
280 VAC, 105°C Max Operating Case Temperature			
5	D81W2805M	AA	2.17 (55.1)
6	D81W2806M	AA	2.17 (55.1)
7	D81W2807M	AA	2.17 (55.1)
8	D81W2808M	AA	2.68 (68.1)
10	D81W2810M	AA	2.68 (68.1)
12	D83W2812M	BB	2.68 (68.1)
13	D83W2813M	BB	2.68 (68.1)
14	D83W2814M	BB	2.68 (68.1)
16	D83W2816M	BB	2.68 (68.1)
17.5	D83W2817N	BB	2.68 (68.1)
18.5	D83W2818N	BB	2.68 (68.1)
20	D83W2820M	BB	2.68 (68.1)
21	D83W2821M	BB	2.68 (68.1)
22	D83W2822M	BB	2.68 (68.1)
22.5	D83W2822N	BB	2.68 (68.1)
24	D83W2824M	BB	3.62 (92.0)
24.5	D83W2824N	BB	3.62 (92.0)
25	D83W2825M	BB	3.62 (92.0)

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
280 VAC, 105°C Max Operating Case Temperature			
35	D83W2835M	BB	3.62 (92.0)
48	D84W2848M	CC	3.62 (92.0)
56	D84W2856M	CC	4.61 (117.1)
330 VAC, 105°C Max Operating Case Temperature			
5	D81W3305M	AA	2.17 (55.1)
7	D81W3307M	AA	2.68 (68.1)
8	D83W3308M	BB	2.68 (68.1)
10	D83W3310M	BB	2.68 (68.1)
12	D83W3312M	BB	2.68 (68.1)
15	D83W3315M	BB	2.68 (68.1)
16	D83W3316M	BB	2.68 (68.1)
17.5	D83W3317N	BB	3.62 (92.0)
26	D84W3326M	CC	3.62 (92.0)
28	D84W3328M	CC	3.62 (92.0)
45	D84W3345M	CC	4.61 (117.1)
48	D85W3348M	DD	4.61 (117.1)
400 VAC, 105°C Max Operating Case Temperature			
10	D83W4010M	BB	3.62 (92.0)
12	D83W4012M	BB	3.62 (92.0)
15	D83W4015M	BB	3.62 (92.0)
18	D84W4018M	CC	3.62 (92.0)
24	D84W4024M	CC	4.61 (117.1)
30	D85W4030M	DD	4.61 (117.1)

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Aerovox®

Microwave Capacitors

FILM CAPACITORS FOR MICROWAVE APPLICATIONS

Intelligent Capacitor Solutions

For the long life required for industrial and commercial microwaves, choose Aerovox capacitors. Our microwave capacitors are constructed using high quality materials and Lean Six Sigma manufacturing practices.

Aerovox capacitors undergo 100% electrical testing, fault current, and mechanical testing. If you have specialized needs, our flexible manufacturing processes allow us to quickly provide custom configurations.

Aerovox provides intelligent capacitor solutions.

Microwave Capacitors

FILM CAPACITORS FOR MICROWAVE APPLICATIONS

Aerovox Microwave capacitors are used in voltage doubler circuits in high voltage microwave oven transformers.

The robust design makes these units ideal for withstanding an AC voltage equal to two times the peak voltage of the transformer output voltage in industrial or commercial microwave applications.

Highlights

- Dual ratings available
- High voltage threshold for corona
- Long service life designed for industrial and commercial applications

Applications

- Industrial Microwave Heating
- Commercial Microwave Ovens
- Water Purification

Specifications

Capacitance Range:	0.5 µF to 2.0 µF
Capacitance Tolerance:	±3%
AC Voltage Range:	1,750 VAC to 3,000 VAC
Operating Temperature:	0°C to +85°C
Operating Life:	>3,000 hours
Capacitance Stability:	+1% to -1.8%; from 0°C to +85°C
Approval Certification:	VDE on specific models

Part Numbering System

The Aerovox part numbering system is a descriptive part number made up of several components. The descriptors are explained here using using N50H2188G as a representative part number:

N	50	H	21	88	G
PRODUCT FAMILY	BASE SIZE: 50 = 1.25" Oval, 64 = 1.75" Oval, 62 = 2.00" Oval / CASE TYPE: A, C, D	IMPREGNATION FLUID	VOLTAGE RATING: 21 = 2100 VAC, 23 = 2300 VAC	CAPACITANCE CODE: 50 = 0.5 µF, 88 = 0.88 µF, 11 = 1.1 µF	VOLTAGE/CAP RATING DESCRIPTOR: E = Rating as indicated, Y = Odd voltage/cap, G = Internal resistor

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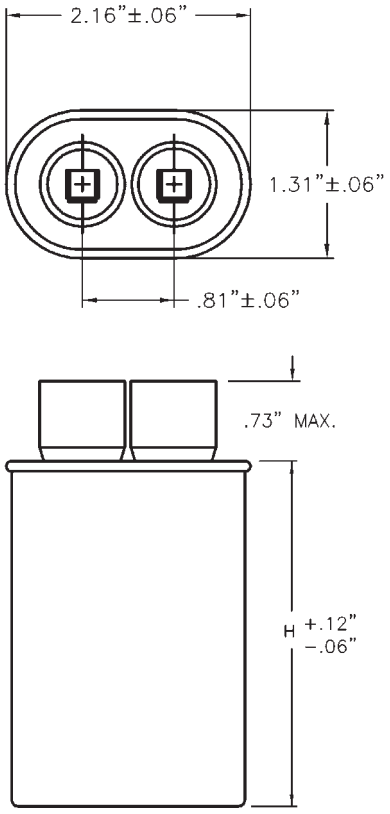
Microwave Capacitors

Typical Sizes for VAC Professional Class 85°C

CAP (µF)	AEROVOX P/N	VOLTAGE (VAC)	CASE TYPE	CASE HEIGHT
0.50 µF	N50H2350G	2300	A	3.75 in (95.3 mm)
0.55 µF	N50H2355G	2300	A	3.75 in (95.3 mm)
0.56 µF	N50H2356G	2300	A	3.75 in (95.3 mm)
0.59 µF	N50H2359G	2300	A	3.75 in (95.3 mm)
0.72 µF	N50H2372G	2300	A	3.75 in (95.3 mm)
0.74 µF	N50H2374G	2300	A	3.75 in (95.3 mm)
0.80 µF	N50H2380G	2300	A	4.25 in (108.0 mm)
0.82 µF	N50H2382G	2300	A	4.25 in (108.0 mm)
0.85 µF	N50H2385G	2300	A	4.25 in (108.0 mm)
0.88 µF	N50H2188G	2100	A	4.25 in (108.0 mm)
0.90 µF	N50H2190G	2100	A	4.25 in (108.0 mm)
1.00 µF	N50H2110G	2100	A	4.25 in (108.0 mm)
1.10 µF	N50H2111G	2100	A	4.75 in (120.7 mm)
1.20 µF	N50H2112G	2100	A	4.75 in (120.7 mm)
1.30 µF	N50H2113G	2100	A	4.75 in (120.7 mm)

Outline Drawings

Case Type A



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Aerovox is a leading manufacturer of capacitors for industrial, medical and specialized applications, with world-class design, manufacturing and testing facilities in New Bedford, MA. Global manufacturing facilities in China and India enable quick turn-around for shipping and delivery worldwide.

Aerovox capacitors are among the world's most reliable components. Our extensive custom design and development capabilities coupled with broad, standardized product offerings allow us to provide intelligent capacitor solutions that meet or exceed customers' application requirements.

Our aim is to be the best and most sought after provider of capacitor solutions for specialty markets in the world by achieving the highest level of customer satisfaction with extraordinary emphasis on the creation of value and speed to market.

Aerovox®

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Aerovox®

Motor Run & General Purpose AC Capacitors

AC FILM CAPACITORS FOR MOTOR RUN, UPS AND GENERAL PURPOSE APPLICATIONS

RoHS COMPLIANT

Intelligent Capacitor Solutions

For safe and reliable performance of virtually any motor run system, choose Aerovox capacitors. Our SuperMet™ line of oil impregnated, AC capacitors for use in motor run, HVAC, UPS and other general purpose applications are constructed using high quality materials and Lean Six Sigma manufacturing practices. If you have specialized needs, our flexible manufacturing processes allow us to quickly provide custom configurations.

Aerovox capacitors undergo 100% electrical testing including: Accelerated Life Testing (ALT) for 2000 hours at 125% voltage rating and temperature at 10°C greater than maximum rating, fault current, and mechanical testing. The SuperMet line is designed to meet performance testing outlined in the Electrical Industry Association (EIA) standard #RS-456A.

Aerovox provides intelligent capacitor solutions.

RoHS COMPLIANT

Motor Run & General Purpose AC Capacitors

AC FILM CAPACITORS FOR MOTOR RUN, UPS AND GENERAL PURPOSE APPLICATIONS

Aerovox's line of SuperMet capacitors are manufactured using state-of-the-art, self-healing metalized polypropylene film technology. Designed to operate in environments where there is a requirement for an internal protective device, these capacitors incorporate a UL-approved pressure-sensitive interrupter to remove the capacitor from the circuit at end of life.

Each capacitor is filled with our patented, environmentally-friendly ESO (Epoxidized Soybean Oil). Used as the dielectric fluid, the soybean oil protects metallized film from corrosion, aids optimum heat transfer, and helps suppress the degrading effects of corona, which may otherwise cause premature failures. Proprietary processing with vacuum and heat cycles ensures complete removal of moisture, resulting in superior capacitance stability and long term reliability.

SuperMet capacitors are available in single and dual ratings, and in industry-standard round and oval, oil-filled, metal can designs as well as a European styled aluminum or plastic can with a mounting stud on the bottom.

All capacitors are built to UL810 standards, and designed to meet or exceed EIA-456-A performance standards.

Applications

- UPS Systems
- HVAC Systems
- Single Phase Motors
- Phase Converters
- Pumps
- Compressors
- White Goods (e.g. Washing Machines, Refrigerators)
- Blowers/Fans
- Unitary/Window Air Conditioners
- Condensing Units
- Dehumidifiers
- Power Factor Correction

Highlights

- Made to EIA-456-A standards
- Aluminum, steel or plastic* case options
- Special high temperature 90°C versions available
- UL-810 fault current protection
- RoHS compliant

*Available upon request

c UL us

Specifications

Capacitance Range:	0.5 µF to 120 µF
Capacitance Tolerance:	±10% standard; ±3% to ±6% optional
AC Voltage Range:	120 VAC to 660 VAC
Temperature Range:	-40°C to +70°C standard; +90°C optional
Approval Certification:	UL, cUL, CE2, IEC 60252

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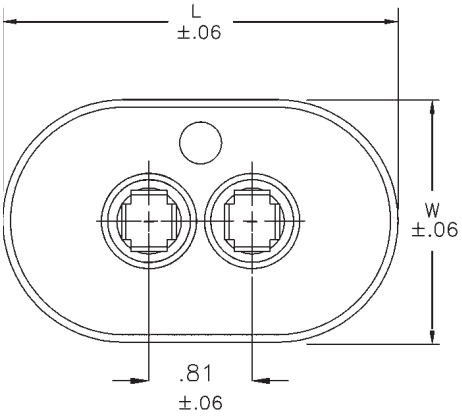
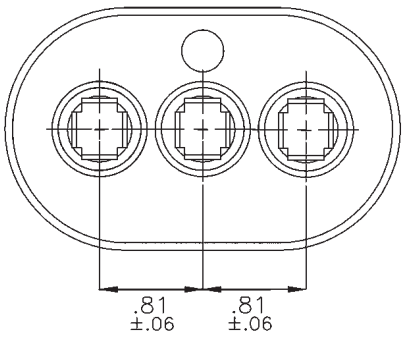
Oval Oil-Filled Case Sizes

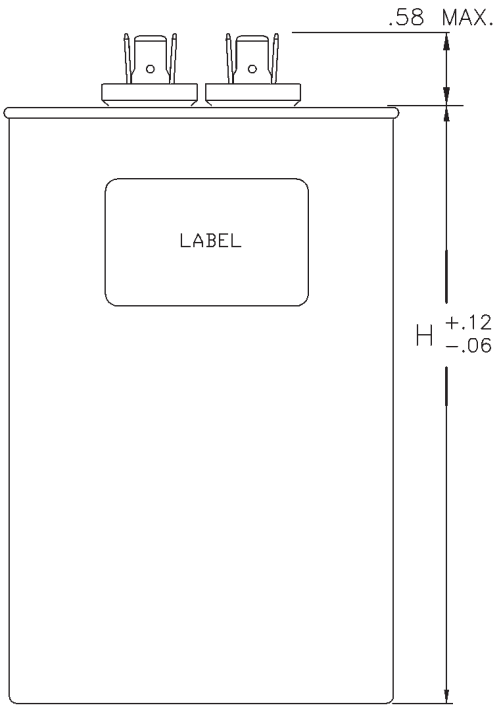
Base Size	Description	L Inches	W Inches
A	1¼" Oval	2.16	1.31
C	1¾" Oval	2.91	1.91
D	2" Oval	3.66	1.97

Oval Single Cover Configuration



Oval Dual Cover Configuration



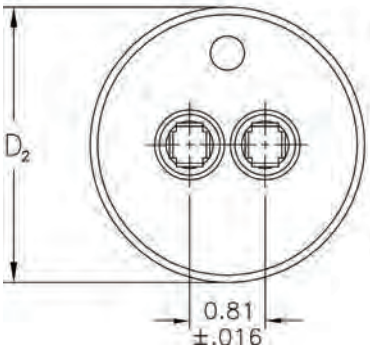


Tolerance on all case dimensions is ±0.06.

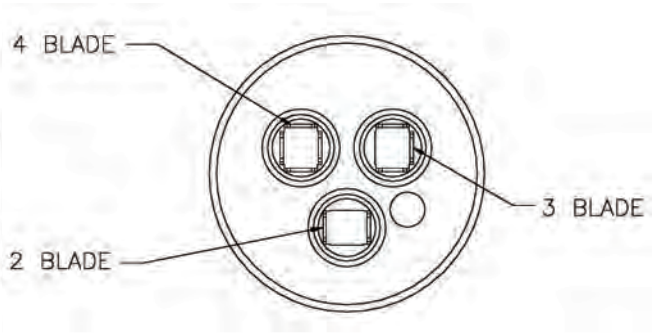
Round Oil-Filled Case Sizes

Base Size	Description	D Inches	D_2 Inches
P	1¾" Round	1.75	1.87
S	2" Round	2.00	2.12
T	2½" Round	2.50	2.62

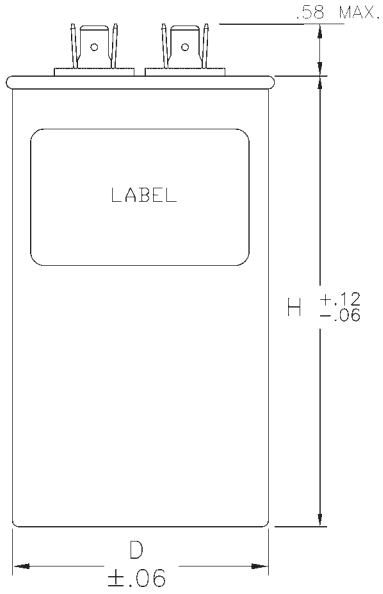
Round Single Cover Configuration



Round Dual Cover Configuration



For 1.75" and 2.00" OD units, spacing is 0.78" rather than 0.81"



Part Numbering System

Aerovox's SuperMet part numbering system is a descriptive part number made up of several different components such as can size, voltage rating, etc. The descriptors are explained here using Z23S3715M01N as a representative part number:

Z 23 S 37 15 M 01 N

TYPE
Z = MPP Film

CAN SIZE
23 = 1.75" Rd
24 = 2.00" Rd
26 = 2.50" Rd
50 = 1.25" Oval
64 = 1.75" Oval
62 = 2.00" Oval

IMPREGNANT
S = Epoxidized Soy Bean Oil

VOLTAGE RATING
37 = 370 VAC
44 = 440 VAC

CAPACITANCE CODE

04 = 4 µF	25 = 25 µF
05 = 5 µF	30 = 30 µF
06 = 6 µF	35 = 35 µF
07 = 7 µF	40 = 40 µF
10 = 10 µF	45 = 45 µF
12 = 12 µF	50 = 50 µF
14 = 14 µF	65 = 65 µF
15 = 15 µF	70 = 70 µF
16 = 16 µF	75 = 75 µF
17 = 17 µF	80 = 80 µF
20 = 20 µF	

SECTION TYPE
M = As indicated
N = Odd rating
W = Dual rating

INTERNAL DESCRIPTOR
01 = Standard
= Customer specific

AEROVOX FACTORY
N = Aerovox China
"XX" = Aerovox US

SuperMet Oval Oil Filled Metal Case Single Rating

Rated for 60,000 hour duty @ 70°C

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
370 VAC, 70°C Case Temperature			
3	Z50S3703M	A	1.56 (39.6)
4	Z50S3704M	A	1.56 (39.6)
5	Z50S3705M	A	1.56 (39.6)
6	Z50S3706M	A	2.38 (60.5)
7.5	Z50S3707N	A	2.38 (60.5)
10	Z50S3710M	A	2.75 (69.9)
12.5	Z50S3712N	A	3.25 (82.6)
15	Z50S3715M	A	3.94 (100.1)
20	Z64S3720M	C	2.38 (60.5)
25	Z64S3725M	C	2.75 (69.9)
440 VAC, 70°C Case Temperature			
3	Z50S4403M	A	1.56 (39.6)
5	Z50S4405M	A	2.12 (53.8)
7.5	Z50S4407N	A	3.15 (80.0)
10	Z50S4410M	A	3.25 (82.6)
15	Z50S4415M	A	4.13 (104.9)
25	Z64S4425M	C	3.25 (82.6)

SuperMet Round Oil Filled Metal Case Single Rating

Rated for 60,000 hour duty @ 70°C

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
370 VAC, 70°C Case Temperature			
4	Z23S3704M	P	2.16 (54.9)
5	Z23S3705M	P	2.16 (54.9)
6	Z23S3706M	P	2.16 (54.9)
7.5	Z23S3707N	P	2.16 (54.9)
10	Z23S3710M	P	2.36 (59.9)
12.5	Z23S3712N	P	2.36 (59.9)
15	Z23S3715M	P	2.56 (65.0)
20	Z23S3720M	P	2.75 (69.9)
25	Z23S3725M	P	3.15 (80.0)
30	Z23S3730M	P	3.15 (80.0)
35	Z23S3735M	P	4.25 (108.0)
40	Z24S3740M	S	3.55 (90.2)
45	Z24S3745M	S	3.95 (100.3)
50	Z24S3750M	S	3.88 (98.6)
440 VAC, 70°C Case Temperature			
15	Z23S4415M	P	3.25 (82.6)
20	Z23S4420M	P	3.15 (80.0)
25	Z23S4425M	P	3.54 (89.9)
30	Z24S4430M	S	3.75 (95.3)
35	Z24S4435M	S	3.94 (100.1)
40	Z24S4440M	S	4.33 (110.0)
45	Z26S4445M	T	3.35 (85.1)
50	Z26S4450M	T	3.25 (82.6)
55	Z26S4455M	T	3.25 (82.6)
60	Z26S4460M	T	3.75 (95.3)

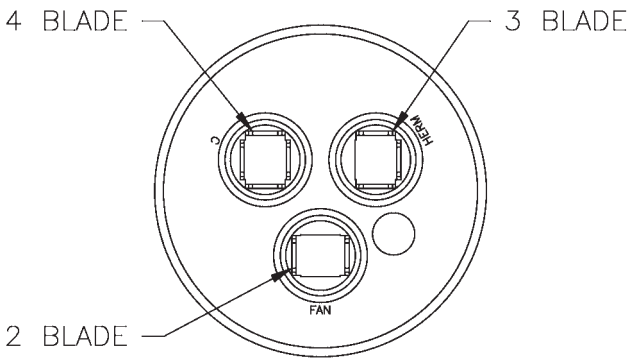
For additional ratings about steel cases or shorter heights, please contact us.

Dual Capacitors

Aerovox dual protected capacitors are designed for optimum performance in HVAC applications such as unitary and window air conditioners. By winding two capacitors on one core, Aerovox is able to provide both capacitor values in an efficient size and cost effective 3-terminal package. These capacitors are available in 370 VAC and 440 VAC, with typical fan ratings of 3, 5, 7.5, and 10 µF. Compressor (Herm) cap ratings are available in ratings of 15 µF to 80 µF.

The most popular ratings are shown below, and Aerovox maintains the designs for hundreds of different combinations that are also available. Unlike a single value capacitor, the dual units have a three-terminal cover with a connection for the fan, the herm, and common. The diagram to the right shows the number of blades per terminal.

2, 3, 4 Blade Terminal (Dual)



SuperMet Round Oil Filled Metal Case Dual Rating

Rated for 60,000 hour duty @ 70°C

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
370 VAC, 70°C Case Temperature			
25+5	Z24S3730W05	S	3.00 (72.2)
30+5	Z24S3735W05	S	3.54 (89.9)
35+5	Z24S3740W05	S	3.94 (100.1)
40+5	Z24S3745W05	S	4.13 (104.9)
45+5	Z24S3750W05	S	4.33 (110.0)
50+5	Z26S3755W05	T	3.54 (89.9)
50+10	Z26S3760W01	T	3.54 (89.9)
55+10	Z26S3765W01	T	3.75 (95.3)
60+5	Z26S3765W05	T	3.75 (95.3)
60+10	Z26S3770W01	T	4.13 (104.9)
70+10	Z26S3780W01	T	4.33 (110.0)
80+5	Z26S3785W05	T	4.33 (110.0)
80+10	Z26S3790W01	T	4.73 (95.3)

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches (mm)
440 VAC, 70°C Case Temperature			
35+5	Z26S4440W05	T	3.15 (80.0)
40+5	Z26S4445W05	T	3.54 (89.9)
40+10	Z26S4450W01	T	3.54 (89.9)
50+5	Z26S4455W05	T	3.75 (95.3)
60+5	Z26S4465W05	T	4.13 (104.9)
60+7.5	Z26S4467W01	T	4.13 (104.9)
60+10	Z26S4470W01	T	4.33 (110.0)
80+7.5	Z26S4487W01	T	4.92 (125.0)

Accessories

Order Optional Mounting Accessories Separately

Terminal Covers, Rubber Boots

CASE STYLE(S)	FIGURE	AEROVOX P/N	D
P	1	44603-0008	1.88" (47.6 mm)
S	1	44603-0012	2.08" (52.8 mm)
A,C,D,T	2	44603-0000	1.50" (38.1 mm)

Figure 1

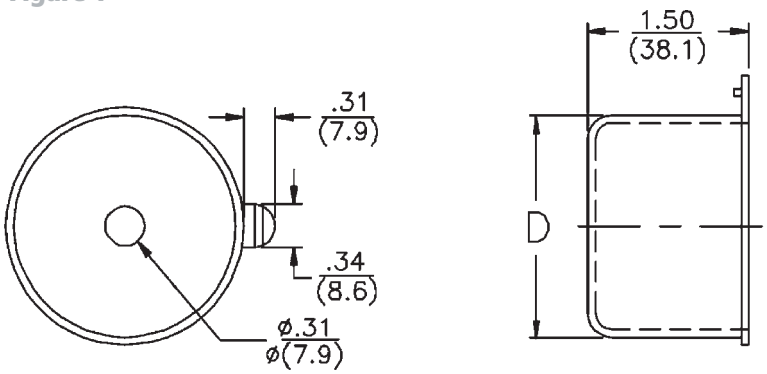
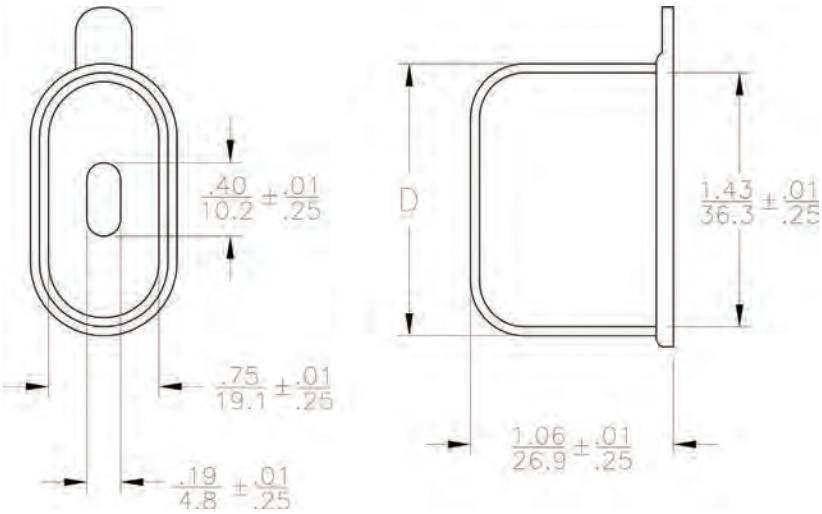


Figure 2



Mounting Brackets

CASE STYLE	FIGURE	AEROVOX P/N	A	B
P	A	51045-0007	1.75" (44.5 mm)	1.13" (28.7 mm)
S	A	51045-0008	2.00" (50.8 mm)	1.25" (31.8 mm)
T	A	51045-0009	2.50" (63.5 mm)	1.50" (38.1 mm)
A	B	43547-0001	2.94" (74.7 mm)	2.56" (65.0 mm)
C	B	51300-0101	3.81" (96.8 mm)	3.31" (84.2 mm)
D	B	51300-0102	4.56" (115.9 mm)	4.06" (103.1 mm)

Figure A

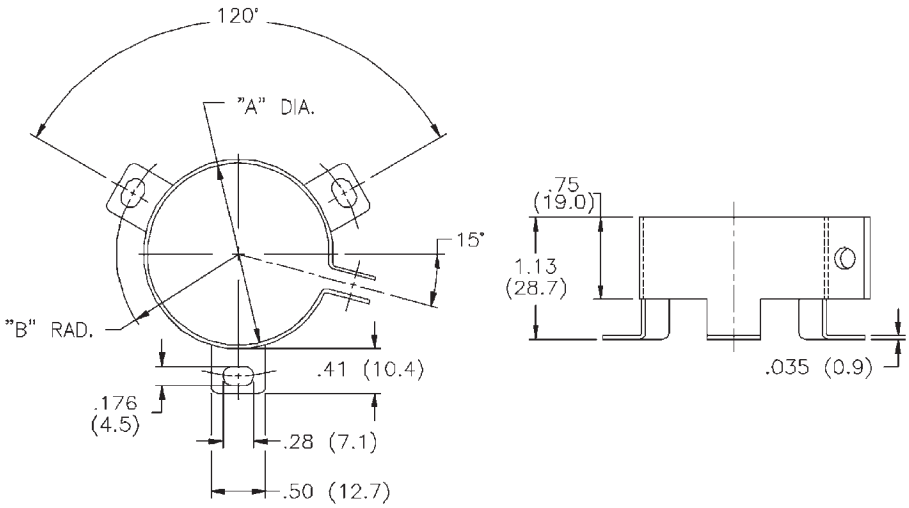
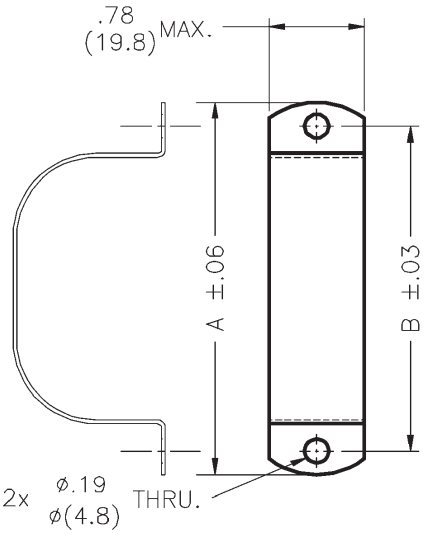


Figure B



About Aerovox

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MR01308 Printed in the USA

Aerovox®

AeroPower™ Power Factor Correction Capacitors

SINGLE-PHASE AND THREE-PHASE
PFC CAPACITORS FOR
HIGH RELIABILITY APPLICATIONS

Intelligent Capacitor Solutions

AeroPower™ power factor correction capacitors are constructed using high quality materials and Lean Six Sigma manufacturing practices to provide reliable performance and long life during continuous use.

Aerovox capacitors undergo 100% electrical and visual testing to further ensure high level performance. If you have specialized needs, our flexible manufacturing processes allow us to quickly provide custom configurations.

CONTENTS

Aerovox provides intelligent capacitor solutions.

AeroPower™ Power Factor Correction Capacitors

SINGLE-PHASE AND THREE-PHASE PFC CAPACITORS FOR HIGH RELIABILITY APPLICATIONS

Aerovox manufactures both single-phase and three-phase power factor correction capacitors up to 4,800 VAC. Our AeroPower brand PFC capacitors are designed for high reliability applications, and have a life rating of over 200,000 hours. They are designed to withstand harmonic currents, with special high harmonic versions available.

Three types of standard reactive compensation capacitors are available:

- AMP0: Vacuum-impregnated metallized polypropylene, compact size. Available in both oil-filled and dry configurations. (Made in USA)
- MMP0: Vacuum-impregnated metallized polypropylene, rugged welded case. (Made in USA)
- EPFC: Euro-style vacuum-impregnated metallized polypropylene, round aluminum studded case (Made in China)

Applications

- Power Factor Correction Systems
- Harmonic Filters
- Alternative Energy Power Systems
- Induction Heating Capacitor Alternatives

Highlights

- Both European and North American styles available
- Long life
- Over-current rating to 150%
- Over-voltage rating to 120%
- Includes discharge resistors
- Large 325 KVAR capacitors available
- Single-phase and three-phase
- Loss of KVAR/fault detection

c UL us

Specifications

KVAR Range:	0.5 to 325 KVAR
Capacitance Tolerance:	0 to +15%
AC Voltage Range:	240 VAC to 4,800 VAC; single-phase or three-phase
Rated Frequency:	50 or 60 Hz
Capacitor Connection:	3-phase, internal delta connection standard; wye available on request
Operating Life:	>200,000 hours
Total Losses:	<0.5 Watts / KVAR at 60 Hertz, 25°C
Operating Temperature Range:	-40°C to +46°C
Approval Certification:	UL, cUL (≤600 VAC)

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Standard Voltage and KVAR Ratings at 60 Hertz*

LOW VOLTAGE	AMP0	EPFC	MMP0
240 VAC	0.5–10	0.5–10	20–30
480 VAC	0.5–25	2–40	25–100
600 VAC	1.0–25	10–40	25–100
750 VAC	–	–	25–150

MEDIUM VOLTAGE	MMP0
900 VAC	25–150
1040 VAC	25–240
1200 VAC	25–240
2400 VAC	25–300
2770 VAC	25–300
4160 VAC	25–300
4800 VAC	25–325

*Please consult the factory for other voltages, frequencies and KVAR ratings.

Construction

All AeroPower capacitors are impregnated with a dielectric fluid to give added insulation, excellent corona protection and a moisture barrier. The dielectric fluid is considered a green (benign), environmentally friendly material. MMP0 and EPFC capacitors are 100% leak tested. Aerovox products do not contain PCBs.

Harmonic Distortion

Harmonic distortion is the resulting non-sinusoidal current waveform generated by a non-linear load. The most common non-linear load is a pulse rectifier, which is used in most switch mode power supplies, variable speed drives and uninterruptible power supplies. The distorted current waveform generates a distorted source voltage due to the system (electrical power system) impedance. A distorted waveform can be analyzed by decomposing it into a fundamental component (line frequency) and higher frequency components of varying amplitude.

The effects of harmonic distortion on metallized film capacitors are (1) higher operating temperature because of higher I^2R losses and (2) higher voltage stress on the dielectric. Both of these factors will shorten the life of a capacitor dramatically.

All Aerovox power factor correction capacitors are designed to handle harmonic currents, however, Aerovox also offers capacitors that are custom designed for systems with high harmonic distortion. By using our high-harmonic capacitors in your harmonic rich application, you will have a more robust construction compared to using standard capacitors in the same application.

Cover Terminals

Most AMP0 and low voltage MMP0 cells are available either in three or five terminal configurations, specified by KVAR rating (see individual specifications). The medium voltage and EPFC cells are not available with 5 terminals. The internal schematics for these terminal configurations are shown in Figures 1A and 1B. The standard five terminal designs can be connected with external components, as shown in Figures 2 and 3, to obtain a loss-of-KVAR feature. In this configuration, a neon indicator lamp will illuminate during a loss-of-fuse or a loss-of-capacitance condition.

Figure 1A: AMP0 & Low Voltage MMP0

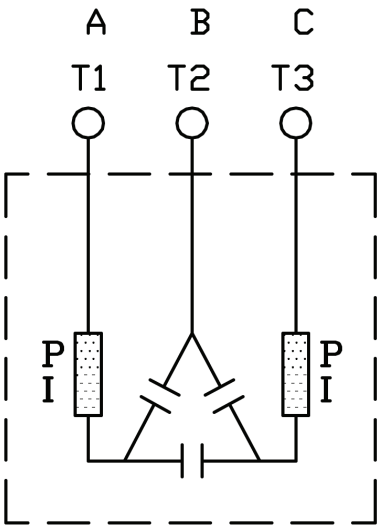
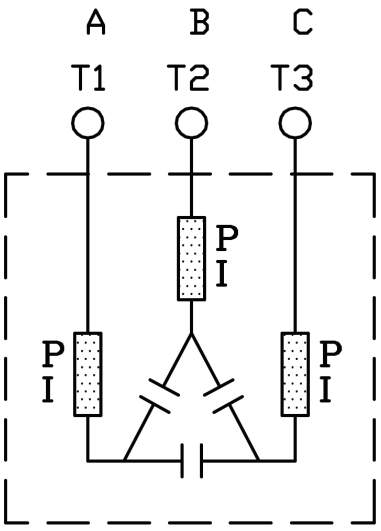
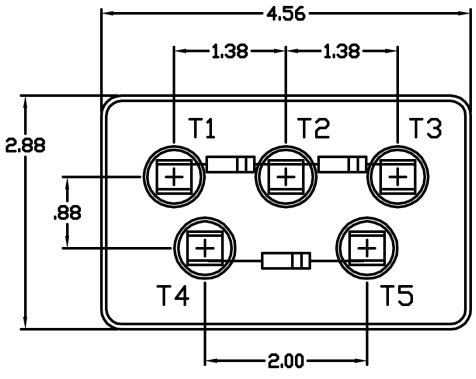


Figure 1B: EPFC



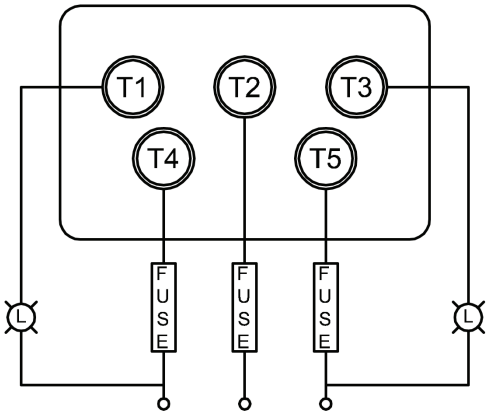
Internal Schematics for Low Voltage
Three-Terminal Capacitors

Figure 2



External Setup for
Five Terminal AMP0 Capacitors

Figure 3



External Connections for Loss
of KVAR Option

Reactive Power Compensation Capacitor Specifications

	AMP0 Low Voltage (Three-phase and single-phase) (up to 600 VAC)	MMP0 Low Voltage (Three-phase and single-phase) (up to 600 VAC)	MMP0 Low Voltage (Three-phase and single-phase) (750 to 900 VAC)	MMP0 Medium Voltage (Three-phase and single-phase) (1040 to 4800 VAC)	EPFC Low Voltage (Three-phase) (up to 600 VAC)
Electrical Characteristics					
Rated Voltages	240, 480 and 600 VAC	240, 480 and 600 VAC	750 and 900 VAC	1040 , 1200, 2400, 2770, 4160 and 4800 VAC	240, 480 and 600 VAC
Rated Frequency	60 Hertz	60 Hertz	60 Hertz	60 Hertz	60 Hertz
Capacitor Type	Fluid impregnated (Dry also available)	Fluid impregnated	Fluid impregnated	Fluid impregnated	Fluid impregnated
Dielectric System	Self-healing metallized polypropylene film	Self-healing metallized polypropylene film	Self-healing metallized polypropylene film	Self-healing metallized polypropylene film	Self-healing metallized polypropylene film
Impregnation Fluid	Non-PCB, non-toxic, biodegradable, Class III combustible fluid	Non-PCB, non-toxic, biodegradable, Class III combustible fluid	Non-PCB, non-toxic, biodegradable, Class III combustible fluid	Non-PCB, non-toxic, biodegradable, Class III combustible fluid	Non-PCB, non-toxic, biodegradable, Class III combustible fluid
Capacitor Connecton, 3-phase	Internal delta connection	Internal delta connection	Internal wye connection	Internal delta or wye connection	Internal delta connection
Capacitance Tolerance	-0% to +15%	-0% to +15%	-0% to +15%	-0% to +15%	-0% to +15%
Discharge Device	External resistors reduce residual voltage to <50 V with in 1 minute	Internal resistors reduce residual voltage to <50 V within 1 minute	Internal resistors reduce residual voltage to <50 V within 5 minutes	Internal resistors reduce residual voltage to <50 V within 5 minutes	Internal resistors reduce residual voltage to <50 V within 1 minute
Total Losses	<0.5 Watts / KVAR at 60 Hertz, 25°C	<0.5 Watts / KVAR at 60 Hertz, 25°C	<0.5 Watts / KVAR at 60 Hertz, 25°C	<0.5 Watts / KVAR at 60 Hertz, 25°C	<0.5 Watts / KVAR at 60 Hertz, 25°C (without resistors)
Design Service Life	200,000 hours continuous duty	200,000 hours continuous duty	200,000 hours continuous duty	200,000 hours continuous duty	200,000 hours continuous duty
Over Current					
Standard	135% * rated current continuous, includes harmonic currents	135% * rated current continuous, includes harmonic currents	135% * rated current continuous, includes harmonic currents	135% * rated current continuous, includes harmonic currents	135% * rated current continuous, includes harmonic currents
High Harmonic	150% * rated current continuous, includes harmonic currents	150% * rated current continuous, includes harmonic currents	150% * rated current continuous, includes harmonic currents	150% * rated current continuous, includes harmonic currents	150% * rated current continuous, includes harmonic currents
Over Voltage					
Standard	110% * rated voltage continuous	110% * rated voltage continuous	110% * rated voltage continuous	110% * rated voltage continuous	110% * rated voltage continuous
High Harmonic	120% * rated voltage continuous	120% * rated voltage continuous	120% * rated voltage continuous	120% * rated voltage continuous	120% * rated voltage continuous

Reactive Power Compensation Capacitor Specifications (cont.)

	AMP0 Low Voltage (Three-phase and single-phase) (up to 600 VAC)	MMP0 Low Voltage (Three-phase and single-phase) (up to 600 VAC)	MMP0 Low Voltage (Three-phase and single-phase) (750 to 900 VAC)	MMP0 Medium Voltage (Three-phase and single-phase) (1040 to 4800 VAC)	EPFC Low Voltage (Three-phase) (up to 600 VAC)
Mechanical Characteristics					
Enclosure Type	Drawn tin plated steel rectangular can	Heavy gauge welded steel construction	Heavy gauge welded steel construction	Heavy gauge welded steel construction	Extruded aluminum cylindrical can with M12 mounting stud
Finish	None (standard) Painted (optional)	Light gray paint, ANSI #61, UL approved for outdoor usage	Light gray paint, ANSI #61, UL approved for outdoor usage	Light gray paint, ANSI #61, UL approved for outdoor usage	None
Mounting	Optional bracketing is available	Heavy gauge brackets, mounting holes 2 x ½ x ⅝" slots	Heavy gauge brackets, mounting holes 2 x ½ x ⅝" slots	Heavy gauge brackets, mounting holes 2 x ½ x ⅝" slots	M12 mounting stud 10 NM max. torque
Terminals	5 terminal cover: ¼" male quick connect 3 and 2 terminal cover: ¼"-20 male threaded stud, 20 in-lbs fastening torque	½"-13 brass studs, 160 in-lbs fastening torque, 30 kV BIL bushing	½"-13 brass studs, 160 in-lbs fastening torque, 30 kV BIL bushing	½"-13 brass studs, 160 in-lbs fastening torque, 60 kV BIL ceramic bushings	M6 terminal 2-1/2 NM fastening torque, M8 terminal 4 NM fastening torque
Loss of KVAR feature	Standard with 5 terminal cover only	Optional	Optional	-	-
Environmental Characteristics					
Operating Temperature	-40°C to +46°C, -40°F to +115°F, with natural convection cooling	-40°C to +46°C, -40°F to +115°F, with natural convection cooling	-40°C to +46°C, -40°F to +115°F, with natural convection cooling	40°C to +46°C, -40°F to +115°F, with natural convection cooling	-40°C to +46°C, -40°F to +115°F, with natural convection cooling
Storage Temperature	-40°C to +85°C, -40°F to +185°F	-40°C to +85°C, -40°F to +185°F	-40°C to +85°C, -40°F to +185°F	-40°C to +85°C, -40°F to +185°F	-40°C to +85°C, -40°F to +185°F
Maximum Altitude	2000 meters above sea level	2000 meters above sea level	2000 meters above sea level	2000 meters above sea level	2000 meters above sea level
Humidity	0 to 95% non-condensing	0 to 95% non-condensing	0 to 95% non-condensing	0 to 95% non-condensing	0 to 95% non-condensing
Standards	UL 810 UL C22.2 No. 190 Canadian Standards	UL 810 UL C22.2 No. 190 Canadian Standards ANSI/IEEE 18 NEMA CP-1	ANSI/IEEE 18 NEMA CP-1	ANSI/IEEE 18 NEMA IEC 871-1	UL 810 IEC 60831
Certifications	UL Recognized CYTW2 cUL Recognized CYTW8 RoHS Compliant	UL Recognized CYTW2 cUL Recognized CYTW8	-	-	UL Recognized CYTW2 cUL Recognized CYTW8
Safety Features	Pressure interrupter Self-healing technology External discharge resistors	Pressure interrupter Self-healing technology Internal discharge resistors	Pressure interrupter Self-healing technology Internal discharge resistors	Self-healing technology Internal discharge resistors	Pressure interrupter Self-healing technology Internal discharge resistors

Safety Features

Discharge resistors are placed internally on MMP0 and EPFC and externally on AMP0 capacitor cells. The resistors are a safety feature that drains the voltage on the capacitor once the unit is taken offline to less than 50 volts in one minute or less for cells rated up to 600 VAC or in 5 minutes or less for cells rated over 600 VAC. The resistors are sized for long life continuous operation at maximum-rated temperature.

Aerovox low-voltage capacitor cells have UL and cUL recognized pressure-sensitive circuit interrupters. The circuit interrupter's purpose is to safely remove the capacitor from service at end-of-life or under heavy fault conditions and still maintain case integrity. Aerovox low-voltage capacitor cells are listed for use with or without fuses at 10,000 amps available fault current (AFC rating).

Self-healing technology: in case of an overload, the self-healing properties of the low-loss metallized polypropylene will prevent permanent dielectric breakdown.

Mounting Orientation

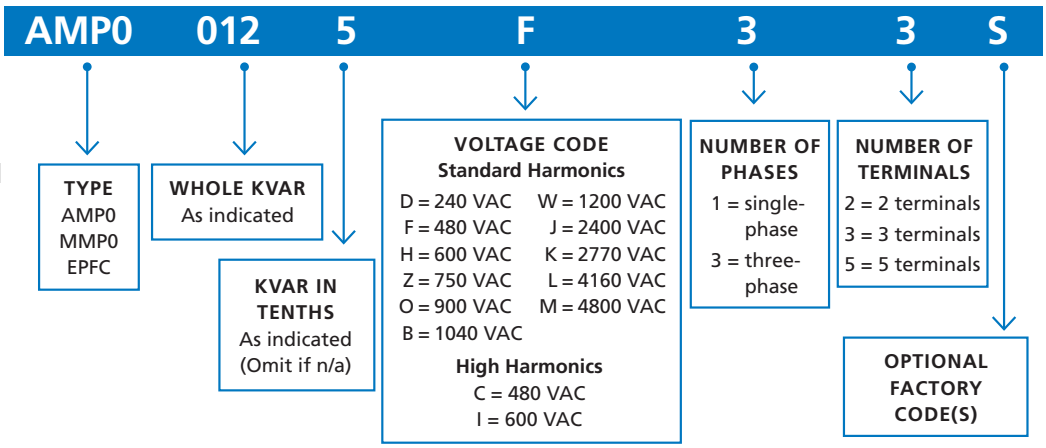
All Aerovox power factor correction capacitors can be mounted in a vertical position with the terminals facing up or horizontally. The units should not be mounted upside down. For proper operation of the pressure interrupter, capacitors mounted in banks must have enough space between them for expansion. In cases where brackets or mounting straps are used, there should only be enough pressure on the unit to hold it in place.

Suggested Mounting Clearances

	Side to Side Clearance	Clearance above Terminals
AMP0/EPFC	0.5"	1.0"
MMP0-LV	1.5"	1.0"
MMP0-MV	1.5"	3.0"

Part Numbering System

Aerovox's part numbering system is a descriptive part number made up of several different components such as KVAR, voltage rating, etc. The descriptors are explained below using AMP00125F33S as a representative part number.



Type AMP0 Capacitor Cells, 240 to 600 VAC, Three-Phase and Single-Phase

Reactive Power Compensation Ratings

KVAR RATING	AEROVOX P/N	NOMINAL CURRENT (A_{RMS})	C_r NOMINAL CAPACITANCE (µF)	CAN SIZE W x L x H (in)	APPROX WEIGHT (lbs)
240 VAC, 60 Hz, 3 Phase, Delta Connection					
0.5	AMP00005D35	1.2	23.0	2.88 x 4.56 x 3.06	1.4
1	AMP0001D35	2.4	46.1	2.88 x 4.56 x 3.06	1.4
1.5	AMP00015D35	3.6	69.1	2.88 x 4.56 x 3.50	1.7
2	AMP0002D35	4.8	92.1	2.88 x 4.56 x 4.50	1.9
2.5	AMP00025D35	6.0	115.1	2.88 x 4.56 x 4.50	2.2
3	AMP0003D35	7.2	138.2	2.88 x 4.56 x 5.00	2.4
4	AMP0004D35	9.6	184.2	2.88 x 4.56 x 6.00	2.5
5	AMP0005D35	12.0	230.3	2.88 x 4.56 x 6.75	3.0
6	AMP0006D35	14.4	276.3	2.88 x 4.56 x 6.75	3.0
7.5	AMP00075D35	18.0	345.4	2.88 x 4.56 x 7.56	3.7
10	AMP0010D33S	24.1	460.4	3.75 x 4.56 x 8.63	5.2
480 VAC, 60 Hz, 3 Phase, Delta Connection					
0.5	AMP00005F35	0.6	5.8	2.88 x 4.56 x 3.06	1.4
1	AMP0001F35	1.2	11.5	2.88 x 4.56 x 3.06	1.4
1.5	AMP00015F35	1.8	17.3	2.88 x 4.56 x 3.06	1.4
2	AMP0002F35	2.4	23.0	2.88 x 4.56 x 3.50	1.8
2.5	AMP00025F35	3.0	28.8	2.88 x 4.56 x 4.00	1.9
3	AMP0003F35	3.6	34.5	2.88 x 4.56 x 4.00	1.9
4	AMP0004F35	4.8	46.1	2.88 x 4.56 x 4.50	2.2
5	AMP0005F35	6.0	57.6	2.88 x 4.56 x 5.00	2.4
6	AMP0006F35	7.2	69.1	2.88 x 4.56 x 5.25	2.5
7.5	AMP00075F35	9.0	86.3	2.88 x 4.56 x 6.00	2.8
10	AMP0010F35	12.0	115.1	2.88 x 4.56 x 6.75	3.2
12.5	AMP00125F35	15.0	143.9	2.88 x 4.56 x 7.38	3.5
15	AMP0015F35	18.0	172.7	2.88 x 4.56 x 8.13	3.7
15	AMP0015F33S	18.0	172.7	3.75 x 4.56 x 7.00	4.3
16.7	AMP00167F33S	20.1	191.9	3.75 x 4.56 x 7.00	4.3
17.5	AMP00175F33S	21.0	201.5	3.75 x 4.56 x 6.75	4.1

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Type AMP0 Capacitor Cells, 240 to 600 VAC, Three-Phase and Single-Phase (cont.)

Reactive Power Compensation Ratings

KVAR RATING	AEROVOX P/N	NOMINAL CURRENT (A_{RMS})	C_r NOMINAL CAPACITANCE (µF)	CAN SIZE W x L x H (in)	APPROX WEIGHT (lbs)
20	AMP0020F33S	24.1	230.3	3.75 x 4.56 x 7.00	4.3
22.5	AMP00225F33S	27.1	259.0	3.75 x 4.56 x 8.63	5.2
25	AMP0025F33S	30.1	287.8	3.75 x 4.56 x 9.00	5.5
480 VAC, High Harmonic Applications, 3 Phase, Delta Connection					
7.5	AMP00075C35	9.0	86.3	2.88 x 4.56 x 6.75	3.2
10.0	AMP0010C35	12.0	115.1	2.88 x 4.56 x 8.13	3.7
12.5	AMP00125C33S	15.0	143.9	3.75 x 4.56 x 7.00	4.3
15	AMP0015C33S	18.0	172.7	3.75 x 4.56 x 10.50	5.9
16.7	AMP00167C33S	20.1	191.9	3.75 x 4.56 x 10.50	6.0
17.5	AMP00175C33S	21.1	201.5	3.75 x 4.56 x 10.50	6.1
20	AMP0020C33S	24.1	230.3	3.75 x 4.56 x 10.50	6.3
600 VAC, 60 Hz, 3 Phase, Delta Connection					
1.0	AMP0001H35	1.0	7.4	2.88 x 4.56 x 3.06	1.4
1.5	AMP00015H35	1.4	11.1	2.88 x 4.56 x 3.06	1.4
2.0	AMP0002H35	1.9	14.7	2.88 x 4.56 x 3.50	1.8
2.5	AMP00025H35	2.4	18.4	2.88 x 4.56 x 4.00	1.9
3.0	AMP0003H35	2.9	22.1	2.88 x 4.56 x 4.00	1.9
4.0	AMP0004H35	3.8	29.5	2.88 x 4.56 x 4.50	2.2
5.0	AMP0005H35	4.8	36.8	2.88 x 4.56 x 5.00	2.4
6.0	AMP0006H35	5.8	44.2	2.88 x 4.56 x 6.00	2.5
7.5	AMP00075H35	7.2	55.3	2.88 x 4.56 x 6.00	2.8
10.0	AMP0010H35	9.6	73.7	2.88 x 4.56 x 6.75	3.2
12.5	AMP00125H35	12.0	92.1	2.88 x 4.56 x 7.38	3.5
15.0	AMP0015H35	14.4	110.5	2.88 x 4.56 x 8.13	3.9
16.7	AMP00167H33S	16.1	122.8	3.75 x 4.56 x 6.75	4.1
17.5	AMP00175H33S	16.8	128.9	3.75 x 4.56 x 6.75	4.1
20.0	AMP0020H33S	19.2	147.4	3.75 x 4.56 x 7.00	4.4
22.5	AMP00225H33S	21.7	165.8	3.75 x 4.56 x 8.63	5.4
25.0	AMP0025H33S	24.1	184.2	3.75 x 4.56 x 9.00	5.7

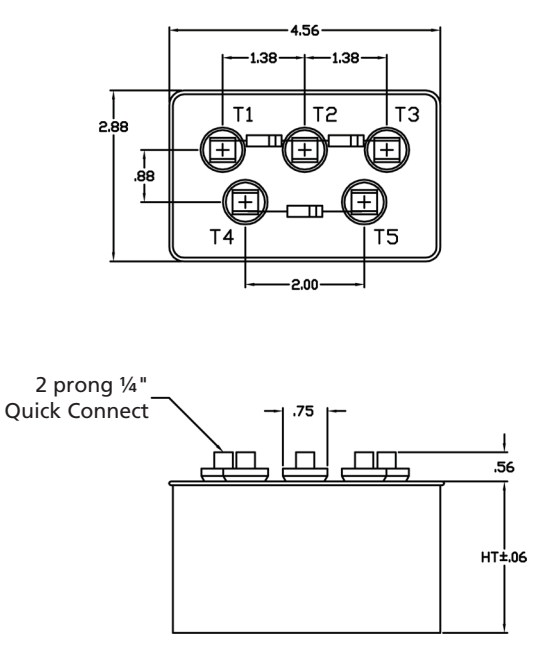
Type AMP0 Capacitor Cells, 240 to 600 VAC, Three-Phase and Single-Phase (cont.)

Reactive Power Compensation Ratings

KVAR RATING	AEROVOX P/N	NOMINAL CURRENT (A_{RMS})	C_r NOMINAL CAPACITANCE (µF)	CAN SIZE W x L x H (in)	APPROX WEIGHT (lbs)
600 VAC, High Harmonic Applications, 3 Phase, Delta Connection					
10.0	AMP0010I33S	9.6	73.7	3.75 x 4.56 x 6.00	3.5
12.5	AMP00125I33S	12.0	92.1	3.75 x 4.56 x 8.25	4.7
15.0	AMP0015I33S	14.4	110.5	3.75 x 4.56 x 9.00	5.2
16.7	AMP00167I33S	16.1	123.1	3.75 x 4.56 x 9.00	5.2
17.5	AMP00175I33S	16.8	128.9	3.75 x 4.56 x 10.50	5.5
20.0	AMP0020I33S	19.2	147.4	3.75 x 4.56 x 10.50	5.5

Outline Drawings

AMP0: Suffix "35"



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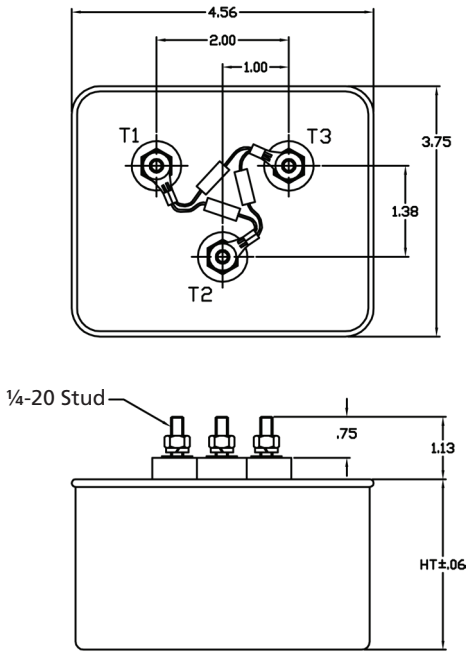

Type MMP0 Capacitor Cells, 240 to 600 VAC, Three-Phase and Single-Phase

Reactive Power Compensation Ratings

KVAR RATING	AEROVOX P/N	NOMINAL CURRENT (A_{RMS})	C_r NOMINAL CAPACITANCE (µF)	CAN SIZE W x L x H (in)	APPROX WEIGHT (lbs)
240 VAC, 60 Hz, 3 Phase, Delta Connection					
20	MMP0020D33	48.1	921.0	3.75 x 13.5 x 11.5	26.1
25	MMP0025D33	60.1	1151.3	3.75 x 13.5 x 13.5	31.3
30	MMP0030D33	72.2	1381.6	3.75 x 13.5 x 15.5	36.5
480 VAC, 60 Hz, 3 Phase, Delta Connection					
25	MMP0025F33	30.1	287.8	3.75 x 13.5 x 8.5	21.4
30	MMP0030F33	36.1	345.4	3.75 x 13.5 x 9.5	23.5
35	MMP0035F33	42.1	403.0	3.75 x 13.5 x 11.5	28.1
40	MMP0040F33	48.1	460.5	3.75 x 13.5 x 11.5	28.3
45	MMP0045F33	54.1	518.1	3.75 x 13.5 x 13.5	32.2
50	MMP0050F33	60.1	575.6	3.75 x 13.5 x 13.5	32.3
60	MMP0060F33	72.2	690.8	3.75 x 13.5 x 15.5	36.4
75	MMP0075F33	90.2	863.5	3.75 x 13.5 x 18.5	43.1
80	MMP0080F33	96.2	921.0	3.75 x 13.5 x 19.5	44.6
90	MMP0090F33	108.3	1036.2	3.75 x 13.5 x 20.5	45.9
100	MMP0100F33	120.3	1151.3	3.75 x 13.5 x 24.0	55.3
480 VAC, High Harmonic Applications, 3 Phase, Delta Connection					
25	MMP0025C33	30.1	287.8	3.75 x 13.5 x 8.5	21.4
50	MMP0050C33	60.1	575.6	3.75 x 13.5 x 13.5	32.3
75	MMP0075C33	90.2	863.5	3.75 x 13.5 x 18.5	43.1
100	MMP0100C33	120.3	1151.3	3.75 x 13.5 x 24.0	55.3
600 VAC, High Harmonic Applications, 3 Phase, Delta Connection					
25	MMP0025I33	24.1	184.2	3.75 x 13.5 x 8.5	21.4
30	MMP0030I33	28.9	221.0	3.75 x 13.5 x 9.5	23.5
35	MMP0035I33	33.7	275.9	3.75 x 13.5 x 11.5	28.1
40	MMP0040I33	38.5	294.7	3.75 x 13.5 x 11.5	28.3
45	MMP0045I33	43.3	331.6	3.75 x 13.5 x 13.5	32.2
50	MMP0050I33	48.1	368.4	3.75 x 13.5 x 13.5	32.3
60	MMP0060I33	57.7	442.1	3.75 x 13.5 x 15.5	36.4
75	MMP0075I33	72.2	552.6	3.75 x 13.5 x 18.5	43.1
80	MMP0080I33	77.0	589.5	3.75 x 13.5 x 19.5	44.6
90	MMP0090I33	86.6	663.1	3.75 x 13.5 x 20.5	45.9
100	MMP0100I33	96.2	736.8	3.75 x 13.5 x 24.0	55.3

Type MMP0 Capacitor Cells, 750 VAC and 900 VAC, Three-Phase and Single-Phase

Reactive Power Compensation Ratings

KVAR RATING	AEROVOX P/N	NOMINAL CURRENT (A_{RMS})	C_t NOMINAL CAPACITANCE (µF)	CAN SIZE W x L x H (in)	APPROX WEIGHT (lbs)
750 VAC, 60 Hz, 3 Phase, "WYE" Connection					
50	MMP0050Z33	38.5	707.4	3.75 x 13.5 x 13.5	32.4
75	MMP0075Z33	57.7	1061	3.75 x 13.5 x 18.5	46.5
100	MMP0100Z33	77.0	1414.7	3.75 x 13.5 x 24.0	55.3
900 VAC, 60 Hz, 3 Phase, "WYE" Connection					
50	MMP0050O33	32.1	491.2	3.75 x 13.5 x 12.5	32.4
75	MMP0075O33	48.1	736.8	3.75 x 13.5 x 17.0	44.8
100	MMP0100O33	64.2	982.4	3.75 x 13.5 x 20.5	49.6

Type MMP0 Capacitor Cells, 1040 VAC to 4800 VAC, Three-Phase and Single-Phase

Reactive Power Compensation Ratings

KVAR RATING	AEROVOX P/N	NOMINAL CURRENT (A_{RMS})	C_t NOMINAL CAPACITANCE (µF)	CAN SIZE W x L x H (in)	APPROX WEIGHT (lbs)
1040 VAC, 60 Hz, 3 Phase, Delta Connection					
25	MMP0025B33	13.9	61.3	5.63 x 13.5 x 6.0	20.5
50	MMP0050B33	27.8	122.6	5.63 x 13.5 x 7.5	25.7
75	MMP0075B33	41.6	183.9	5.63 x 13.5 x 10.0	34.2
100	MMP0100B33	55.6	245.2	5.63 x 13.5 x 11.5	39.3
125	MMP0125B33	69.4	306.6	5.63 x 13.5 x 13.0	44.5
150	MMP0150B33	83.3	367.9	5.63 x 13.5 x 15.0	51.3
175	MMP0175B33	97.2	429.2	5.63 x 13.5 x 17.5	59.9
200	MMP0200B33	111.0	490.5	5.63 x 13.5 x 20.0	68.4
1200 VAC, 60 Hz, 3 Phase, Delta Connection					
25	MMP0025W33	12.0	46.1	5.63 x 13.5 x 6.0	20.5
50	MMP0050W33	24.1	92.1	5.63 x 13.5 x 9.0	30.8
75	MMP0075W33	36.1	138.2	5.63 x 13.5 x 10.0	34.2
100	MMP0100W33	48.1	184.2	5.63 x 13.5 x 11.5	39.3
125	MMP0125W33	60.1	230.3	5.63 x 13.5 x 14.0	47.9
150	MMP0150W33	72.2	276.3	5.63 x 13.5 x 15.0	51.3
175	MMP0175W33	84.2	322.4	5.63 x 13.5 x 17.5	59.9
200	MMP0200W33	96.2	368.4	5.63 x 13.5 x 19.0	65.0

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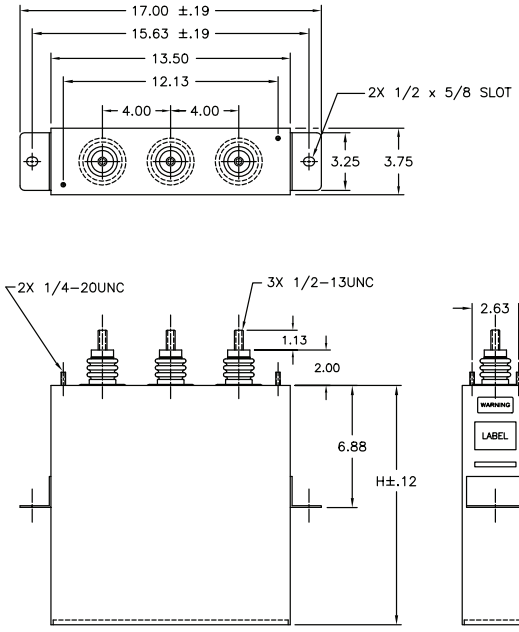
Type MMP0 Capacitor Cells, 1040 VAC to 4800 VAC, Three-Phase and Single-Phase (cont.)

Reactive Power Compensation Ratings

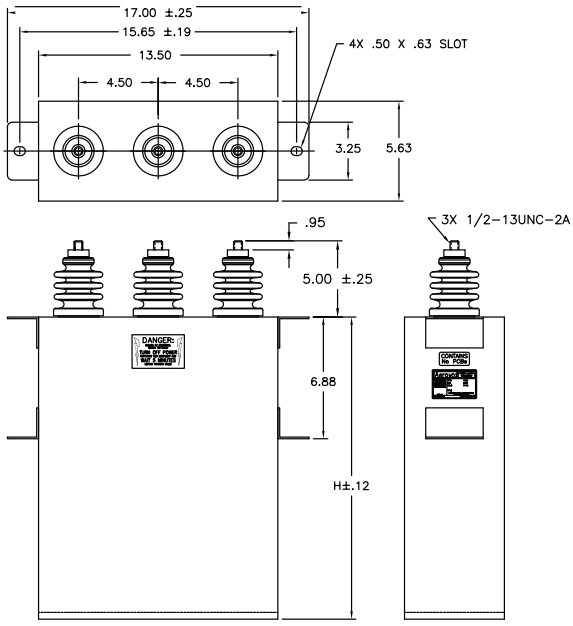
KVAR RATING	AEROVOX P/N	NOMINAL CURRENT (A_{RMS})	C_r NOMINAL CAPACITANCE (µF)	CAN SIZE W x L x H (in)	APPROX WEIGHT (lbs)
2400 VAC, 60 Hz, 3 Phase, Delta Connection					
25	MMP0025J33	6.0	11.5	5.63 x 13.5 x 6.0	20.5
50	MMP0050J33	12.0	23.0	5.63 x 13.5 x 7.5	25.7
75	MMP0075J33	18.0	34.5	5.63 x 13.5 x 10.0	34.2
100	MMP0100J33	24.1	46.1	5.63 x 13.5 x 11.5	39.3
125	MMP0125J33	30.1	57.6	5.63 x 13.5 x 14.0	47.9
150	MMP0150J33	36.1	69.1	5.63 x 13.5 x 16.0	54.7
175	MMP0175J33	42.1	80.6	5.63 x 13.5 x 17.5	59.9
200	MMP0200J33	48.1	92.1	5.63 x 13.5 x 19.0	65.0
2770 VAC, 60 Hz, 3 Phase, Delta Connection					
25	MMP0025K33	5.2	8.6	5.63 x 13.5 x 7.5	25.7
50	MMP0050K33	10.4	17.3	5.63 x 13.5 x 9.0	30.8
75	MMP0075K33	15.6	25.9	5.63 x 13.5 x 11.5	39.3
100	MMP0100K33	20.8	34.6	5.63 x 13.5 x 11.5	39.3
125	MMP0125K33	26.1	73.2	5.63 x 13.5 x 16.0	54.7
150	MMP0150K33	31.3	51.9	5.63 x 13.5 x 17.5	59.9
175	MMP0175K33	36.5	60.5	5.63 x 13.5 x 19.0	65.0
200	MMP0200K33	41.7	69.1	5.63 x 13.5 x 20.0	68.4
4160 VAC, 60 Hz, 3 Phase, Delta Connection					
25	MMP0025L33	3.5	3.8	5.63 x 13.5 x 7.5	25.7
50	MMP0050L33	7.0	7.7	5.63 x 13.5 x 9.0	30.8
75	MMP0075L33	10.4	11.5	5.63 x 13.5 x 11.5	39.3
100	MMP0100L33	13.9	15.3	5.63 x 13.5 x 11.5	39.3
125	MMP0125L33	17.4	19.2	5.63 x 13.5 x 16.0	54.7
150	MMP0150L33	20.8	23.0	5.63 x 13.5 x 17.5	59.9
175	MMP0175L33	24.3	26.8	5.63 x 13.5 x 19.0	65.0
200	MMP0200L33	27.8	30.7	5.63 x 13.5 x 20.0	68.4
4800 VAC, 60 Hz, 3 Phase, Delta Connection					
25	MMP0025M33	3.0	2.9	5.63 x 13.5 x 7.5	25.7
50	MMP0050M33	6.0	4.8	5.63 x 13.5 x 9.0	30.8
75	MMP0075M33	9.0	8.6	5.63 x 13.5 x 10.0	34.2
100	MMP0100M33	12.0	11.5	5.63 x 13.5 x 11.5	39.3
125	MMP0125M33	15.0	14.4	5.63 x 13.5 x 16.0	54.7
150	MMP0150M33	18.0	17.3	5.63 x 13.5 x 17.5	59.9
175	MMP0175M33	21.1	20.1	5.63 x 13.5 x 17.5	59.9
200	MMP0200M33	24.1	23.0	5.63 x 13.5 x 20.0	68.4

Outline Drawings

MMP0: 240, 480, 600, 750 & 900 VAC



MMP0: 1040 to 4800 VAC



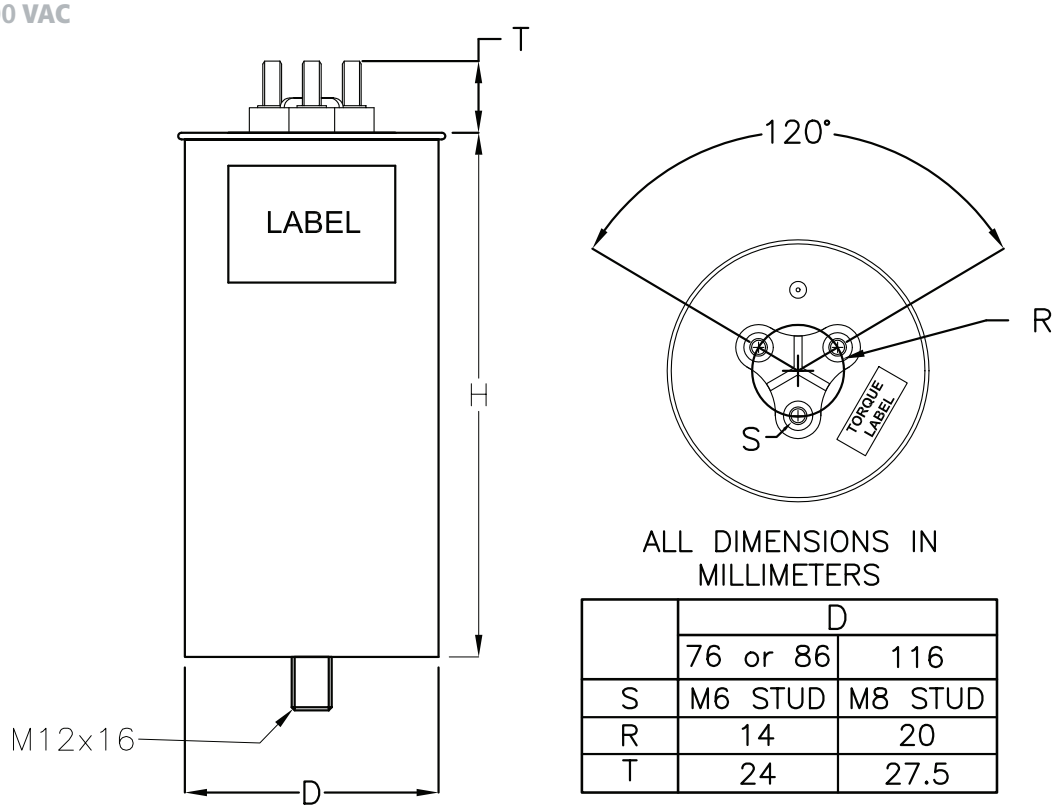
Type EPFC Capacitor Cells

KVAR RATING	AEROVOX P/N	NOMINAL CURRENT (A_{RMS})	C_1 NOMINAL CAPACITANCE (µF)	DIMENSIONS D x H (mm)	APPROX WEIGHT (kg)
240 VAC, 60 Hz, 3 Phase, Delta Connection					
0.5	EPFC0005D33N	1.2	23.0	76 x 70	0.48
1	EPFC001D33N	2.4	46.1	76 x 76	0.50
2	EPFC002D33N	4.8	92.1	76 x 140	0.78
2.5	EPFC0025D33N	6.0	115.1	76 x 140	0.78
3	EPFC003D33N	7.2	138.2	76 x 140	0.78
4	EPFC004D33N	9.6	184.2	86 x 115	0.90
5	EPFC005D33N	12.0	230.3	86 x 170	1.20
6	EPFC006D33N	14.4	276.3	86 x 170	1.20
7.5	EPFC0075D33N	18.0	345.4	86 x 170	1.20
10	EPFC010D33N	24.1	460.4	86 x 200	1.35
480 VAC, 60 Hz, 3 Phase, Delta Connection					
2	EPFC002F33N	2.4	23.0	86 x 70	0.60
7.5	EPFC0075F33N	9.0	86.3	86 x 170	1.15
10	EPFC010F33N	12.0	115.1	86 x 170	1.15
12.5	EPFC0125F33N	15.0	143.9	86 x 170	1.15
15	EPFC015F33N	18.0	172.7	86 x 200	1.35
16.7	EPFC0167F33N	20.0	191.9	86 x 215	1.45
17.5	EPFC0175F33N	21.0	201.8	86 x 245	1.60
20	EPFC020F33N	24.0	230.3	86 x 245	1.60
22.5	EPFC0225F33N	27.0	259.0	86 x 275	1.75
25	EPFC025F33N	30.0	287.8	86 x 275	1.75
30	EPFC030F33N	36.0	345.6	116 x 285	3.15
35	EPFC035F33N	42.1	403.2	116 x 315	3.45
40	EPFC040F33N	48.1	460.8	116 x 342	3.70
600 VAC, 60 Hz, 3 Phase, Delta Connection					
10	EPFC010H33N	9.6	73.7	86 x 170	1.15
12.5	EPFC0125H33N	12.0	92.1	86 x 170	1.15
15	EPFC015H33N	14.4	110.5	86 x 200	1.35
16.7	EPFC0167H33N	16.0	122.8	86 x 215	1.45
17.5	EPFC0175H33N	16.8	128.9	86 x 215	1.45
20	EPFC020H33N	19.2	147.4	86 x 245	1.60
22.5	EPFC0225H33N	21.6	165.8	86 x 275	1.75
25	EPFC025H33N	24.0	184.2	86 x 275	1.75
30	EPFC030H33N	28.8	219.9	116 x 285	2.95
35	EPFC035H33N	33.6	258.0	116 x 315	3.25
40	EPFC040H33N	38.4	294.9	116 x 342	3.70

KVAR RATING	AEROVOX P/N	NOMINAL CURRENT (A_{RMS})	C_1 NOMINAL CAPACITANCE (µF)	DIMENSIONS D x H (mm)	APPROX WEIGHT (kg)
480 VAC, 60 Hz, High Harmonic Applications, 3 Phase, Delta Connection					
12.5	EPFC0125C33N	15.0	143.9	86 x 245	1.60
15	EPFC015C33N	18.0	172.7	86 x 275	1.75
16.7	EPFC0167C33N	20.0	191.9	86 x 305	1.90
17.5	EPFC0175C33N	21.0	201.5	86 x 305	1.90
20	EPFC020C33N	24.0	230.3	86 x 335	2.05
600 VAC, 60 Hz, High Harmonic Applications, 3 Phase, Delta Connection					
10	EPFC010I33N	9.6	73.7	86 x 200	1.35
12.5	EPFC0125I33N	12.0	92.1	86 x 245	1.60
15	EPFC015I33N	14.4	110.5	86 x 245	1.60
16.7	EPFC0167I33N	16.0	122.8	86 x 275	1.75
17.5	EPFC0175I33N	16.8	128.9	86 x 275	1.75
20	EPFC020I33N	19.2	147.4	86 x 305	1.90

Outline Drawings

EPFC: 240 to 600 VAC



ALL DIMENSIONS IN MILLIMETERS

	D	
	76 or 86	116
S	M6 STUD	M8 STUD
R	14	20
T	24	27.5

Equations for Power Factor Correction and Harmonic Distortion (Balanced Phase Loads)

Capacitors in Parallel

$$C_T = C_1 + C_2 + C_3 + \cdots C_n = \sum_{i=1}^{n} C_i$$

Capacitors in Series

$$\frac{1}{C_T} = \frac{1}{C_1} + \frac{1}{C_2} + \frac{1}{C_3} + \cdots \frac{1}{C_n} = \sum_{i=1}^{n} \frac{1}{C_i}$$

$$DF = Tan(\delta) = \frac{ESR}{X_C} = (2\pi f)(C)(ESR)$$

$$\text{Power Loss} = (2\pi f)(C \times V^2)(DF)$$

$$X_C = \frac{1}{(2\pi f)C}$$

$$C_T = \frac{KVAR \times 10^{-3}}{(2\pi f)(KV)^2}$$

$$KW \text{ (Motor Input)} = \frac{hp \times 0.746}{\%\text{Eff}}$$

$$KVA = \frac{KW}{PF} = \sqrt{(KW)^2 + (KVAR)^2}$$

$$KVAR = \frac{2\pi \times f \times C \times (KV)^2}{10^{-3}}$$

$$KVAR_E = KVAR_R \times \left[\frac{V_A}{V_R}\right]^2 \times \left[\frac{f_A}{f_R}\right]$$

$$KVAR = \frac{hp \times 0.746}{\eta}\left[\sqrt{\frac{1 - PF_0^2}{PF_0^2}} - \sqrt{\frac{1 - PF_0^2}{PF_T^2}}\right]$$

$$KVA = \frac{V_L \times I_L}{1000} \quad \text{Single-Phase}$$

$$KVA = \frac{\sqrt{3} \times V_L \times I_L}{1000} \quad \text{Three-Phase}$$

$$I_{RMS} = \sqrt{I_1^2 + \sum_{h=2}^{\infty} I_h^2}$$

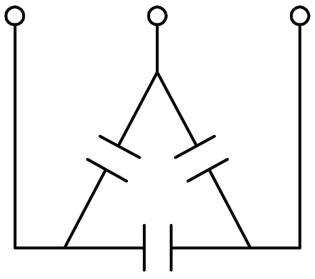
Legend

K	1000
W	Watts
V	Volts
A	Amperes
hp	Horsepower
C	Capacitance (Farads)
PF	Power Factor
KW	Working Power (1000 Watts)
KVA	Total Power (1000 Volt-Amperes)
KVAR	Reactive Power (1000 Volt-Amperes Reactive)
δ	Loss Angle
V_L	Line Voltage
I_L	Line current
f	Frequency
$KVAR_E$	Effective KVAR
$KVAR_R$	Rated KVAR

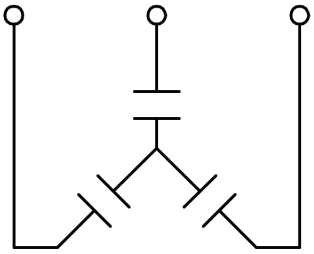
KVAR De-rating for Voltage & Frequency

V_A	Applied line Voltage
V_R	Rated line voltage
f_A	Applied frequency
f_R	Rated frequency
η	Motor efficiency
PF_0	Initial Power Factor
PF_T	Target Power Factor
I_{RMS}	Root-mean-square value of current
I_1	Current at fundamental frequency
I_h	Harmonic current of order h
C_T	Total capacitance (Farads)
X_c	Capacitor reactance
I_{ph}	Phase current
DF	Dissipation Factor
ESR	Equivalent Series Resistances (Ohms)

Connection Types



Delta Connection



Wye Connection

About Aerovox

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Aerovox capacitors are among the world's most reliable components. Our extensive custom design and development capabilities coupled with broad, standardized product offerings allow us to provide intelligent capacitor solutions that meet or exceed our customers' application requirements.

Our aim is to be the best and most sought after provider of capacitor solutions for specialty markets.

Aerovox®

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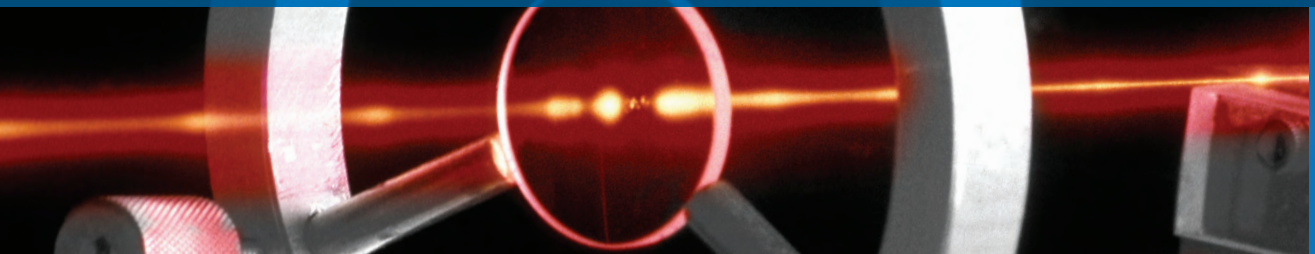
Aerovox®

Pulse & Custom Capacitors

CAPACITORS FOR PULSE, FLASH LAMP, LASER AND CUSTOM AC OR DC APPLICATIONS

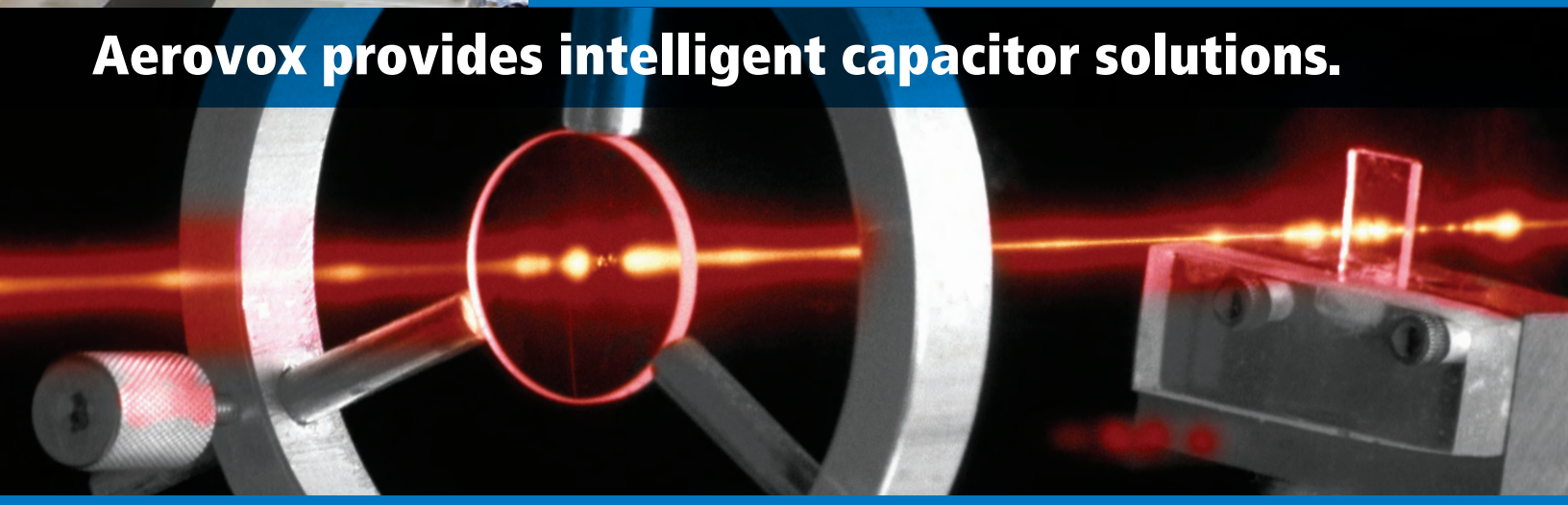
Intelligent Capacitor Solutions



Aerovox's deep technical capabilities and flexible manufacturing processes enable us to meet the unique requirements of demanding pulse, flash lamp, laser and other custom applications. We have a long history in the pulse power area where different capacitor technologies are needed to satisfy the particularly stringent requirements of pulsing applications.

Our custom capacitors are designed and built using state-of-the-art technologies and computer-integrated manufacturing systems under an ISO 9001-certified quality management system. They undergo rigorous quality assurance testing, including 100% electrical and visual testing to further ensure reliability and high level performance.

Aerovox provides intelligent capacitor solutions.



Aerovox®

Main cover image courtesy of lod.org. Photo by C. Hooper.

Pulse & Custom Capacitors

CAPACITORS FOR PULSE, FLASH LAMP, LASER AND CUSTOM AC OR DC APPLICATIONS

Aerovox offers aluminum foil and polypropylene capacitor construction as well as single-sided metallized polypropylene for use in pulse-forming and DC filtering applications.

Highlights

- High voltage up to 50,000 VDC
- Designed for user specified life
- Dry or oil-filled with an environmentally “green” fluid
- Multiple terminal configurations
- Metal or plastic case designs
- Low inductance

Specifications

Capacitance Range:	0.01 µF to 50,000 µF
Capacitance Tolerance:	±3% to ±10%
DC Voltage Range:	Up to 50 kV
Operating Life:	Up to 100 million shots
Operating Temperature Range:	-40°C to +55°C typical Higher temperature limit available

Applications

- Utility UPS
- Magnetic Forming
- MARX Generator Banks
- Strobe Lights
- Flash Lamps
- Particle Accelerators
- Pulsed Lasers
- High Energy Dynodes
- DC Filters

Typical Specifications

AEROVOX TYPE	TYPE S	TYPE Z	TYPE Q	TYPE C
Electrodes	Aluminum foil	Single side	Single side	Single side
Dielectric	Polypropylene	Polypropylene	Polypropylene	PET (high energy density)
Impregnated	Yes	Yes	Yes	Yes
Dry	No	Yes	Yes	Yes
Capacitance Range	0.1 to 1,000 µF	1 to 4,000 µF	10 to 6,000 µF	100 to 10,000 µF
Voltage Levels	0.5 to 50 kV	0.5 to 50 kV	1 to 50 kV	0.3 to 1.5 kV
Peak Current Levels	Up to 150 kA	Up to 60 kA	Up to 30 kA	Up to 10 kA
Pulse Life, Nominal	250K to 10 million	100 million	250K	250K
Rep Rate	1 to 120 per minute	1 to 120 per minute	1 to 4 per minute	Up to 2 per minute

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Typical Specifications (cont.)

AEROVOX TYPE	TYPE S	TYPE Z	TYPE Q	TYPE C
Reversal	Up to 95%	Up to 90%	Up to 80%	Up to 20%
DC Life	20,000 hours	N/A	N/A	N/A
DF% @ 120 Hz	N/A	0.10%	0.60%	1.50%
DF% @ 1 kHz	0.50%	1.0%	N/A	N/A
Energy Density (J/gm)	0.08	0.19	1.0	0.7
Energy Density (J/cc)	0.12	0.21	1.1	1.0
Package: Metal Case, Oil-Filled				
Round	No	Yes	Yes	Yes
Oval	Yes	Yes	Yes	Yes
Rectangular	Yes	Yes	Yes	Yes
Package: Metal Case, Epoxy-Filled				
Oval	No	Yes	No	No
Rectangular	No	Yes	Yes	Yes
Package: Plastic Case, Epoxy-Filled				
Round	No	Yes	Yes	Yes
Oval	No	Yes	Yes	Yes
Box	No	Yes	Yes	Yes
Tubular	No	Yes	Yes	Yes
Function	Pulse forming and DC filtering			

About Aerovox

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Aerovox®

Snubber Capacitors

FILM CAPACITORS FOR
IGBT POWER ELECTRONICS
APPLICATIONS

RoHS COMPLIANT

Intelligent Capacitor Solutions

As a world-class supplier of capacitors for industrial, medical and specialty applications, Aerovox can address all of your capacitor needs. Aerovox's snubber capacitors provide the highest electrical performance of any snubber capacitors currently available.

Constructed of polypropylene film dielectric and dual metallized film electrodes, our snubbers are the optimal capacitor design for IGBT (Insulated Gate Bipolar Transistors) applications. They combine high current carrying capability with low inductance, low dielectric losses and capacitance stability across a wide frequency range.

All capacitors are built using Lean Six Sigma manufacturing practices and undergo rigorous quality assurance testing under an ISO 9001-certified quality management system. Our products undergo 100% electrical testing to further ensure high level performance. If you have specialized needs, our flexible manufacturing processes allow us to quickly provide custom configurations.

Aerovox provides intelligent capacitor solutions.

Snubber Capacitors

RoHS COMPLIANT

FILM CAPACITORS FOR IGBT POWER ELECTRONICS APPLICATIONS

Snubber capacitors are designed for the high peak current operation required for protection against transient voltages. Such voltages are caused by the high di/dt generated in switching power electronics applications.

Aerovox IGBT Snubber capacitors are offered in standard voltages of 630 VDC to 3,000 VDC for 100,000-hour operation. They are available with direct IGBT module terminals, radial wire leads, or a unique printed circuit board dual in-line pin mount.

Applications

- Inverters
- Electric Vehicles
- UPS (Uninterruptible Power Supplies)
- Alternative Energy Power Management Systems
- Switch Mode Power Supplies
- Power Supplies
- Motor Controllers

Highlights

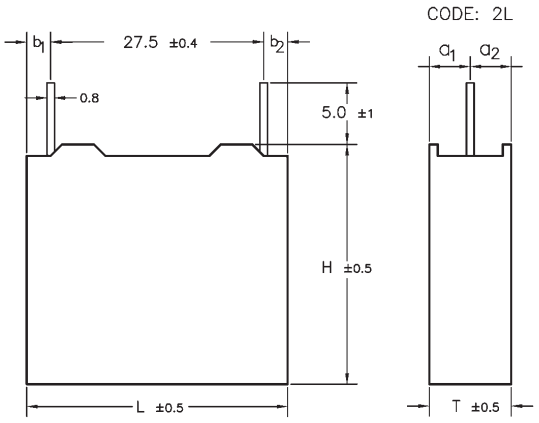
- High dV/dt
- Direct or board mount configurations
- RoHS compliant
- Wide temperature range; low ESR
- Low inductance
- CE (IEC) 61071 certified

Specifications

Capacitance Range:	0.033 µF to 20.0 µF
Capacitance Tolerance:	±5% to ±10%
AC Voltage Range:	300 VAC to 1,000 VAC
DC Voltage Range:	630 VDC to 3,000 VDC
Operating Life:	>100,000 hours
Dissipation Factor:	<0.1% @ 1 kHz
Approval Certification:	CE to IEC 61071

Termination Options

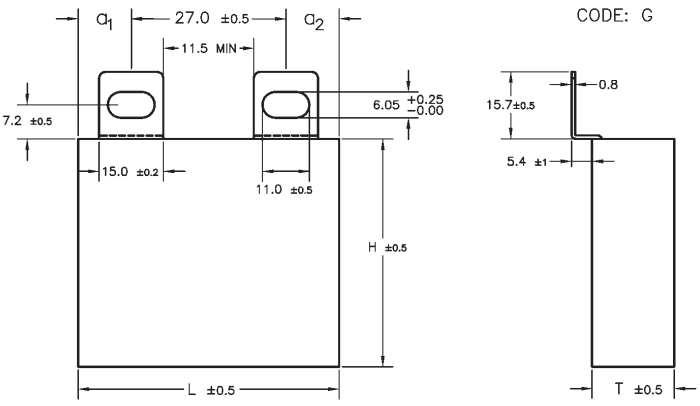
2 & 4 Pin PCB Terminals



$|a_1 - a_2| < 0.4$

$|b_1 - b_2| < 0.6$

Direct IGBT Mount Terminals



$|a_1 - a_2| < 0.5$

All dimensions in mm.

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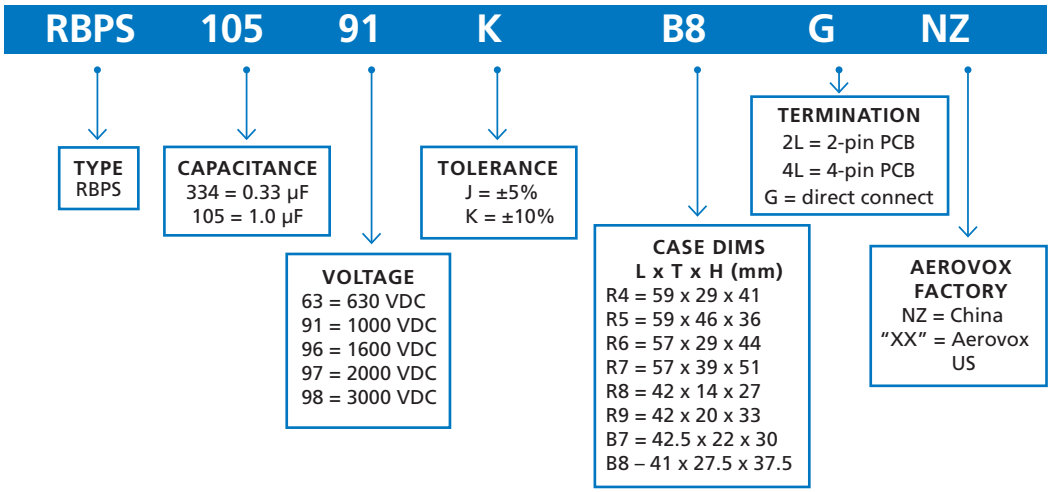
Part Numbering System

Aerovox's part numbering system is explained here using RBPS10591KB8GNZ as a representative part number:



Snubber Capacitor Specifications

CAP (µF)	AEROVOX P/N	PEAK CURRENT A (Ipeak)	RIPPLE CURRENT A (I_{RMS})	dV/dt (V/µs)	LENGTH L (mm)	THICKNESS T (mm)	HEIGHT H (mm)
Rated Voltage: 630 VDC (300 VAC 60 Hz)							
0.33	RBPS33463KR8GNZ	51	1	155	42.0	14.0	27.0
0.47	RBPS47463KR8GNZ	73	1	155	42.0	14.0	27.0
0.68	RBPS68463KR8GNZ	79	2	116	42.0	14.0	27.0
1.00	RBPS10563KR8GNZ	116	3	116	42.0	14.0	27.0
2.00	RBPS20563KR9GNZ	207	6	104	42.0	20.0	33.0
3.00	RBPS30563KR9GNZ	272	9	91	42.0	20.0	33.0
9.00	RBPS90563KR6GNZ	537	18	60	57.0	29.0	44.0
20.00	RBPS20663KR7GNZ	1194	40	60	57.0	39.0	51.0
Rated Voltage: 1,000 VDC (530 VAC 60 Hz)							
0.22	RBPS22491KR8GNZ	180	6	817	42.0	14.0	27.0
0.33	RBPS33491KR8GNZ	236	9	715	42.0	14.0	27.0
0.47	RBPS47491KR9GNZ	384	13	817	42.0	20.0	33.0
0.68	RBPS68491KR9GNZ	486	19	715	42.0	20.0	33.0
1.00	RBPS10591KB8GNZ	817	28	817	41.0	27.5	37.5
1.20	RBPS12591KB8GNZ	858	33	715	41.0	27.5	37.5
2.00	RBPS20591KR6GNZ	854	37	427	57.0	29.0	44.0
3.00	RBPS30591KR7GNZ	1465	45	488	57.0	39.0	51.0

CAP (µF)	AEROVOX P/N	PEAK CURRENT A (Ipeak)	RIPPLE CURRENT A (I_{RMS})	dV/dt (V/µs)	LENGTH L (mm)	THICKNESS T (mm)	HEIGHT H (mm)
Rated Voltage: 1,600 VDC (550 VAC 60 Hz)							
0.22	RBPS22496KR9GNZ	270	10	1226	42.0	20.0	33.0
0.33	RBPS33496KB8GNZ	404	14	1226	41.0	27.5	37.5
0.47	RBPS47496KB8GNZ	576	20	1226	41.0	27.5	37.5
0.68	RBPS68496KR6GNZ	498	20	732	57.0	29.0	44.0
1.00	RBPS10596KR6GNZ	732	29	732	57.0	29.0	44.0
2.00	RBPS20596KR7GNZ	1343	45	671	57.0	39.0	51.0
Rated Voltage: 2,000 VDC (800 VAC 60 Hz)							
0.033	RBPS33397KR8GNZ	96	2	2912	42.0	14.0	27.0
0.047	RBPS47397KR8GNZ	120	3	2548	42.0	14.0	27.0
0.068	RBPS68397KR9GNZ	198	4	2912	42.0	20.0	33.0
0.10	RBPS10497KR9GNZ	255	6	2548	42.0	20.0	33.0
0.22	RBPS22497KB8GNZ	560	14	2548	41.0	27.5	37.5
0.33	RBPS33497KR6GNZ	480	14	1456	57.0	29.0	44.0
0.47	RBPS47497KR6GNZ	599	20	1274	57.0	29.0	44.0
0.68	RBPS68497KR7GNZ	990	29	1456	57.0	39.0	51.0
1.00	RBPS10597KR7GNZ	1274	43	1274	57.0	39.0	51.0
Rated Voltage: 3,000 VDC (1,000 VAC 60 Hz)							
0.033	RBPS33398KR9GNZ	144	3	4367	42.0	20.0	33.0
0.047	RBPS47398KR9GNZ	188	4	4003	42.0	20.0	33.0
0.068	RBPS68398KB8GNZ	297	6	4367	41.0	27.5	37.5
0.10	RBPS10498KB8GNZ	364	9	3639	41.0	27.5	37.5
0.22	RBPS22498KR6GNZ	400	16	1820	57.0	29.0	44.0
0.33	RBPS33498KR7GNZ	721	24	2184	57.0	39.0	51.0
0.47	RBPS47498KR7GNZ	855	34	1820	57.0	39.0	51.0

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Andhra Pradesh State
India

SN01308 Printed in the USA

Aerovox®

UPS Capacitors

High reliability for essential functions

Aerovox's line of UPS capacitors are constructed with metalized polypropylene film technology using the latest design techniques and testing methods to assure high quality and long life.

Reliability essential to UPS systems is accomplished by Aerovox's unique testing protocol. After the standard final electrical test, a high voltage five-minute burn-in/aging test is performed on all UPS capacitors, followed by five high current discharge pulses. Developed specifically for UPS capacitors, this testing protocol effectively screens out the potential for infantile or early life failures, which must be avoided in any type of UPS application.

Applications

UPS Systems for:

- Data centers
- High density power zones
- Buildings and critical industrial processes
- Other industrial or facility applications

Highlights

- Made to EIA-456-A standards
- Round or oval, oil-filled aluminum cases
- Long life
- Non-toxic
- Maintenance free
- UL-810 fault current protection
- Proprietary pressure sensitive interrupter system
- Ratings available with discharge resistors and mounting studs
- RoHS compliant

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Specifications

Capacitance Range:	10 µF to 120 µF
Capacitance Tolerance:	±6% standard; ±3% or +5/-1% for some ratings
AC Voltage Range:	240 VAC to 660 VAC
Temperature Range:	-40°C to +70°C standard
Approval Certification:	UL, cUL

The life of capacitors in UPS systems is dependent on many factors. Capacitors should be replaced as part of normal UPS system preventative maintenance programs, before you experience end-of-life failures. For assistance, please contact Aerovox at 508-910-3500 or email sales1@aerovox.com

AC Film Capacitors for UPS Applications

Round Oil-Filled, Aluminum Case

Rated for 60,000 hour duty @ 70°C

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches
240 VAC, 70°C Case Temperature			
15	Z23S2415M50N	P	3.75
20	Z23S2420M50N	P	2.36
20	Z23S2420M50N	P	2.75
25	Z23S2425M50N	P	2.56
30	Z23S2430M50N	P	3.13
40	Z23S2440M50N	P	3.75
50	Z23S2450M50N	P	3.75
80	Z26S2480M50N	T	3.75
120	Z26S2412N50N	T	3.95
300 VAC, 70°C Case Temperature			
120	Z26S3012N50N	T	4.92
310 VAC, 70°C Case Temperature			
90	Z26S3190MT5	T	4.75
370 VAC, 70°C Case Temperature			
10	Z23S3710M50N	P	2.36
60	Z26S3760M56N	T	3.75
70	Z26S3770M50N	T	4.33
75	Z26S3775M50N	T	4.75
90	Z26S3790M50N	T	4.33
440 VAC, 70°C Case Temperature			
30	Z26S4430M50N	T	2.95
40	Z26S4440M50N	T	4.50
56	Z26S4456M51N	T	3.75
56	Z26S4456M50N	T	4.50
550 VAC, 70°C Case Temperature			
30	Z26S5530M50N	T	3.75
92	Z26S5592MT5	T	7.50
580 VAC, 70°C Case Temperature			
46	Z26S5846M50N	T	4.75
70	Z26S5870M50N	T	6.69
92	Z26S5892MT5	T	7.50

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches
600 VAC, 70°C Case Temperature			
21	Z26S6021M50N	T	3.15
25	Z26S6025M50N	T	3.31
28	Z26S6028M50N	T	3.75
30	Z26S6030M56N	T	4.75
40	Z26S6040M56N	T	4.75
45	Z26S6045M50N	T	4.75
660 VAC, 70°C Case Temperature			
20	Z26S6620M50N	T	3.54
30	Z26S6630M50N	T	3.75

Oval Oil-Filled, Aluminum Case

Rated for 60,000 hour duty @ 70°C

CAP (µF)	AEROVOX P/N	BASE SIZE	CAN HEIGHT Inches
660 VAC, 70°C Case Temperature			
25	Z64S6625M50N	A	4.29
25	Z62S6625M50N	D	3.75
35	Z62S6635M50N	D	4.75
50	Z62S6650M50N	D	5.12

Round Oil-Filled Case Sizes

Base Size	Description	D Inches	D_2 Inches
P	1¾" Round	1.75	1.87
T	2½" Round	2.50	2.62

For P" OD units, spacing is 0.78" rather than 0.81"

Oval Oil-Filled Case Sizes

Base Size	Description	L Inches	W Inches
A	1¼" Oval	2.16	1.31
D	2" Oval	3.66	1.97

M50N = Standard

M5IN = Discharge Resistor

M56N = Case Mounting Stud

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