Pulse & Custom Capacitors

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

Intelligent Capacitor Solutions



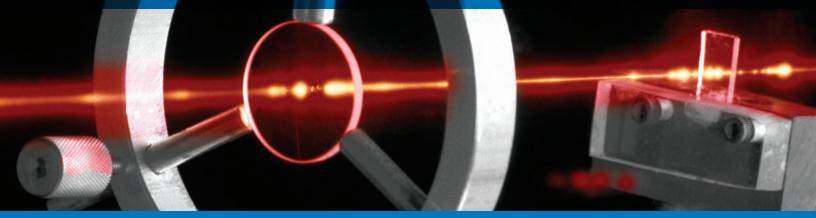




Aerovox's deep technical capabilities and flexible manufacturing processes enable us to meet the unique requirements of demanding pulse, flash lamp, laser and other custom applications. We have a long history in the pulse power area where different capacitor technologies are needed to satisfy the particularly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





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



Applications

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

Typical Specifications

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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

AEROVOX TYPE	TYPE S	TYPE Z	TYPE Q	ТҮРЕ С
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	ТҮРЕ С	
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	

 Tubular
 No

 Function
 Pulse forming and DC filtering

No

About Aerovox

Box

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.

Yes

Yes

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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Yes

Yes

Yes

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