

# Paper (Kraft) and Foil Type PF Retro Capacitors

The Electrocube Type PF series offers original vintage tone for guitars and amplifiers in a wide range of sizes and configurations. Its paper oil-filled construction encased in a metal tube, then hermetically sealed, makes for high performance and long life characteristics. Proudly made in the U.S., the Type PF Retro series is part of a designated line of capacitors specially optimized for the high-end audio industry using design and manufacturing techniques proprietary to Electrocube. Audio engineers prefer the authentic, old-style soft sound it creates for professional, commercial stage and studio use.

## Specifications

### Temperature range

- -55°C to +85°C at rated voltage
- Up to +125°C with 50% voltage derating

### Dielectric strength

- Will withstand 200% at rated voltage and 25°C for a period not to exceed 1 minute
- Current limited to 5 mA

### Life test

- Will withstand rated voltage for 250 hours at +125°C with not more than 1 failure in 12 permitted

### Dissipation factor

- Will not exceed 1.0% at 25°C

### Acceptance criteria

- Measurement frequency for capacitance and dissipation factor will be:
  - 1,000 Hz for values up to 1 mfd.
  - 120 Hz for values over 1 mfd.

### Insulation resistance

- At rated voltage or 500 V, whichever is less, units will meet minimum values as follows:

TEMP. (°C)	MEG X MFD.	MEG (need not exceed)
	200 V - UP	200 V - UP
25	250	1500
85	25	500
125	2.5	50



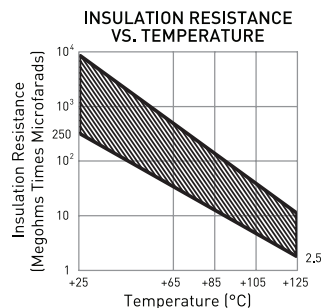
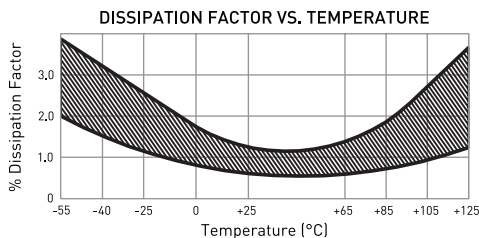
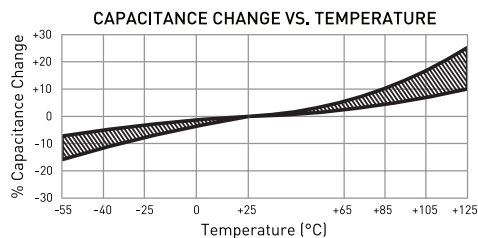
### Type PF Retro Series

Available in round shape with axial-lead, oil-filled, metal enclosure hermetically sealed

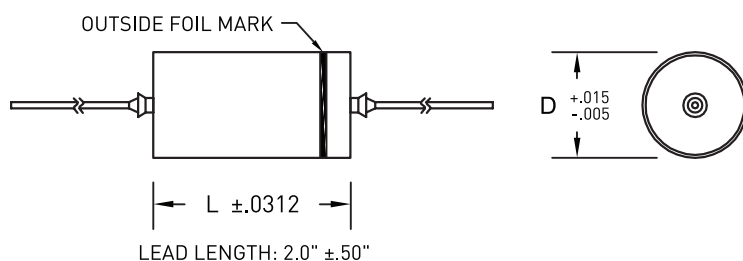
## Features

- Non-inductively wound extended foil construction with standard tin-coated, oxygen-free solid copper leads
- Tolerances available to 10%
- Voltages available from 200 VDC to 600 VDC
- Compliance and certification to worldwide and other environmental standards available upon request; available in Non-RoHS construction only
- Customizable insulating sleeves, mountings, special terminals, non-standard leads, circuit connections and other hardware
- Assorted styles, ratings and customization for unusual requirements necessitated by special circuit applications (including higher IR or lower DF)

Typical Dielectric Characteristic Curves



Round Configuration



200 VOLT DC					400 VOLT DC				600 VOLT DC			
MFD.	PART NO.	DIMENSIONS		LEAD SIZE (AWG)	PART NO.	DIMENSIONS		LEAD SIZE (AWG)	PART NO.	DIMENSIONS		LEAD SIZE (AWG)
		D	L			D	L			D	L	
.0010	PFD1C102*	.235	.687	22	PFD1E102*	.235	.687	22	PFD1F102*	.235	.687	22
.0015	PFD1C152*	.235	.687	22	PFD1E152*	.235	.687	22	PFD1F152*	.235	.687	22
.0022	PFD1C222*	.235	.687	22	PFD1E222*	.235	.687	22	PFD1F222*	.235	.687	22
.0033	PFD1C332*	.235	.687	22	PFD1E332*	.235	.687	22	PFD1F332*	.312	.812	22
.0047	PFD1C472*	.235	.687	22	PFD1E472*	.235	.687	22	PFD1F472*	.312	.812	22
.0068	PFD1C682*	.235	.687	22	PFD1E682*	.235	.687	22	PFD1F682*	.312	.812	22
.010	PFD1C103*	.235	.687	22	PFD1E103*	.235	.687	22	PFD1F103*	.312	.812	22
.015	PFD1C153*	.235	.687	22	PFD1E153*	.235	.687	22	PFD1F153*	.400	.812	20
.022	PFD1C223*	.235	.687	22	PFD1E223*	.312	.812	22	PFD1F223*	.400	.812	20
.033	PFD1C333*	.312	.812	22	PFD1E333*	.312	.812	22	PFD1F333*	.400	1.062	20
.047	PFD1C473*	.312	.812	22	PFD1E473*	.400	1.062	20	PFD1F473*	.400	1.312	20
.068	PFD1C683*	.312	.812	20	PFD1E683*	.400	1.062	20	PFD1F683*	.562	1.062	20
.10	PFD1C104*	.400	.812	20	PFD1E104*	.400	1.312	20	PFD1F104*	.562	1.312	20
.15	PFD1C154*	.400	1.062	20	PFD1E154*	.562	1.062	20	PFD1F154*	.562	1.562	20
.22	PFD1C224*	.410	1.312	20	PFD1E224*	.562	1.312	20	PFD1F224*	.670	1.562	20
.33	PFD1C334*	.562	1.062	20	PFD1E334*	.562	1.812	20	PFD1F334*	.750	2.062	20
.47	PFD1C474*	.562	1.312	20	PFD1E474*	.670	1.812	20	PFD1F474*	.750	2.312	20
.68	PFD1C684*	.562	1.812	20	PFD1E684*	.750	2.062	20	PFD1F684*	-	-	-
1.0	PFD1C105*	.670	1.812	20	PFD1E105*	1.00	1.812	20	PFD1F105*	-	-	-
1.5	PFD1C155*	-	-	-	PFD1E155*	-	-	-	PFD1F155*	-	-	-
2.0	PFD1C205*	-	-	-	PFD1E205*	-	-	-	PFD1F205*	-	-	-
2.2	PFD1C225*	-	-	-	PFD1E225*	-	-	-	PFD1F225*	-	-	-

\* Add tolerance designator to complete part number: K = ±10%, M = ±20%

For questions and/or a quote, contact Sales at 909-595-4037 or info@electrocube.com.



Founded in 1961, Electrocube is one of the most respected design manufacturers of passive electrical components – film capacitors, RC Networks, EMI Filters and foil transformers – for a wide range of standard and custom applications in the aerospace, audio, elevator, heavy equipment industries and more. Electrocube’s hallmark is its clear understanding of the challenges faced by design engineers and purchasing agents as well as audio engineers, editors and musicians in the high-end audio industry. [www.electrocube.com](http://www.electrocube.com)