

ElectroFilm ElectroFilm Technology - A Film Alternative for Electrolytic Capacitors

Metallized
Polyester & Polypropylene

Screw Terminal, Snap-In and
Custom Case Configurations



ElectroFilm Technology is a material system used by CDE to fabricate custom capacitors for stable high capacitance, high voltage and/or high current and low ESR applications. ElectroFilm can be made with metallized polypropylene or metallized polyester at very high capacitance values and could be used to replace electrolytic capacitors where increased reliability is desired. ElectroFilm is self-healing, non-polar, and typically has 10 times the ripple current capability, 20 times greater life expectancy and 500 times lower ESR than comparable electrolytic capacitors. A lower in-place cost is achieved by using ElectroFilm Capacitors, because 65% fewer capacitors are generally needed when compared to aluminum electrolytic capacitors for the same application.

Features

Voltage Range: 300 Vdc to 1200 Vdc
Capacitance Range: 7.5 μ F to 600 μ F
Operating Temperature Range: -55° C to +85° C
Ripple Current Capability:
25 °C 13.8 Arms to 39.2 Arms
50 °C 11.1 Arms to 31.5 Arms
75 °C 6.8 Arms to 19.2 Arms

Type Designation

UNL - Snap-In Capacitor Metallized Polypropylene

UPP - Screw Terminal Metallized Polypropylene

UPE - Screw Terminal Metallized Polyester

CDE ElectroFilm Capacitors - Alternative to Aluminum Electrolytics

Catalog Number	Cap μF	Vdc	Diel.	D		H		S	E.S.R. $\text{m}\Omega$ @ 1 kHz	25 °C Arms	50 °C Arms	75 °C Arms	Joules	dV/dt $\text{V}/\mu\text{s}$	ESL (nH)	S.R.F. kHz
				In.	mm	In.	mm									
UNL12W7P5K	7.5 μF	1200 Vdc	MPP	1.42	36.07	2.12	53.85	0.500	14.0	13.8	11.1	6.8	5.40	208	35	309
UNL6W30K	30 μF	600 Vdc	MPP	1.42	36.07	2.12	53.85	0.500	8.0	18.1	14.6	8.9	5.40	104	35	155
UNL5W35K	35 μF	500 Vdc	MPP	1.42	36.07	2.12	53.85	0.500	8.0	18.6	15.0	9.1	4.38	91	35	143
UPE10W120K	120 μF	1000 Vdc	MPE	3.00	76.2	5.13	130.2	1.250	18.0	25.6	20.6	12.5	60.0	71	81	71
UPE6W240K	240 μF	600 Vdc	MPE	3.00	76.2	4.13	104.8	1.250	8.5	32.7	26.2	16.0	43.2	58	61	42
UPE3W600K	600 μF	300 Vdc	MPE	3.00	76.2	3.13	79.38	1.250	5.0	39.2	31.5	19.2	27.0	39	47	30
UPP12W30K	30 μF	1200 Vdc	MPP	2.50	63.5	3.13	79.38	1.125	6.2	30.3	24.3	14.8	21.6	172	42	143
UPP12W60K	60 μF	1200 Vdc	MPP	2.50	63.5	4.13	104.8	1.125	7.5	31.1	24.9	15.2	43.2	64	82	70
UPP6W120K	120 μF	600 Vdc	MPP	2.50	63.5	3.13	79.38	1.125	5.0	36.7	29.4	18.0	21.6	82	43	70

