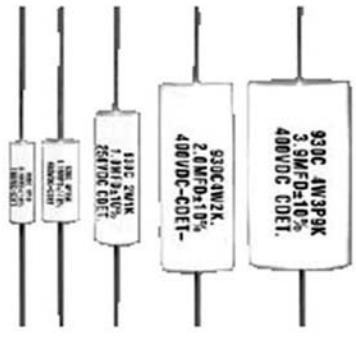
Type 930 Polypropylene Film Capacitors

Metallized, Axial Leads



High Voltage/High Frequency Switching Power Supplies

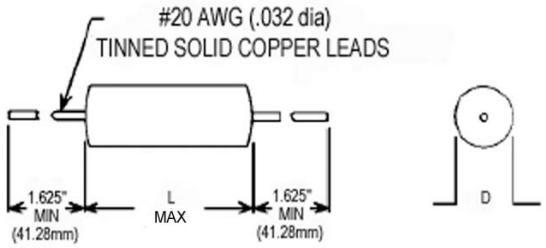
Type 930 axial-leaded, metallized polypropylene capacitors are available in a wide range of capacitance values in reduced sizes. Flame-retardant tape wrap and epoxy end seals provide moisture resistance. Used most frequently in high-voltage/high-frequency switching power supplies where superior stability and AC performance characteristics are important. This non-protected film capacitor has Underwriters Laboratories, Inc. recognition for construction only. U.L. File Number assigned is E128034(N).

Specifications

Voltage Range: 100-630 Vdc (70-275 Vac, 60 Hz)
Capacitance Range: .022-10 µF
Capacitance Tolerance: ±10% (K) standard
±5% (J) optional
Operating Temperature Range: –55 °C to 105 °C*

*Full-rated voltage at 85°C–Derate linearly to 50%-rated voltage at 105 °C

Dielectric Strength: 200% (1 minute)
Dissipation Factor: .10% Max. (25 °C, 1kHz)
Insulation Resistance: 200,000 MΩ x µF
400,000 MΩ Min.
Life Test: 1,000 Hours at 85 °C at 125% Rated Voltage



NOTE: Other capacitance values, sizes and performance specifications are available. Contact us.

Ratings and Dimensions — Normally Stocked

Cap. µF	Catalog Part Number	D Maximum Inches	D Maximum (mm)	L Max Inches	L Max (mm)	ESR (milliohms) 20-100 kHz	dV/dt V/µs	Maximum Ripple Current (Amps rms) at 20 kHz Case Temperature +25 °C	+35 °C	+45 °C	+55 °C	+65 °C	+75 °C	+85 °C
100 Vdc (70 Vac)														
0.22	930C1P22K	0.275	(7.0)	0.750	(19.0)	---	25							
0.27	930C1P27K	0.298	(7.6)	0.750	(19.0)	---	25							
0.33	930C1P33K	0.324	(8.2)	0.750	(19.0)	---	25							
0.39	930C1P39K	0.347	(8.8)	0.750	(19.0)	---	25							
0.47	930C1P47K	0.376	(9.5)	0.750	(19.0)	37	25	3.7	3.4	3.1	2.8	2.5	2.0	1.4
0.56	930C1P56K	0.321	(8.2)	1.000	(25.4)	35	14	3.9	3.6	3.3	2.9	2.6	2.1	1.5
0.68	930C1P68K	0.348	(8.8)	1.000	(25.4)	33	14	4.1	3.8	3.5	3.1	2.8	2.2	1.6
0.82	930C1P82K	0.377	(9.6)	1.000	(25.4)	31	14	4.3	4.0	3.6	3.2	2.9	2.3	1.7
1.00	930C1W1K	0.421	(10.7)	1.000	(25.4)	26	14	5.5	5.1	4.7	4.2	3.6	2.8	2.6
1.20	930C1W1P2K	0.454	(11.5)	1.000	(25.4)	24	14	5.7	5.3	4.9	4.4	3.8	3.0	2.8
1.50	930C1W1P5K	0.500	(12.7)	1.000	(25.4)	20	14	6.1	5.5	5.1	4.6	4.0	3.2	3.1
1.80	930C1W1P8K	0.541	(13.7)	1.000	(25.4)	19	14	6.3	5.7	5.3	4.8	4.1	3.4	3.0
2.00	930C1W2K	0.486	(12.3)	1.250	(31.7)	18	10	6.5	6.0	5.5	4.9	4.2	3.5	3.2
2.20	930C1W2P2K	0.507	(12.9)	1.250	(31.7)	18	10	6.8	6.3	5.7	2.1	4.4	3.6	3.3
2.70	930C1W2P7K	0.554	(14.1)	1.250	(31.7)	17	10	7.1	6.5	6.0	5.3	4.6	3.7	3.4
3.00	930C1W3K	0.581	(14.8)	1.250	(31.7)	16	10	7.3	6.7	6.2	5.5	4.8	3.9	3.5
3.30	930C1W3P3K	0.606	(15.4)	1.250	(31.7)	16	10	7.4	6.8	6.4	5.6	4.9	4.0	3.6
3.90	930C1W3P9K	0.654	(16.6)	1.250	(31.7)	15	10	7.6	6.9	6.6	5.8	5.1	4.1	3.7
4.00	930C1W4K	0.537	(13.6)	1.750	(44.4)	15	6	7.8	7.0	6.7	5.9	5.2	4.2	3.8

Type 930 Polypropylene Film Capacitors

Cap. µF	Catalog Part Number	D Maximum Inches	D Maximum (mm)	L Max ±.062 (1.6) Inches	L Max ±.062 (1.6) (mm)	ESR (milliohms) 20-100 kHz	dV/dt V/µs	Maximum Ripple Current (Amps rms) at 20 kHz Case Temperature +25 °C	+35 °C	+45 °C	+55 °C	+65° C	+75 °C	+85 °C
4.70	930C1W4P7K	0.577	(14.7)	1.750	(44.4)	15	6	8.1	7.4	6.8	6.0	5.3	4.3	3.9
5.00	930C1W5K	0.593	(15.1)	1.750	(44.4)	14	6	8.3	7.6	7.0	6.2	5.4	4.4	4.0
5.60	930C1W5P6K	0.624	(15.8)	1.750	(44.4)	14	6	8.4	7.7	7.1	6.4	5.5	4.5	4.1
6.00	930C1W6K	0.644	(16.4)	1.750	(44.4)	14	6	8.5	7.8	7.2	6.5	5.6	1.6	4.2
6.80	930C1W6P8K	0.682	(17.3)	1.750	(44.4)	13	6	8.5	8.0	7.4	6.7	5.7	4.7	4.3
8.00	930C1W8K	0.735	(18.7)	1.750	(44.4)	13	6	8.6	8.3	7.7	6.8	6.0	4.8	4.4
8.20	930C1W8P2K	0.743	(18.9)	1.750	(44.4)	13	6	8.8	8.6	8.0	7.0	6.1	4.9	4.5
10.00	930C1W10K	0.815	(20.7)	1.750	(44.4)	12	6	9.0	9.0	8.5	7.6	6.6	5.4	4.9
						250 Vdc (175 Vac)								
0.10	930C2P1K	0.315	(8.0)	0.750	(19.0)	---	37							
0.12	930C2P12K	0.315	(8.0)	0.750	(19.0)	---	37							
0.15	930C2P15K	0.335	(8.5)	0.750	(19.0)	---	37							
0.18	930C2P18K	0.353	(9.0)	0.750	(19.0)	---	37							
0.22	930C2P22K	0.335	(8.5)	1.000	(25.4)	---	21							
0.27	930C2P27K	0.333	(8.5)	1.000	(25.4)	---	21							
0.33	930C2P33K	0.362	(9.2)	1.000	(25.4)	---	21							
0.39	930C2P39K	0.389	(9.9)	1.000	(25.4)	---	21							
0.47	930C2P47K	0.422	(10.7)	1.000	(25.4)	35	21	3.8	3.7	3.6	3.4	2.9	2.4	1.7
0.56	930C2P56K	0.464	(11.8)	1.000	(25.4)	33	21	3.9	3.8	3.7	3.5	3.1	2.5	1.8
0.68	930C2P68K	0.472	(12.0)	1.250	(31.7)	32	15	4.0	3.9	3.8	3.7	3.2	2.6	1.9
0.82	930C2P82K	0.471	(12.0)	1.250	(31.7)	31	15	4.2	4.1	4.0	3.9	3.4	2.8	2.0
1.00	930C2W1K	0.513	(13.0)	1.260	(32.0)	28	15	4.4	4.4	4.4	4.4	4.3	3.5	3.2
1.20	930C2W1P2K	0.554	(14.1)	1.260	(32.0)	27	15	4.7	4.6	4.5	5.0	4.5	3.7	3.3
1.50	930C2W1P5K	0.613	(15.6)	1.260	(32.0)	26	15	5.1	5.0	4.9	5.4	4.7	3.9	3.5
1.80	930C2W1P8K	0.667	(16.9)	1.250	(31.7)	25	15	5.9	5.8	5.7	5.7	5.0	4.1	3.7
2.00	930C2W2K	0.700	(17.8)	1.250	(31.7)	21	15	7.2	7.2	6.8	6.0	5.2	4.3	3.9
2.20	930C2W2P2K	0.650	(16.5)	1.750	(44.4)	20	9	8.4	7.5	7.0	6.3	5.4	4.5	4.1
2.70	930C2W2P7K	0.669	(17.0)	1.750	(44.4)	19	9	8.6	7.8	7.3	6.6	5.7	4.7	4.3
3.00	930C2W3K	0.703	(17.8)	1.750	(44.4)	18	9	9.0	8.3	7.6	6.8	5.9	4.8	4.4
3.30	930C2W3P3K	0.734	(18.6)	1.750	(44.4)	18	9	9.0	8.4	7.8	7.0	6.0	4.9	4.5
3.90	930C2W3P9K	0.794	(20.2)	1.750	(44.4)	17	9	9.0	8.5	8.0	7.2	6.2	5.0	4.6
4.00	930C2W4K	0.803	(20.4)	1.750	(44.4)	16	9	9.0	8.5	8.2	7.4	6.3	5.1	4.7
4.70	930C2W4P7K	0.866	(22.0)	1.750	(44.4)	16	9	9.0	8.8	8.5	7.7	6.6	5.3	4.9
5.00	930C2W5K	0.892	(22.6)	1.750	(44.4)	15	9	9.0	9.0	8.8	7.9	6.8	5.6	5.1
5.60	930C2W5P6K	0.941	(23.9)	1.750	(44.4)	15	9	9.0	9.0	8.9	8.0	7.0	5.8	5.3
6.00	930C2W6K	0.972	(24.7)	1.750	(44.4)	15	9	9.0	9.0	9.0	8.2	7.2	5.9	5.5
6.80	930C2W6P8K	0.882	(22.4)	2.250	(57.1)	15	9	9.0	9.0	9.0	8.4	7.4	6.0	5.6
8.00	930C2W8K	0.953	(24.2)	2.250	(57.1)	14	9	9.0	9.0	9.0	8.7	7.8	6.3	5.8
8.20	930C2W8P2K	0.964	(24.5)	2.250	(57.1)	14	9	9.0	9.0	9.0	8.8	7.9	6.4	5.9
10.00	930C2W10K	1.060	(26.9)	2.250	(57.1)	13	9	9.0	9.0	9.0	9.0	8.3	6.8	6.2
						400 Vdc (275 Vac)								
0.05	930C4S47K	0.315	(8.0)	0.750	(19.0)	---	49							
0.06	930C4S56K	0.315	(8.0)	0.750	(19.0)	---	49							
0.07	930C4S68K	0.315	(8.0)	0.750	(19.0)	---	49							
0.08	930C4S82K	0.320	(8.1)	0.750	(19.0)	---	49							
0.10	930C4P1K	0.348	(8.8)	0.750	(19.0)	---	49							
0.12	930C4P12K	0.299	(7.6)	1.000	(25.4)	---	28							
0.15	930C4P15K	0.335	(8.5)	1.000	(25.4)	---	28							
0.18	930C4P18K	0.353	(9.0)	1.000	(25.4)	---	28							
0.22	930C4P22K	0.385	(9.8)	1.000	(25.4)	---	28							

Cap.	Catalog	D Maximum		L +.062 (1.5)		ESR (milliohms)	dV/dt	Maximum Ripple Current (Amps rms) at 20 kHz Case Temperature						
(µF)	Number	Inches	(mm)	Inches	(mm)	20-100 kHz	V/µs	+25C	+35C	+45C	+55C	+65C	+75C	+85C
0.220	930C4P22K	.385	(9.8)	1.000	(25.4)	---	28							
0.270	930C4P27K	.421	(10.7)	1.000	(25.4)	---	28							
0.330	930C4P33K	.469	(11.9)	1.000	(25.4)	---	28							
0.390	930C4P39K	.503	(12.8)	1.000	(25.4)	---	28							
0.470	930C4P47K	.545	(13.8)	1.260	(32.0)	32	20	5.7	5.5	5.0	4.4	3.8	3.2	2.2
0.560	930C4P56K	.503	(12.8)	1.260	(32.0)	31	20	5.7	5.7	5.3	4.4	4.1	3.3	2.3
0.680	930C4P68K	.551	(14.0)	1.260	(32.0)	30	20	5.7	5.7	5.5	4.8	4.3	3.5	2.4
0.820	930C4P82K	.599	(15.2)	1.260	(32.0)	28	20	5.7	5.7	5.6	5.3	4.5	3.7	2.6
1.000	930C4W1K	.655	(16.6)	1.260	(32.0)	27	20	5.7	5.7	5.7	5.7	5.7	4.7	4.3
1.200	930C4W1P2K	.712	(18.1)	1.260	(32.0)	26	20	6.3	6.2	6.0	5.9	5.8	4.9	4.5
1.500	930C4W1P5K	.709	(18.0)	1.750	(44.4)	25	13	7.0	6.9	6.7	6.6	6.5	5.2	4.7
1.800	930C4W1P8K	.716	(18.2)	1.750	(44.4)	23	13	8.0	7.9	7.8	7.7	6.8	5.5	5.0
2.000	930C4W2K	.752	(19.1)	1.750	(44.4)	21	13	9.0	9.0	9.0	8.0	7.0	5.7	5.2
2.200	930C4W2P2K	.827	(21.0)	1.750	(44.4)	20	13	9.0	9.0	9.0	8.3	7.4	5.9	5.4
2.700	930C4W2P7K	.865	(22.0)	1.750	(44.4)	19	13	9.0	9.0	9.0	8.6	7.6	6.0	5.6
3.000	930C4W3K	.909	(23.1)	1.750	(44.4)	17	13	9.0	9.0	9.0	9.0	7.9	6.4	5.9
3.300	930C4W3P3K	.951	(24.1)	1.750	(44.4)	16	13	9.0	9.0	9.0	9.0	8.1	6.6	6.3
3.900	930C4W3P9K	1.031	(26.2)	1.750	(44.4)	15	13	9.0	9.0	9.0	9.0	8.3	6.8	6.5
						630 Vdc (275 Vac)								
0.022	930C6S22K	.315	(8.0)	.750	(19.0)	---	74							
0.027	930C6S27K	.315	(8.0)	.750	(19.0)	---	74							
0.033	930C6S33K	.334	(8.5)	.750	(19.0)	---	74							
0.039	930C6S39K	.358	(9.1)	.750	(19.0)	---	74							
0.047	930C6S47K	.388	(9.9)	.750	(19.0)	---	74							
0.056	930C6S56K	.418	(10.6)	.750	(19.0)	---	74							
0.068	930C6S68K	.354	(9.0)	1.000	(25.4)	---	43							
0.082	930C6S82K	.374	(9.5)	1.000	(25.4)	---	43							
0.100	930C6P1K	.433	(11.0)	1.000	(25.4)	---	43							
0.120	930C6P12K	.443	(11.2)	1.000	(25.4)	---	43							
0.150	930C6P15K	.512	(13.0)	1.260	(32.0)	---	30							
0.180	930C6P18K	.538	(13.7)	1.260	(32.0)	---	30							
0.220	930C6P22K	.496	(12.6)	1.260	(32.0)	---	30							
0.270	930C6P27K	.542	(13.8)	1.260	(32.0)	---	30							
0.330	930C6P33K	.593	(15.1)	1.260	(32.0)	---	30							
0.390	930C6P39K	.639	(16.2)	1.260	(32.0)	---	30							
0.470	930C6P47K	.696	(17.7)	1.457	(37.0)	28	20	6.8	6.3	5.8	5.2	4.5	3.6	2.6
0.560	930C6P56K	.608	(15.4)	1.750	(44.4)	26	19	7.4	6.9	6.3	5.6	4.8	4.0	2.8
0.680	930C6P68K	.709	(18.0)	1.750	(44.4)	25	19	7.8	7.2	6.6	5.9	5.1	4.2	2.9
0.820	930C6P82K	.724	(18.4)	1.750	(44.4)	22	19	8.1	7.5	6.9	6.2	5.3	4.3	3.1
1.000	930C6W1K	.794	(20.2)	1.850	(47.0)	18	19	8.6	7.9	7.3	6.5	5.6	4.6	3.6