

Type 935 Axial Leaded Metallized Polypropylene Film Capacitors

Capacitors for Power Supplies and High Current Circuits



Complies with the EU Directive 2002/95/EC requirement restricting the use of Lead (Pb), Mercury (Hg), Cadmium (Cd), Hexavalent chromium (Cr(VI)), PolyBrominated Biphenyls (PBB) and PolyBrominated Diphenyl Ethers (PBDE).

Type 935 axial-leaded, metallized polypropylene capacitors are designed for 20-100 kHz switching power supply input filtering, DC blocking and output filter applications where high current, high capacitance and low ESR values are important. Dry sections are sealed with flame-retardant outer wrap and epoxy end seals for moisture resistance. This film capacitor has Underwriters Laboratories, Inc. recognition for construction only under U.L. File Number E128034(N).

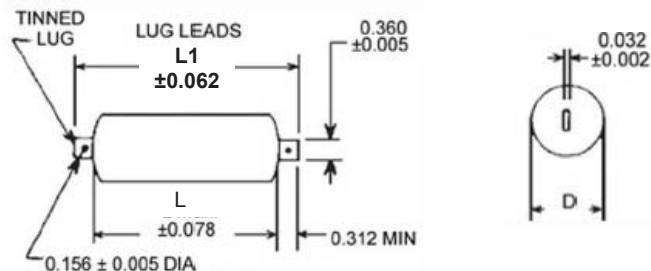
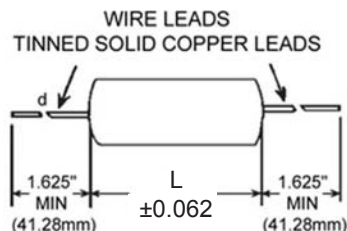
Highlights

- Great for high current circuits
- Available with lugs
- Flame-retardant outer wrap

Specifications

Capacitance Range:	1.0 μ F to 30.0 μ F
Voltage Range:	100 Vdc to 400 Vdc (70 Vac to 250 Vac, 60 Hz)
Capacitance Tolerance:	$\pm 10\%$ (K) Standard; $\pm 5\%$ (J) Optional
Operating Temperature Range:	$-55\text{ }^\circ\text{C}$ to $+105\text{ }^\circ\text{C}$ *Full-rated voltage at $85\text{ }^\circ\text{C}$, Derate linearly to 50% rated voltage at $105\text{ }^\circ\text{C}$
Dielectric Strength:	200% for 1 minute
Dissipation Factor:	0.1% Max. @ $25\text{ }^\circ\text{C}$, 1 kHz
Insulation Resistance:	200,000 $\text{M}\Omega \times \mu\text{F}$
Life Test:	1,000 hours @ $85\text{ }^\circ\text{C}$, 125% rated voltage

Outline Drawings



Ratings

RoHS Compliant

Cap. (μ F)	Catalog Part Number	D (Inches)	D (mm)	L ± 0.062		d (mm)	Max. ESR 20-100 kHz (m Ω)	dV/dt (V/ μ s)	Max. Ripple Current (Amps RMS) 20-100 kHz Case Temperature							
				(Inches)	(mm)				+25 $^\circ\text{C}$	+35 $^\circ\text{C}$	+45 $^\circ\text{C}$	+55 $^\circ\text{C}$	+65 $^\circ\text{C}$	+75 $^\circ\text{C}$	+85 $^\circ\text{C}$	
With Wire Leads																
100 Vdc (70 Vac)																
1	935C1W1K-F	0.469 \pm 0.062	(11.9) \pm (1.6)	0.750	(19.0)	0.032	(0.8)	15	25	9.2	8.5	7.8	7.0	6.0	4.9	4.5
2	935C1W2K-F	0.534 \pm 0.062	(13.6) \pm (1.6)	0.938	(23.8)	0.032	(0.8)	12	16	10.8	10.0	9.1	8.2	7.0	5.8	5.3
3	935C1W3K-F	0.624 \pm 0.093	(15.8) \pm (2.4)	0.938	(23.8)	0.040	(1.0)	11	16	12.1	11.2	10.3	9.2	8.0	6.5	5.9
5	935C1W5K-F	0.640 \pm 0.093	(16.3) \pm (2.4)	1.250	(31.7)	0.040	(1.0)	10	10	13.8	12.7	11.6	10.4	9.0	7.4	6.7
10	935C1W10K-F	0.805 \pm 0.093	(20.4) \pm (2.4)	1.500	(38.1)	0.040	(1.0)	9	8	15.0	15.0	14.2	12.7	11.0	9.0	8.2
20	935C1W20K-F	0.875 \pm 0.125	(22.2) \pm (3.2)	2.250	(57.1)	0.040	(1.0)	8	5	15.0	15.0	15.0	15.0	13.6	11.1	10.0
30	935C1W30K-F	1.075 \pm 0.125	(27.3) \pm (3.2)	2.250	(57.1)	0.040	(1.0)	6	5	15.0	15.0	15.0	15.0	15.0	12.4	11.4
With Wire Leads																
200 Vdc (140 Vac)																
1	935C2W1K-F	0.450 \pm 0.062	(11.4) \pm (1.6)	1.250	(31.7)	0.032	(0.8)	20	15	7.3	7.3	7.3	7.3	7.2	5.9	5.4
2	935C2W2K-F	0.605 \pm 0.093	(15.4) \pm (2.4)	1.250	(31.7)	0.032	(0.8)	15	15	12.0	12.0	11.3	10.1	8.7	7.1	6.5
3	935C2W3K-F	0.654 \pm 0.093	(16.6) \pm (2.4)	1.500	(38.1)	0.040	(1.0)	13	12	15.0	13.8	12.6	11.3	9.8	8.0	7.3
5	935C2W5K-F	0.769 \pm 0.093	(19.5) \pm (2.4)	1.750	(44.4)	0.040	(1.0)	11	9	15.0	15.0	14.7	13.1	11.4	9.3	8.5
10	935C2W10K-F	0.905 \pm 0.125	(23.0) \pm (3.2)	2.250	(57.1)	0.040	(1.0)	9	7	15.0	15.0	15.0	15.0	13.8	11.3	10.3
20	935C2W20K-F	1.315 \pm 0.125	(33.4) \pm (3.2)	2.250	(57.1)	0.040	(1.0)	6	7	15.0	15.0	15.0	15.0	15.0	14.1	12.8

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Cap. (μ F)	Catalog Part Number	D		L ± 0.062		d		Max. ESR 20-100 kHz		Max. Ripple Current (Amps RMS) 20-100 kHz						
		(Inches)	(mm)	(Inches)	(mm)	(Inches)	(mm)	(m Ω)	(V/ μ s)	Case Temperature						
										+25 °C	+35 °C	+45 °C	+55 °C	+65 °C	+75 °C	+85 °C
With Wire Leads																
400 Vdc (250 Vac)																
1	935C4W1K-F	0.620 \pm 0.093	(15.7) \pm (2.4)	1.500	(38.1)	0.032	(0.8)	19	19	9.5	9.5	9.5	9.5	9.5	7.8	7.1
2	935C4W2K-F	0.802 \pm 0.093	(20.4) \pm (2.4)	1.750	(44.4)	0.040	(1.0)	15	16	15.0	15.0	15.0	13.4	11.6	9.5	8.7
3	935C4W3K-F	0.961 \pm 0.125	(24.4) \pm (3.2)	1.750	(44.4)	0.040	(1.0)	12	16	15.0	15.0	15.0	15.0	13.1	10.7	9.8
5	935C4W5K-F	1.067 \pm 0.125	(27.1) \pm (3.2)	2.250	(57.1)	0.040	(1.0)	10	11	15.0	15.0	15.0	15.0	15.0	12.5	11.4
10	935C4W10K-F	1.543 \pm 0.125	(39.2) \pm (3.2)	2.250	(57.1)	0.040	(1.0)	6	11	15.0	15.0	15.0	15.0	15.0	15.0	14.1
With Lug Leads																
100 Vdc (70 Vac)																
1	935H1W1K-F	0.469 \pm 0.062	(11.9) \pm (1.6)	0.750	(19.0)	1.640	(41.6)	15	25	10.3	9.5	8.7	7.8	6.7	5.5	5.0
2	935H1W2K-F	0.534 \pm 0.062	(13.6) \pm (1.6)	0.938	(23.8)	1.828	(46.4)	12	16	12.0	11.0	10.0	8.9	7.8	6.3	5.8
3	935H1W3K-F	0.624 \pm 0.093	(15.8) \pm (2.4)	0.938	(23.8)	1.828	(46.4)	11	16	13.3	12.3	11.2	10.0	8.7	7.1	6.5
5	935H1W5K-F	0.640 \pm 0.093	(16.3) \pm (2.4)	1.250	(31.7)	2.098	(53.3)	10	10	14.8	13.7	12.5	11.2	9.7	7.9	7.2
10	935H1W10K-F	0.803 \pm 0.093	(20.4) \pm (2.4)	1.500	(38.1)	2.252	(57.2)	9	8	17.8	16.5	15.0	13.5	11.7	9.5	8.7
20	935H1W20K-F	0.875 \pm 0.125	(22.2) \pm (3.2)	2.250	(57.1)	3.054	(77.6)	8	5	21.6	20.0	18.3	16.4	14.2	11.6	10.6
30	935H1W30K-F	1.075 \pm 0.125	(27.3) \pm (3.2)	2.250	(57.1)	3.054	(77.6)	6	5	24.3	22.5	20.5	18.4	15.9	13.0	11.9
With Lug Leads																
200 Vdc (140 Vac)																
1	935H2W1K-F	0.450 \pm 0.062	(11.4) \pm (1.6)	1.250	(31.7)	2.098	(53.3)	20	15	7.3	7.3	7.3	7.3	7.3	6.4	5.8
2	935H2W2K-F	0.605 \pm 0.093	(15.4) \pm (2.4)	1.250	(31.7)	2.098	(53.3)	15	15	14.3	13.3	12.1	10.8	9.4	7.7	7.0
3	935H2W3K-F	0.654 \pm 0.093	(16.6) \pm (2.4)	1.500	(38.1)	2.252	(57.2)	13	12	15.9	14.7	13.5	12.0	10.4	8.5	7.8
5	935H2W5K-F	0.768 \pm 0.093	(19.5) \pm (2.4)	1.750	(44.4)	2.570	(65.3)	11	9	18.3	17.0	15.5	13.9	12.0	9.8	8.9
10	935H2W10K-F	0.905 \pm 0.125	(23.0) \pm (3.2)	2.250	(57.1)	3.054	(77.6)	9	7	22.4	20.7	18.9	16.9	14.6	12.0	10.9
20	935H2W20K-F	1.315 \pm 0.125	(33.4) \pm (3.2)	2.250	(57.1)	3.054	(77.6)	6	7	27.4	25.4	23.2	20.7	17.9	14.7	13.4
With Lug Leads																
400 Vdc (250 Vac)																
1	935H4W1K-F	0.620 \pm 0.093	(15.7) \pm (2.4)	1.500	(38.1)	2.252	(57.2)	19	19	9.5	9.5	9.5	9.5	9.5	8.3	7.5
2	935H4W2K-F	0.802 \pm 0.093	(20.4) \pm (2.4)	1.750	(44.4)	2.570	(65.3)	15	16	15.0	15.0	15.0	14.2	12.3	10.0	9.1
3	935H4W3K-F	0.961 \pm 0.125	(24.4) \pm (3.2)	1.750	(44.4)	2.570	(65.3)	12	16	21.1	19.5	17.8	15.9	13.8	11.3	10.3
5	935H4W5K-F	1.067 \pm 0.125	(27.1) \pm (3.2)	2.250	(57.1)	3.054	(77.6)	10	11	24.4	22.6	20.6	18.5	16.0	13.1	11.9
10	935H4W10K-F	1.543 \pm 0.125	(39.2) \pm (3.2)	2.250	(57.1)	3.054	(77.6)	6	11	30.0	27.8	25.4	22.7	19.7	16.1	14.7