

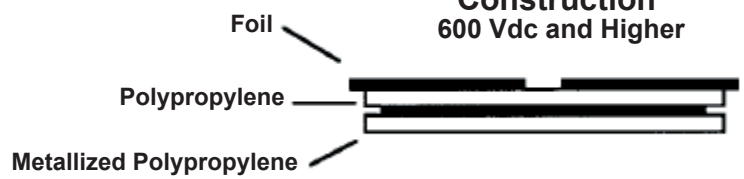
# Type 942C Very High dV/dt, Round Polypropylene Film Capacitors

## Round, Film/Foil/Metallized Hybrid, Axial Leaded



Type 942C round, axial film capacitors utilize a hybrid section design of polypropylene film, metal foils and metallized polypropylene dielectric to achieve both high peak current as well as superior rms current ratings. This series is ideal for high pulse operation and high peak current circuits.

### Construction 600 Vdc and Higher



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).

## Specifications

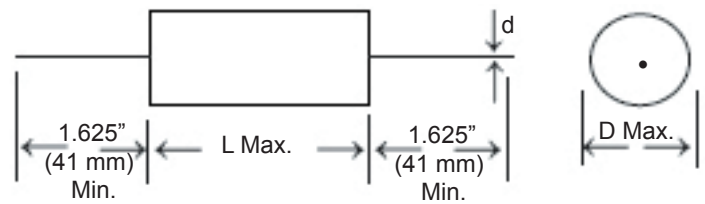
**Capacitance Range:** 0.01 to 2.5  $\mu\text{F}$

**Voltage Range:** 600 to 2000 Vdc  
(300 to 500 Vac, 60 Hz)

**Capacitance Tolerance:**  $\pm 10\%$

**Operating Temperature Range:**  $-55^{\circ}\text{C}$  to  $+105^{\circ}\text{C}^*$

\*Full-rated voltage at  $85^{\circ}\text{C}$ , derate linearly to 50% rated voltage at  $+105^{\circ}\text{C}$



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

## Ratings

Cap. ( $\mu\text{F}$ )	Catalog Part Number	D Inches(mm)	L Inches(mm)	d Inches(mm)	Typical ESR ( $\text{m}\Omega$ )	Typical ESL (nH)	dV/dt ( $\text{V}/\mu\text{s}$ )	$I_{\text{PEAK}}$ (A)	$I_{\text{RMS}}$ 70 $^{\circ}\text{C}$ 100 kHz (A)
<b>600 Vdc (300 Vac)</b>									
.15	942C6P15K-F	.551(14.0)	1.339(34.0)	.040(1.0)	5	21	1427	214	7.7
.22	942C6P22K-F	.630(16.0)	1.339(34.0)	.040(1.0)	7	22	1427	314	7.0
.33	942C6P33K-F	.748(19.0)	1.339(34.0)	.040(1.0)	6	23	1427	471	8.4
.47	942C6P47K-F	.866(22.0)	1.339(34.0)	.040(1.0)	5	24	1427	671	10.1
.68	942C6P68K-F	1.010(25.6)	1.339(34.0)	.047(1.2)	4	26	1427	970	12.4
1.00	942C6W1K-F	.925(23.5)	1.811(46.0)	.047(1.2)	5	30	800	800	11.8
1.50	942C6W1P5K-F	1.122(28.5)	1.811(46.0)	.047(1.2)	4	32	800	1200	14.8
2.00	942C6W2K-F	1.122(28.5)	2.126(54.0)	.047(1.2)	3	36	628	1256	18.2
2.20	942C6W2P2K-F	1.181(30.0)	2.126(54.0)	.047(1.2)	3	36	628	1382	18.8
2.50	942C6W2P5K-F	1.260(32.0)	2.126(54.0)	.047(1.2)	3	37	628	1570	19.5
<b>850 Vdc (360 Vac)</b>									
.15	942C8P15K-F	.610(15.5)	1.339(34.0)	.040(1.0)	5	22	1712	257	8.1
.22	942C8P22K-F	.709(18.0)	1.339(34.0)	.040(1.0)	7	23	1712	377	7.5
.33	942C8P33K-F	.846(21.5)	1.339(34.0)	.040(1.0)	6	24	1712	565	7.7
.47	942C8P47K-F	.984(25.0)	1.339(34.0)	.047(1.2)	5	26	1712	805	10.9
.68	942C8P68K-F	1.161(29.5)	1.339(34.0)	.047(1.2)	4	27	1712	1164	13.6
1.00	942C8W1K-F	1.102(28.0)	1.811(46.0)	.047(1.2)	5	32	960	960	13.1
1.50	942C8W1P5K-F	1.142(29.0)	2.126(54.0)	.047(1.2)	4	36	754	1131	15.9
2.00	942C8W2K-F	1.161(29.5)	2.520(64.0)	.047(1.2)	3	41	574	1148	19.9

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

# Type 942C Very High dV/dt, Round Polypropylene Film Capacitors

## Ratings

Cap. ( $\mu$ F)	Catalog Part Number	D Inches(mm)	L Inches(mm)	d Inches(mm)	Typical ESR (m $\Omega$ )	Typical ESL (nH)	dV/dt (V/ $\mu$ s)	I <sub>PEAK</sub> (A)	I <sub>RMS</sub> 70 °C 100 kHz (A)
<b>1000 Vdc (400 Vac)</b>									
.10	942C10P1K-F	.630(16.0)	1.339(34.0)	.040(1.0)	8	22	2283	228	6.6
.15	942C10P15K-F	.748(19.0)	1.339(34.0)	.040(1.0)	7	23	2283	342	7.8
.22	942C10P22K-F	.887(22.5)	1.339(34.0)	.040(1.0)	6	24	2283	502	9.3
.33	942C10P33K-F	.827(21.0)	1.811(46.0)	.040(1.0)	5	29	1280	422	11.0
.47	942C10P47K-F	.945(24.0)	1.811(46.0)	.047(1.2)	5	30	1280	601	11.9
.68	942C10P68K-F	1.122(28.5)	1.811(46.0)	.047(1.2)	5	32	1280	870	13.3
1.00	942C10W1K-F	1.181(30.0)	2.126(54.0)	.047(1.2)	5	37	1005	1005	14.6
1.40	942C10W1P4K-F	1.240(31.5)	2.520(64.0)	.047(1.2)	4	41	765	1071	17.9
<b>1200 Vdc (430 Vac)</b>									
.10	942C12P1K-F	.748(19.0)	1.339(34.0)	.040(1.0)	5	23	2854	285	9.2
.15	942C12P15K-F	.887(22.5)	1.339(34.0)	.040(1.0)	5	24	2854	428	10.2
.22	942C12P22K-F	1.043(26.5)	1.339(34.0)	.047(1.2)	6	26	2854	628	10.3
.33	942C12P33K-F	.965(24.5)	1.811(46.0)	.047(1.2)	6	31	1600	528	11.0
.47	942C12P47K-F	1.142(29.0)	1.811(46.0)	.047(1.2)	5	32	1600	752	13.4
.68	942C12P68K-F	1.201(30.5)	2.126(54.0)	.047(1.2)	5	37	1256	854	14.7
.90	942C12P9K-F	1.220(31.0)	2.520(64.0)	.047(1.2)	5	41	957	861	15.9
<b>1600 Vdc (460 Vac)</b>									
.022	942C16S22K-F	.472(12.0)	1.339(34.0)	.040(1.0)	27	20	3425	75	3.0
.033	942C16S33K-F	.571(14.5)	1.339(34.0)	.040(1.0)	14	21	3425	113	4.7
.047	942C16S47K-F	.650(16.5)	1.339(34.0)	.040(1.0)	8	22	3425	161	6.7
.068	942C16S68K-F	.748(19.0)	1.339(34.0)	.040(1.0)	6	23	3425	233	8.4
.100	942C16P1K-F	.887(22.5)	1.339(34.0)	.040(1.0)	4	24	3425	342	11.4
.150	942C16P15K-F	.807(20.5)	1.811(46.0)	.040(1.0)	5	29	1919	288	10.9
.220	942C16P22K-F	.925(23.5)	1.811(46.0)	.040(1.0)	5	68	1919	422	11.8
.330	942C16P33K-F	1.122(28.5)	1.811(46.0)	.047(1.2)	5	32	1919	633	13.3
.470	942C16P47K-F	1.181(30.0)	2.126(54.0)	.047(1.2)	5	36	1507	708	14.6
.560	942C16P56K-F	1.122(28.5)	2.520(64.0)	.047(1.2)	5	40	1148	643	15.1
.680	942C16P68K-F	1.240(31.5)	2.520(64.0)	.047(1.2)	5	42	1148	781	16.0
<b>2000 Vdc (500 Vac)</b>									
.010	942C20S1K-F	.472(12.0)	1.339(34.0)	.040(1.0)	50	20	5137	51	2.2
.015	942C20S15K-F	.571(14.5)	1.339(34.0)	.040(1.0)	40	21	5137	77	2.8
.022	942C20S22K-F	.650(16.5)	1.339(34.0)	.040(1.0)	20	22	5137	113	4.2
.033	942C20S33K-F	.768(19.5)	1.339(34.0)	.040(1.0)	12	23	5137	170	6.0
.047	942C20S47K-F	.709(18.0)	1.811(46.0)	.040(1.0)	10	28	2879	135	7.1
.068	942C20S68K-F	.807(20.5)	1.811(46.0)	.040(1.0)	6	29	2879	196	9.9
.100	942C20P1K-F	.965(24.5)	1.811(46.0)	.047(1.2)	5	30	2879	288	12.1
.150	942C20P15K-F	1.161(29.5)	1.811(46.0)	.047(1.2)	5	32	2879	432	13.5