

## Metallized Polyester Film Capacitors, Wrap-and-Fill



### FEATURES

- Economical
- Extensive standard ratings
- Rugged construction
- Small size
- Compliant to RoHS directive 2002/95/EC


**RoHS**  
COMPLIANT

### PERFORMANCE CHARACTERISTICS

**Operating Temperature:** - 55 °C to + 85 °C

**Capacitance Range:** 0.0047 μF to 10.0 μF

**Capacitance Tolerance:** ± 20 %, ± 10 %, ± 5 %

**DC Voltage Rating:** 50 WVDC to 600 WVDC

**Dissipation Factor:** 1.0 % maximum

**Voltage Test:** 200 % of rated voltage for 2 min

**Insulation Resistance:**

At + 25 °C: 25 000 MΩ/μF or 50 000 MΩ minimum

At + 85 °C: 1000 MΩ/μF or 2500 MΩ minimum

**Vibration Test (Condition B):**

No mechanical damage, short, open or intermittent circuits.

**DC Life Test:** 125 % of rated voltage for 250 h at + 85 °C. No open or short circuits. No visible damage. Maximum Δ CAP = ± 10 %  
Minimum IR = 50 % of initial limit  
Maximum DF = 1.25 %

**Humidity Test:** 95 % relative humidity at + 40 °C for 250 h. No visible damage. Maximum Δ CAP ± 10 %  
Minimum IR = 20 % of initial limit  
Maximum DF = 2.0 %

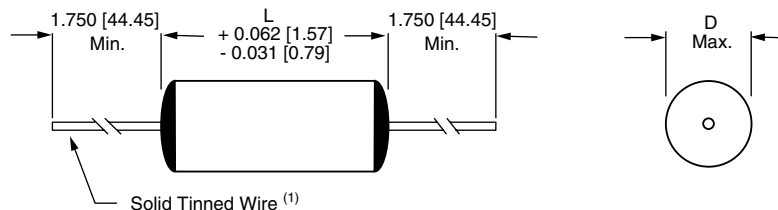
### PHYSICAL CHARACTERISTICS

**Lead Pull:** 5 lb (2.3 kg) for one min. No physical damage.

**Lead Bend:** After three complete consecutive bends, no damage.

**Marking:** Sprague® trademark, type or part number, capacitance and voltage.

### DIMENSIONS in inches (millimeters)



**Note**

(1) Lead size: D Max. < 0.270 [6.86] 0.025 [0.64] (No. 22 AWG). D Max ≥ 0.270 [6.86] 0.032 [0.81] (No. 20 AWG). Leads to be within ± 0.062" [1.57 mm] of center line at egress but not less than 0.031" [0.79 mm] from edge.

### STANDARD RATINGS in inches [millimeters]

CAPACITANCE (μF)	PART NUMBER		CASE SIZE		LEAD AWG NO.
	± 10 % TOLERANCE	± 5 % TOLERANCE	D	L	
50 WVDC					
0.12	V-430P124X9050	V-430P124X5050	0.196 [4.98]	0.625 [15.88]	22
0.15	V-430P154X9050	V-430P154X5050	0.210 [5.33]	0.625 [15.88]	22
0.18	V-430P184X9050	V-430P184X5050	0.223 [5.66]	0.625 [15.88]	22
0.22	V-430P224X9050	V-430P224X5050	0.240 [6.10]	0.625 [15.88]	22
0.27	V-430P274X9050	V-430P274X5050	0.258 [6.55]	0.625 [15.88]	22
0.33	V-430P334X9050	V-430P334X5050	0.279 [7.09]	0.625 [15.88]	20
0.39	V-430P394X9050	V-430P394X5050	0.250 [6.35]	0.750 [19.05]	22
0.47	V-430P474X9050	V-430P474X5050	0.269 [6.83]	0.750 [19.05]	22
0.56	V-430P564X9050	V-430P564X5050	0.288 [7.32]	0.750 [19.05]	20
0.68	V-430P684X9050	V-430P684X5050	0.311 [7.90]	0.750 [19.05]	20
0.82	V-430P824X9050	V-430P824X5050	0.270 [6.86]	1.000 [25.40]	20



<b>STANDARD RATINGS</b> in inches [millimeters]						
CAPACITANCE ( $\mu$ F)	PART NUMBER		CASE SIZE		LEAD AWG NO.	
	$\pm 10\%$ TOLERANCE	$\pm 5\%$ TOLERANCE	D	L		
<b>50 WVDC</b>						
1.0	V-430P105X9050	V-430P105X5050	0.291 [7.39]	1.000 [25.40]	20	
1.5	V-430P155X9050	V-430P155X5050	0.344 [8.74]	1.000 [25.40]	20	
2.0	V-430P205X9050	V-430P205X5050	0.400 [10.16]	1.000 [25.40]	20	
2.5	V-430P255X9050	V-430P255X5050	0.438 [11.13]	1.000 [25.40]	20	
3.0	V-430P305X9050	V-430P305X5050	0.398 [10.11]	1.250 [31.75]	20	
4.0	V-430P405X9050	V-430P405X5050	0.434 [11.02]	1.500 [38.10]	20	
5.0	V-430P505X9050	V-430P505X5050	0.476 [12.09]	1.500 [38.10]	20	
6.0	V-430P605X9050	V-430P605X5050	0.515 [13.08]	1.500 [38.10]	20	
7.0	V-430P705X9050	V-430P705X5050	0.551 [14.00]	1.500 [38.10]	20	
10.0	V-430P106X9050	V-430P106X5050	0.647 [16.43]	1.500 [38.10]	20	
<b>100 WVDC</b>						
0.082	V-430P823X9100	V-430P823X5100	0.192 [4.88]	0.625 [15.88]	22	
0.1	V-430P104X9100	V-430P104X5100	0.204 [5.18]	0.625 [15.88]	22	
0.12	V-430P124X9100	V-430P124X5100	0.216 [5.49]	0.625 [15.88]	22	
0.15	V-430P154X9100	V-430P154X5100	0.233 [5.92]	0.625 [15.88]	22	
0.18	V-430P184X9100	V-430P184X5100	0.213 [5.41]	0.750 [19.05]	22	
0.22	V-430P224X9100	V-430P224X5100	0.228 [5.79]	0.750 [19.05]	22	
0.27	V-430P274X9100	V-430P274X5100	0.245 [6.22]	0.750 [19.05]	22	
0.33	V-430P334X9100	V-430P334X5100	0.264 [6.71]	0.750 [19.05]	22	
0.39	V-430P394X9100	V-430P394X5100	0.230 [5.84]	1.000 [25.40]	22	
0.47	V-430P474X9100	V-430P474X5100	0.246 [6.25]	1.000 [25.40]	22	
0.56	V-430P564X9100	V-430P564X5100	0.262 [6.65]	1.000 [25.40]	22	
0.68	V-430P684X9100	V-430P684X5100	0.283 [7.19]	1.000 [25.40]	20	
0.82	V-430P824X9100	V-430P824X5100	0.265 [6.73]	1.250 [31.75]	22	
1.0	V-430P105X9100	V-430P105X5100	0.286 [7.26]	1.250 [31.75]	20	
1.5	V-430P155X9100	V-430P155X5100	0.351 [8.92]	1.250 [31.75]	20	
2.0	V-430P205X9100	V-430P205X5100	0.393 [9.98]	1.250 [31.75]	20	
2.5	V-430P255X9100	V-430P255X5100	0.430 [10.92]	1.250 [31.75]	20	
3.0	V-430P305X9100	V-430P305X5100	0.464 [11.79]	1.250 [31.75]	20	
4.0	V-430P405X9100	V-430P405X5100	0.494 [12.55]	1.500 [38.10]	20	
5.0	V-430P505X9100	V-430P505X5100	0.544 [13.82]	1.500 [38.10]	20	
6.0	V-430P605X9100	V-430P605X5100	0.591 [15.01]	1.500 [38.10]	20	
7.0	V-430P705X9100	V-430P705X5100	0.633 [16.08]	1.500 [38.10]	20	
10.0	V-430P106X9100	V-430P106X5100	0.678 [17.22]	1.750 [44.45]	20	
<b>200 WVDC</b>						
0.047	V-430P473X9200	V-430P473X5200	0.200 [5.08]	0.625 [15.88]	22	
0.056	V-430P563X9200	V-430P563X5200	0.211 [5.36]	0.625 [15.88]	22	
0.068	V-430P683X9200	V-430P683X5200	0.225 [5.72]	0.625 [15.88]	22	
0.082	V-430P823X9200	V-430P823X5200	0.240 [6.10]	0.625 [15.88]	22	
0.10	V-430P104X9200	V-430P104X5200	0.221 [5.61]	0.750 [19.05]	22	
0.12	V-430P124X9200	V-430P124X5200	0.234 [5.94]	0.750 [19.05]	22	
0.15	V-430P154X9200	V-430P154X5200	0.254 [6.45]	0.750 [19.05]	22	
0.18	V-430P184X9200	V-430P184X5200	0.272 [6.91]	0.750 [19.05]	20	
0.22	V-430P224X9200	V-430P224X5200	0.295 [7.49]	0.750 [19.05]	20	
0.27	V-430P274X9200	V-430P274X5200	0.258 [6.55]	1.000 [25.40]	22	
0.33	V-430P334X9200	V-430P334X5200	0.279 [7.09]	1.000 [25.40]	20	
0.39	V-430P394X9200	V-430P394X5200	0.298 [7.57]	1.000 [25.40]	20	
0.47	V-430P474X9200	V-430P474X5200	0.321 [8.15]	1.000 [25.40]	20	
0.56	V-430P564X9200	V-430P564X5200	0.345 [8.76]	1.000 [25.40]	20	
0.68	V-430P684X9200	V-430P684X5200	0.375 [9.53]	1.000 [25.40]	20	
0.82	V-430P824X9200	V-430P824X5200	0.350 [8.89]	1.250 [31.75]	20	
1.0	V-430P105X9200	V-430P105X5200	0.380 [9.65]	1.250 [31.75]	20	
1.5	V-430P155X9200	V-430P155X5200	0.454 [11.53]	1.250 [31.75]	20	
2.0	V-430P205X9200	V-430P205X5200	0.469 [11.91]	1.500 [38.10]	20	
2.5	V-430P255X9200	V-430P255X5200	0.516 [13.11]	1.500 [38.10]	20	
3.0	V-430P305X9200	V-430P305X5200	0.559 [14.20]	1.500 [38.10]	20	
4.0	V-430P405X9200	V-430P405X5200	0.580 [14.73]	1.750 [44.45]	20	
5.0	V-430P505X9200	V-430P505X5200	0.641 [16.28]	1.750 [44.45]	20	

**Note**  
 • Other capacitance values and voltage ratings are available upon request



STANDARD RATINGS in inches [millimeters]						
CAPACITANCE ( $\mu$ F)	PART NUMBER		CASE SIZE		LEAD AWG NO.	
	$\pm 10\%$ TOLERANCE	$\pm 5\%$ TOLERANCE	D	L		
<b>400 WVDC</b>						
0.015	V-430P153X9400	V-430P153X5400	0.186 [4.72]	0.625 [15.88]	22	
0.018	V-430P183X9400	V-430P183X5400	0.197 [5.00]	0.625 [15.88]	22	
0.022	V-430P223X9400	V-430P223X5400	0.210 [5.33]	0.625 [15.88]	22	
0.027	V-430P273X9400	V-430P273X5400	0.224 [5.69]	0.625 [15.88]	22	
0.033	V-430P333X9400	V-430P333X5400	0.241 [6.12]	0.625 [15.88]	22	
0.039	V-430P393X9400	V-430P393X5400	0.256 [6.50]	0.625 [15.88]	22	
0.047	V-430P473X9400	V-430P473X5400	0.275 [6.99]	0.625 [15.88]	20	
0.056	V-430P563X9400	V-430P563X5400	0.248 [6.30]	0.750 [19.05]	22	
0.068	V-430P683X9400	V-430P683X5400	0.266 [6.76]	0.750 [19.05]	22	
0.082	V-430P823X9400	V-430P823X5400	0.286 [7.26]	0.750 [19.05]	20	
0.10	V-430P104X9400	V-430P104X5400	0.310 [7.87]	0.750 [19.05]	20	
0.12	V-430P124X9400	V-430P124X5400	0.268 [6.81]	1.000 [25.40]	22	
0.15	V-430P154X9400	V-430P154X5400	0.293 [7.44]	1.000 [25.40]	20	
0.18	V-430P184X9400	V-430P184X5400	0.315 [8.00]	1.000 [25.40]	20	
0.22	V-430P224X9400	V-430P224X5400	0.342 [8.69]	1.000 [25.40]	20	
0.27	V-430P274X9400	V-430P274X5400	0.322 [8.18]	1.250 [31.75]	20	
0.33	V-430P334X9400	V-430P334X5400	0.350 [8.89]	1.250 [31.75]	20	
0.39	V-430P394X9400	V-430P394X5400	0.337 [8.56]	1.500 [38.10]	20	
0.47	V-430P474X9400	V-430P474X5400	0.364 [9.25]	1.500 [38.10]	20	
0.56	V-430P564X9400	V-430P564X5400	0.393 [9.98]	1.500 [38.10]	20	
0.68	V-430P684X9400	V-430P684X5400	0.402 [10.21]	1.750 [44.45]	20	
0.82	V-430P824X9400	V-430P824X5400	0.434 [11.02]	1.750 [44.45]	20	
1.0	V-430P105X9400	V-430P105X5400	0.472 [11.99]	1.750 [44.45]	20	
1.5	V-430P155X9400	V-430P155X5400	0.563 [14.30]	1.750 [44.45]	20	
2.0	V-430P205X9400	V-430P205X5400	0.640 [16.26]	1.750 [44.45]	20	
<b>600 WVDC</b>						
0.0047	V-430P472X9600	V-430P472X5600	0.187 [4.75]	0.625 [15.88]	22	
0.0056	V-430P562X9600	V-430P562X5600	0.197 [5.00]	0.625 [15.88]	22	
0.0068	V-430P682X9600	V-430P682X5600	0.209 [5.31]	0.625 [15.88]	22	
0.0082	V-430P822X9600	V-430P822X5600	0.223 [5.66]	0.625 [15.88]	22	
0.01	V-430P103X9600	V-430P103X5600	0.239 [6.07]	0.625 [15.88]	22	
0.012	V-430P123X9600	V-430P123X5600	0.255 [6.48]	0.625 [15.88]	22	
0.015	V-430P153X9600	V-430P153X5600	0.224 [5.69]	0.750 [19.05]	22	
0.018	V-430P183X9600	V-430P183X5600	0.239 [6.07]	0.750 [19.05]	22	
0.022	V-430P223X9600	V-430P223X5600	0.257 [6.53]	0.750 [19.05]	22	
0.027	V-430P273X9600	V-430P273X5600	0.278 [7.06]	0.750 [19.05]	20	
0.033	V-430P333X9600	V-430P333X5600	0.300 [7.62]	0.750 [19.05]	20	
0.039	V-430P393X9600	V-430P393X5600	0.251 [6.38]	1.000 [25.40]	22	
0.047	V-430P473X9600	V-430P473X5600	0.269 [6.83]	1.000 [25.40]	22	
0.056	V-430P563X9600	V-430P563X5600	0.288 [7.32]	1.000 [25.40]	20	
0.068	V-430P683X9600	V-430P683X5600	0.311 [7.90]	1.000 [25.40]	20	
0.082	V-430P823X9600	V-430P823X5600	0.336 [8.53]	1.000 [25.40]	20	
0.10	V-430P104X9600	V-430P104X5600	0.365 [9.27]	1.000 [25.40]	20	
0.12	V-430P124X9600	V-430P124X5600	0.335 [8.51]	1.250 [31.75]	20	
0.15	V-430P154X9600	V-430P154X5600	0.368 [9.35]	1.250 [31.75]	20	
0.18	V-430P184X9600	V-430P184X5600	0.354 [8.99]	1.500 [38.10]	20	
0.22	V-430P224X9600	V-430P224X5600	0.385 [9.78]	1.500 [38.10]	20	
0.27	V-430P274X9600	V-430P274X5600	0.421 [10.69]	1.500 [38.10]	20	
0.33	V-430P334X9600	V-430P334X5600	0.428 [10.87]	1.750 [44.45]	20	
0.39	V-430P394X9600	V-430P394X5600	0.459 [11.66]	1.750 [44.45]	20	
0.47	V-430P474X9600	V-430P474X5600	0.497 [12.62]	1.750 [44.45]	20	
0.56	V-430P564X9600	V-430P564X5600	0.537 [13.64]	1.750 [44.45]	20	
0.68	V-430P684X9600	V-430P684X5600	0.585 [14.86]	1.750 [44.45]	20	

**Note**  
 • Other capacitance values and voltage ratings are available upon request

ORDERING INFORMATION			
V-430P TYPE	124 CAPACITANCE	X9 CAPACITANCE TOLERANCE	050 DC VOLTAGE RATING
	This is expressed in picofarads. The first two digits are the significant figures. The third is the number of zeros to follow. Values must conform to the decade rating for the tolerance specified.	X0 = $\pm 20\%$ X9 = $\pm 10\%$ X5 = $\pm 5\%$	This is expressed in volts. To complete the three-digit block, zeros precede the voltage rating.



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