Type 430P

Vishay Sprague

Metalized Polyester Film Capacitors Wrap-and-Fill

FEATURES

- Economical
- Extensive standard ratings
- Rugged construction
- Small size

PERFORMANCE CHARACTERISTICS

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

Capacitance Range: 0.0047μF to 10.0μF.

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 minutes.

Insulation Resistance:
At + 25°C: 25,000 Megohm - Microfarads or 50,000 Megohm minimum. At + 85°C: 1000 Megohm - Microfarads or 2500 Megohm minimum.

Vibration Test (Condition B): No mechanical damage, short, open or intermittent circuits.

PHYSICAL CHARACTERISTICS

Lead Pull: 5 pounds (2.3 kilograms) for one minute. No physical damage.

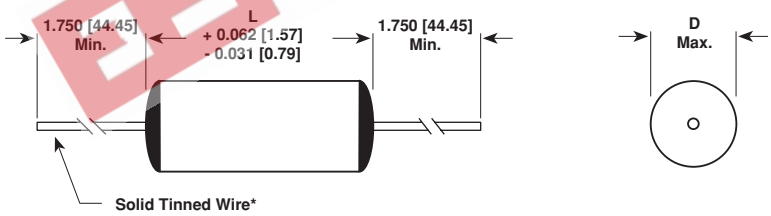
Lead Bend: After three complete consecutive bends, no damage.

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

DC Life Test: 125% of rated voltage for 250 hours @ + 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 @ + 40°C for 250 hours, no visible damage.
Maximum Δ CAP ± 10%.
Minimum IR = 20% of initial limit.
Maximum DF = 2.0%.

DIMENSIONS in inches [millimeters]



* 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" [1.57mm] of center line at egress but not less than 0.031" [0.79mm] 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	430P124X9050	430P124X5050	0.196 [4.98]	0.625 [15.88]	22
0.15	430P154X9050	430P154X5050	0.210 [5.33]	0.625 [15.88]	22
0.18	430P184X9050	430P184X5050	0.223 [5.66]	0.625 [15.88]	22
0.22	430P224X9050	430P224X5050	0.240 [6.10]	0.625 [15.88]	22
0.27	430P274X9050	430P274X5050	0.258 [6.55]	0.625 [15.88]	22
0.33	430P334X9050	430P334X5050	0.279 [7.09]	0.625 [15.88]	20
0.39	430P394X9050	430P394X5050	0.250 [6.35]	0.750 [19.05]	22
0.47	430P474X9050	430P474X5050	0.269 [6.83]	0.750 [19.05]	22
0.56	430P564X9050	430P564X5050	0.288 [7.32]	0.750 [19.05]	20
0.68	430P684X9050	430P684X5050	0.311 [7.90]	0.750 [19.05]	20
0.82	430P824X9050	430P824X5050	0.270 [6.86]	1.000 [25.40]	20

STANDARD RATINGS in inches [millimeters]

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

* These ratings are stocked.

STANDARD RATINGS in inches [millimeters]

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

* These ratings are stocked.

ORDERING INFORMATION

430P	124	X9	050
TYPE	CAPACITANCE	CAPACITANCE TOLERANCE	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 = ± 20% X9 = ± 10% X5 = ± 5%	This is expressed in volts. To complete the three-digit block, zeros precede the voltage rating.