

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 (μ F) | PART NUMBER | | CASE SIZE | | LEAD AWG NO. |
| | $\pm 10\%$ TOLERANCE | $\pm 5\%$ TOLERANCE | D | L | |
| 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.

Type 430P

Vishay Sprague



| STANDARD RATINGS in inches [millimeters] | | | | | |
|--|----------------------|---------------------|---------------|---------------|-----------------|
| CAPACITANCE (μ F) | PART NUMBER | | CASE SIZE | | LEAD AWG NO. |
| | $\pm 10\%$ TOLERANCE | $\pm 5\%$ TOLERANCE | D | L | |
| 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 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. |