

# Type 732P

Vishay Sprague



## Film Capacitors Metalized Polypropylene, Wrap-and-Fill



### PERFORMANCE CHARACTERISTICS

- Operating Temperature:** - 55°C to + 105°C.
  - Capacitance Range:** 1.0µF to 30.0µF.
  - Capacitance Tolerance:** ± 10, ± 5%.
  - Voltage Rating:** 200 WVDC to 600 WVDC.
  - Dissipation Factor:** .10% maximum.
  - Equivalent Series Resistance:** 20kHz - 100kHz (see Standard Ratings table).
  - Voltage Test:** 200% of rated voltage for 2 minutes.
  - ΔV/ΔT:** 10 volts/microsecond maximum.
  - Insulation Resistance:** At + 25°C, 100,000 Megohm - Microfarads or 200,000 Megohm minimum.
- ### ENVIRONMENTAL CHARACTERISTICS
- Vibration Test (Condition B):** No mechanical damage, short, open or intermittent circuits.

### FEATURES

- High stability
- High ripple current to 30A
- Low inductance and low ESR
- Excellent AC performance

**DC Life Test:** 140% of rated DC voltage for 250 hours at + 105°C. No open or short circuits. No visible damage evident. Maximum Capacitance Change: ± 1.0%. Minimum IR = 50% of initial limit. Maximum DF = .10%.

**Humidity Test:** 95% relative humidity at + 40°C for 250 hours. No visible damage evident. Maximum Capacitance Change: ± 1.0%. Minimum IR = 20% of initial limit. Maximum DF = .12%.

### 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.

### STANDARD RATINGS in inches [millimeters]

CAP. (µF)	PART NUMBER* ± 10% TOLERANCE	CASE SIZE D (Max.) x L ± 0.062 [1.57]	Max. ESR (Milliohms) 20kHz - 100kHz	MAXIMUM RIPPLE CURRENT (Amps rms) @ 20kHz - 100kHz Case Temperature @						
				+ 25°C	+ 35°C	+ 45°C	+ 55°C	+ 65°C	+ 75°C	+ 85°C
<b>200 WVDC</b>										
1.0	732P105X9200L	0.531 x 0.750 [13.49 x 19.05]	15.0	9.2	8.5	7.8	7.0	6.0	4.9	4.5
2.0	732P205X9200L	0.596 x 0.938 [15.14 x 23.83]	12.0	10.8	10.0	9.1	8.2	7.0	5.8	5.3
3.0	732P305X9200L	0.717 x 0.938 [18.21 x 23.83]	11.0	12.1	11.2	10.3	9.4	8.0	6.5	5.9
5.0	732P505X9200L	0.733 x 1.250 [18.62 x 31.75]	10.0	13.8	12.7	11.6	10.4	9.0	7.4	8.7
10.0	732P106X9200L	0.898 x 1.500 [22.81 x 38.10]	9.0	15.0	15.0	14.2	12.7	11.0	9.0	8.2
20.0	732P206X9200L	1.000 x 2.250 [25.40 x 57.15]	8.0	15.0	15.0	15.0	15.0	13.6	11.1	10.0
30.0	732P306X9200L	1.200 x 2.250 [30.48 x 57.15]	6.0	15.0	15.0	15.0	15.0	15.0	12.4	11.4
<b>400 WVDC</b>										
1.0	732P105X9400L	0.512 x 1.250 [13.00 x 31.75]	20.0	7.3	7.3	7.3	7.3	7.2	5.9	5.4
2.0	732P205X9400L	0.698 x 1.250 [17.73 x 31.75]	15.0	12.0	12.0	11.3	10.1	8.7	7.1	6.5
3.0	732P305X9400L	0.747 x 1.500 [18.97 x 38.10]	13.0	15.0	13.8	12.6	11.3	9.8	8.0	7.3
5.0	732P505X9400L	0.862 x 1.750 [21.89 x 44.45]	11.0	15.0	15.0	14.7	13.1	11.4	9.3	8.5
10.0	732P106X9400L	1.030 x 2.250 [26.16 x 57.15]	9.0	15.0	15.0	15.0	15.0	13.8	11.3	10.3
20.0	732P206X9400L	1.440 x 2.250 [36.58 x 57.15]	6.0	15.0	15.0	15.0	15.0	15.0	14.1	12.8
<b>600 WVDC</b>										
1.0	732P105X9600L	0.713 x 1.500 [18.11 x 38.10]	19.0	9.5	9.5	9.5	9.5	9.5	7.8	7.1
2.0	732P205X9600L	0.895 x 1.750 [22.73 x 44.45]	15.0	15.0	15.0	15.0	13.4	11.6	9.5	8.7
3.0	732P305X9600L	1.086 x 1.750 [27.58 x 44.45]	12.0	15.0	15.0	15.0	15.0	13.1	10.7	9.8
5.0	732P505X9600L	1.192 x 2.250 [30.28 x 57.15]	10.0	15.0	15.0	15.0	15.0	15.0	12.5	11.4
10.0	732P106X9600L	1.668 x 2.250 [42.37 x 57.15]	6.0	15.0	15.0	15.0	15.0	15.0	15.0	14.1

\* Part Numbers listed are for a capacitance tolerance of ± 10%. To specify ± 5% tolerance, change the "X9" in the Part Number to "X5".

### ORDERING INFORMATION

732P TYPE	105 CAPACITANCE	X9 CAPACITANCE TOLERANCE	200 DC VOLTAGE RATING	L TERMINAL
	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.	X9 = ± 10% (Inventoried) X5 = ± 5%	This is expressed in volts.	L = Wire leads*
* Leads are bare, solid tinned copper wire. Lead wire sizes are: Case diameter < .700" [17.78mm], lead AWG No. 20.				