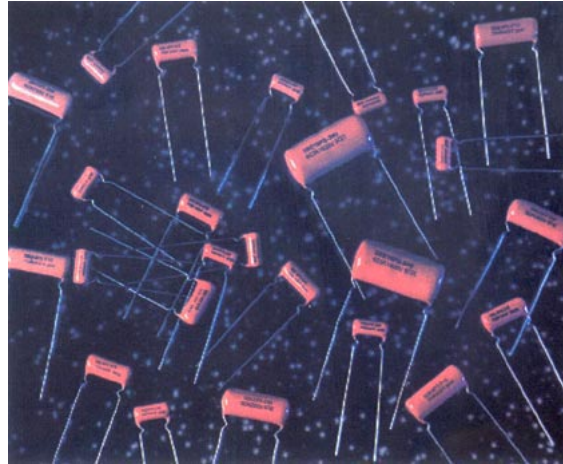


Type PS, Orange Drop[®], Polyester Film Capacitors

Features

- Radial-lead. Non-inductively wound, extended foil construction.
- Long established distribution series.



Specifications

Capacitance Range:

.001 to .5 μ F

Capacitance Tolerance:

\pm 10%

Voltage Ratings:

200 to 2000 Volts D-C

140 to 500 Volts A-C

Operating Temperature Range:

-40°C to +85°C (at full voltage)

Voltage Derating:

Units rated 200 thru 1000 VDC:

at +105°C, 70% of +85°C rating.

at +125°C, 50% of +85°C rating.

Units rated 1600 and 2000 VDC:

at +105°C, 50% of +85°C rating.

Lead Wire:

Tinned copper-clad steel.

0.032 (0.8) diameter, #20 AWG

Insulation Resistance:

At +25°C the minimum product of insulation resistance, expressed in megohms, and capacitance, expressed in microfarads, shall be 5000 $M\Omega$ - μ F

Dissipation Factor:

Units rated 200 thru 1000 VDC:

0.75% Maximum

Units rated 1600 and 2000 VDC:

0.1% Maximum

Encapsulation:

Conformal coating of orange, flame retardant epoxy. Meets minimum of UL94V-0 specifications.

Dielectric/Construction:

Units rated 200 thru 1000 VDC:

Polyester film, single section design, non-inductively wound with extended foil.

However, the exception is part # 6PSP47 which is a metallized polyester film design.

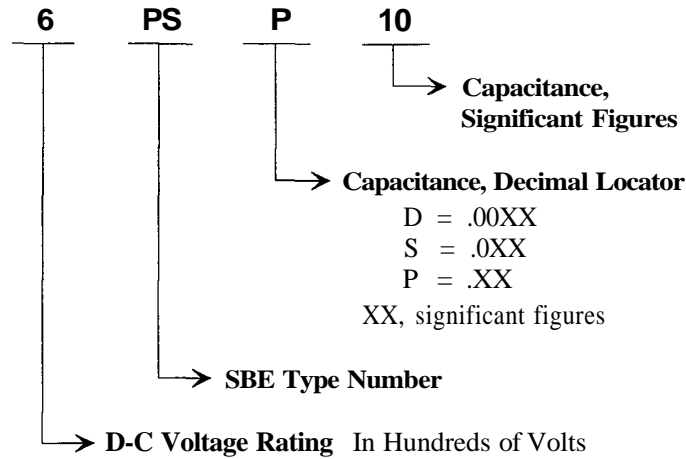
Units rated 1600 and 2000 VDC:

Polypropylene film, non-inductively wound, series section design with extended foil and utilizing a floating common of metallized polypropylene film.

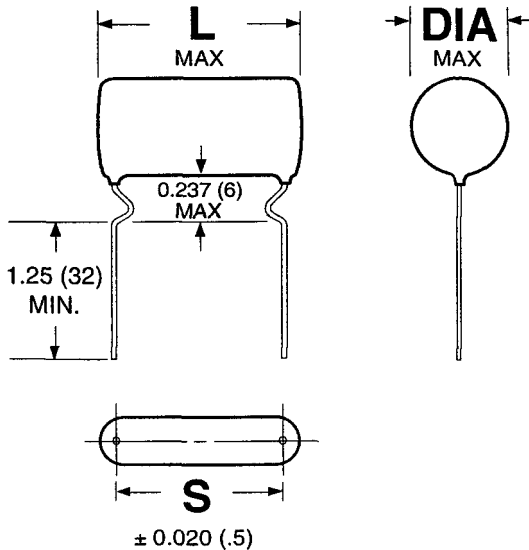
Dimensions in inches, metric (mm) in parenthesis.

Type PS, Orange Drop[®], Polyester Film Capacitors

Ordering/Part Number Information



Dimensions



Standard Marking Format

| Marking | Description |
|---------------|--|
| CDE | CDE Electronics identification |
| 6PS-P10 | 6PS-P10 Part number |
| 104K600V 9810 | 600V D-C Voltage rating, Volts |
| | 104K Capacitance and EIA tolerance code* |
| | 9810 Weekly date code (i.e. 10th week of 1998) |

* Capacitance code expressed in picofarads, first two digits are the significant figures, the third is the number of zeros following (i.e. 104 = 10000pF = .1 μ F). EIA tolerance code: K = \pm 10%.

Note: The PS series was primarily designed for DC applications. If you require additional technical data or application information for an AC application we suggest you contact us.

Type PS, Orange Drop®, Polyester Film Capacitors

Type PS Standard Sizes/Ratings

| Value, μ F | Part # ¹ | L MAX | DIA MAX | S | Value, μ F | Part # ¹ | L MAX | DIA MAX | S |
|---------------------------|---------------------|-------------|------------|--------------|---------------------------|---------------------|-------------|----------------|--------------|
| 200 VDC / 140 VAC* | | | | | 600 VDC / 200 VAC* | | | | |
| .02 | 2PSS20 | .70 (17.8) | .33 (8.4) | .500 (12.7) | .003 | 6PSD30 | .70 (17.8) | .35 (8.9) | .500 (12.7) |
| .022 | 2PSS22 | .70 (17.8) | .33 (8.4) | .500 (12.7) | .0033 | 6PSD33 | .70 (17.8) | .35 (8.9) | .500 (12.7) |
| .047 | 2PSS47 | .90 (22.9) | .38 (9.7) | .688 (17.5) | .0039 | 6PSD39 | .70 (17.8) | .38 (9.7) | .500 (12.7) |
| .05 | 2PSS50 | .90 (22.9) | .38 (9.7) | .688 (17.5) | .004 | 6PSD40 | .70 (17.8) | .38 (9.7) | .500 (12.7) |
| .1 | 2PSP10 | 1.20 (30.5) | .40 (10.2) | .969 (24.6) | .0047 | 6PSD47 | .70 (17.8) | .38 (9.7) | .500 (12.7) |
| .15 | 2PSP15 | 1.20 (30.5) | .45 (11.4) | .969 (24.6) | .005 | 6PSD50 | .70 (17.8) | .38 (9.7) | .500 (12.7) |
| .2 | 2PSP20 | 1.20 (30.5) | .50 (12.7) | .969 (24.6) | .0056 | 6PSD56 | .70 (17.8) | .40 (10.2) | .500 (12.7) |
| .22 | 2PSP22 | 1.20 (30.5) | .50 (12.7) | .969 (24.6) | .006 | 6PSD60 | .70 (17.8) | .40 (10.2) | .500 (12.7) |
| .25 | 2PSP25 | 1.20 (30.5) | .50 (12.7) | .969 (24.6) | .0068 | 6PSD68 | .70 (17.8) | .40 (10.2) | .500 (12.7) |
| .33 | 2PSP33 | 1.60 (40.6) | .47 (11.9) | 1.344 (34.1) | .0075 | 6PSD75 | .70 (17.8) | .40 (10.2) | .500 (12.7) |
| .47 | 2PSP47 | 1.60 (40.6) | .55 (14.0) | 1.344 (34.1) | .008 | 6PSD80 | .90 (22.9) | .40 (10.2) | .688 (17.5) |
| .5 | 2PSP50 | 1.60 (40.6) | .55 (14.0) | 1.344 (34.1) | .0082 | 6PSD82 | .90 (22.9) | .40 (10.2) | .688 (17.5) |
| 400 VDC / 200 VAC* | | | | | .01 | 6PSS10 | .90 (22.9) | .40 (10.2) | .688 (17.5) |
| .01 | 4PSS10 | .70 (17.8) | .35 (8.9) | .500 (12.7) | .012 | 6PSS12 | .90 (22.9) | .40 (10.2) | .688 (17.5) |
| .015 | 4PSS15 | .70 (17.8) | .38 (9.7) | .500 (12.7) | .015 | 6PSS15 | .90 (22.9) | .40 (10.2) | .688 (17.5) |
| .02 | 4PSS20 | .90 (22.9) | .38 (9.7) | .688 (17.5) | .02 | 6PSS20 | .90 (22.9) | .45 (11.4) | .688 (17.5) |
| .022 | 4PSS22 | .90 (22.9) | .38 (9.7) | .688 (17.5) | .022 | 6PSS22 | .90 (22.9) | .45 (11.4) | .688 (17.5) |
| .025 | 4PSS25 | .90 (22.9) | .40 (10.2) | .688 (17.5) | .025 | 6PSS25 | .90 (22.9) | .45 (11.4) | .688 (17.5) |
| .03 | 4PSS30 | .90 (22.9) | .40 (10.2) | .688 (17.5) | .027 | 6PSS27 | 1.20 (30.5) | .45 (11.4) | .969 (24.6) |
| .033 | 4PSS33 | .90 (22.9) | .40 (10.2) | .688 (17.5) | .03 | 6PSS30 | 1.20 (30.5) | .45 (11.4) | .969 (24.6) |
| .04 | 4PSS40 | 1.20 (30.5) | .40 (10.2) | .969 (24.6) | .033 | 6PSS33 | 1.20 (30.5) | .45 (11.4) | .969 (24.6) |
| .047 | 4PSS47 | 1.20 (30.5) | .40 (10.2) | .969 (24.6) | .035 | 6PSS35 | 1.20 (30.5) | .45 (11.4) | .969 (24.6) |
| .05 | 4PSS50 | 1.20 (30.5) | .40 (10.2) | .969 (24.6) | .039 | 6PSS39 | 1.20 (30.5) | .55 (14.0) | .969 (24.6) |
| .056 | 4PSS56 | 1.20 (30.5) | .45 (11.4) | .969 (24.6) | .04 | 6PSS40 | 1.20 (30.5) | .55 (14.0) | .969 (24.6) |
| .068 | 4PSS68 | 1.20 (30.5) | .45 (11.4) | .969 (24.6) | .047 | 6PSS47 | 1.20 (30.5) | .55 (14.0) | .969 (24.6) |
| .075 | 4PSS75 | 1.20 (30.5) | .45 (11.4) | .969 (24.6) | .05 | 6PSS50 | 1.20 (30.5) | .55 (14.0) | .969 (24.6) |
| .1 | 4PSP10 | 1.20 (30.5) | .52 (13.2) | .969 (24.6) | .056 | 6PSS56 | 1.20 (30.5) | .60 (15.2) | .969 (24.6) |
| .15 | 4PSP15 | 1.20 (30.5) | .57 (14.5) | .969 (24.6) | .06 | 6PSS60 | 1.20 (30.5) | .60 (15.2) | .969 (24.6) |
| .2 | 4PSP20 | 1.60 (40.6) | .60 (15.2) | 1.344 (34.1) | .068 | 6PSS68 | 1.20 (30.5) | .60 (15.2) | .969 (24.6) |
| .22 | 4PSP22 | 1.60 (40.6) | .60 (15.2) | 1.344 (34.1) | .075 | 6PSS75 | 1.20 (30.5) | .60 (15.2) | .969 (24.6) |
| .25 | 4PSP25 | 1.60 (40.6) | .65 (16.5) | 1.344 (34.1) | .082 | 6PSS82 | 1.20 (30.5) | .65 (16.5) | .969 (24.6) |
| 600 VDC / 200 VAC* | | | | | .1 | 6PSP10 | 1.20 (30.5) | .65 (16.5) | .969 (24.6) |
| .001 | 6PSD10 | .70 (17.8) | .30 (7.6) | .500 (12.7) | .15 | 6PSP15 | 1.60 (40.6) | .70 (17.8) | 1.344 (34.1) |
| .0012 | 6PSD12 | .70 (17.8) | .33 (8.4) | .500 (12.7) | .2 | 6PSP20 | 1.60 (40.6) | .80 (20.3) | 1.344 (34.1) |
| .0015 | 6PSD15 | .70 (17.8) | .33 (8.4) | .500 (12.7) | .22 | 6PSP22 | 1.60 (40.6) | .80 (20.3) | 1.344 (34.1) |
| .0018 | 6PSD18 | .70 (17.8) | .33 (8.4) | .500 (12.7) | .25 | 6PSP25 | 1.60 (40.6) | .80 (20.3) | 1.344 (34.1) |
| .002 | 6PSD20 | .70 (17.8) | .33 (8.4) | .500 (12.7) | .33 | 6PSP33 | 1.81 (46.0) | .89 (22.6) | 1.531 (38.9) |
| .0022 | 6PSD22 | .70 (17.8) | .33 (8.4) | .500 (12.7) | .47 | 6PSP47 | 1.50 (38.1) | See note below | 1.344 (34.1) |
| .0025 | 6PSD25 | .70 (17.8) | .35 (8.9) | .500 (12.7) | | | | | |
| .0027 | 6PSD27 | .70 (17.8) | .35 (8.9) | .500 (12.7) | | | | | |

* 60 Hz, RMS

¹ Shaded part numbers above are standard stock items available through the Sprague/Vishay Distribution Network. Any other part number may be ordered as a special.

Note: 6PSP47 has a pressed profile, therefore the physical body dimensions are: **T** MAX = .51 (13.0) and **H** MAX = .76 (19.3)

Dimensions in inches, metric (mm) in parenthesis.

Type PS, Orange Drop[®], Polyester Film Capacitors

Type PS Standard Sizes/Ratings

| Value, μ F | Part # ¹ | L MAX | DIA MAX | S | Value, μ F | Part # ¹ | L MAX | DIA MAX | S |
|----------------------------|---------------------|-------------|------------|--------------|----------------------------|---------------------|-------------|------------|--------------|
| 1000 VDC / 200 VAC* | | | | | 1600 VDC / 475 VAC* | | | | |
| .001 | 10PSD10 | .70 (17.8) | .33 (8.4) | .500 (12.7) | .005 | 16PSD50 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) |
| .0015 | 10PSD15 | .70 (17.8) | .33 (8.4) | .500 (12.7) | .006 | 16PSD60 | 1.30 (33.0) | .55 (14.0) | .969 (24.6) |
| .002 | 10PSD20 | .70 (17.8) | .35 (8.9) | .500 (12.7) | .0068 | 16PSD68 | 1.30 (33.0) | .55 (14.0) | .969 (24.6) |
| .0022 | 10PSD22 | .70 (17.8) | .35 (8.9) | .500 (12.7) | .007 | 16PSD70 | 1.30 (33.0) | .55 (14.0) | .969 (24.6) |
| .0033 | 10PSD33 | .90 (22.9) | .35 (8.9) | .688 (17.5) | .0075 | 16PSD75 | 1.30 (33.0) | .55 (14.0) | .969 (24.6) |
| .004 | 10PSD40 | .90 (22.9) | .40 (10.2) | .688 (17.5) | .008 | 16PSD80 | 1.30 (33.0) | .60 (15.2) | .969 (24.6) |
| .005 | 10PSD50 | .90 (22.9) | .40 (10.2) | .688 (17.5) | .01 | 16PSS10 | 1.30 (33.0) | .60 (15.2) | .969 (24.6) |
| .0068 | 10PSD68 | .90 (22.9) | .43 (10.9) | .688 (17.5) | .015 | 16PSS15 | 1.30 (33.0) | .65 (16.5) | .969 (24.6) |
| .01 | 10PSS10 | .90 (22.9) | .48 (12.2) | .688 (17.5) | .018 | 16PSS18 | 1.70 (43.2) | .65 (16.5) | 1.344 (34.1) |
| .015 | 10PSS15 | 1.20 (30.5) | .48 (12.2) | .969 (24.6) | .02 | 16PSS20 | 1.70 (43.2) | .65 (16.5) | 1.344 (34.1) |
| .022 | 10PSS22 | 1.20 (30.5) | .58 (14.7) | .969 (24.6) | .022 | 16PSS22 | 1.70 (43.2) | .65 (16.5) | 1.344 (34.1) |
| .033 | 10PSS33 | 1.20 (30.5) | .65 (16.5) | .969 (24.6) | .03 | 16PSS30 | 1.70 (43.2) | .75 (19.1) | 1.344 (34.1) |
| .039 | 10PSS39 | 1.60 (40.6) | .65 (16.5) | 1.344 (34.1) | .033 | 16PSS33 | 1.70 (43.2) | .75 (19.1) | 1.344 (34.1) |
| .047 | 10PSS47 | 1.60 (40.6) | .65 (16.5) | 1.344 (34.1) | .039 | 16PSS39 | 1.70 (43.2) | .85 (21.6) | 1.344 (34.1) |
| .056 | 10PSS56 | 1.60 (40.6) | .75 (19.1) | 1.344 (34.1) | .04 | 16PSS40 | 1.70 (43.2) | .85 (21.6) | 1.344 (34.1) |
| .068 | 10PSS68 | 1.60 (40.6) | .75 (19.1) | 1.344 (34.1) | .047 | 16PSS47 | 1.70 (43.2) | .85 (21.6) | 1.344 (34.1) |
| .1 | 10PSP10 | 1.60 (40.6) | .85 (21.6) | 1.344 (34.1) | .05 | 16PSS50 | 1.70 (43.2) | .85 (21.6) | 1.344 (34.1) |
| 1600 VDC / 475 VAC* | | | | | 2000 VDC / 500 VAC* | | | | |
| .001 | 16PSD10 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) | .001 | 20PSD10 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) |
| .0015 | 16PSD15 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) | .0015 | 20PSD15 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) |
| .002 | 16PSD20 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) | .0022 | 20PSD22 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) |
| .0022 | 16PSD22 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) | .0033 | 20PSD33 | 1.30 (33.0) | .55 (14.0) | .969 (24.6) |
| .003 | 16PSD30 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) | .0047 | 20PSD47 | 1.30 (33.0) | .60 (15.2) | .969 (24.6) |
| .0033 | 16PSD33 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) | .0056 | 20PSD56 | 1.30 (33.0) | .65 (16.5) | .969 (24.6) |
| .0039 | 16PSD39 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) | .0068 | 20PSD68 | 1.30 (33.0) | .65 (16.5) | .969 (24.6) |
| .004 | 16PSD40 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) | .0082 | 20PSD82 | 1.30 (33.0) | .70 (17.8) | .969 (24.6) |
| .0047 | 16PSD47 | 1.30 (33.0) | .50 (12.7) | .969 (24.6) | .027 | 20PSS27 | 1.70 (43.2) | .95 (24.1) | 1.344 (34.1) |

* 60 Hz, RMS

¹ Shaded part numbers above are standard stock items available through the Sprague/Vishay Distribution Network. Any other part number may be ordered as a special.

Dimensions in inches, metric (mm) in parenthesis.