# Type 715P/717P, Orange Drop®, High Voltage, Polypropylene Film/Foil

Type 715P/717P are high AC voltage, film/foil polypropylene capacitors. Well suited for high AC voltage applications requiring corona free performacnce. These capacitors are ideal in high frequency, high pulse current applications and offer excellent stability, virtually linear temperature coefficient.

## Highlights

- Very low dissipation factor
- High dV/dt rating

## Specifications

| | |
|---|---|
| **Capacitance Range** | 470 pF to .015 µF |
| **Capacitance Tolerance** | ±1% to ±10% |
| **Rated Voltage** | 800/900 Vac (1800/2000 Vdc) |
| **Operating Temperature Range** | –55 ºC to 85 ºC<br>+105 ºC with proper voltage derating |
| **Lead Wire** | Tinned copper clad steel, .032" (0.8) diameter, #20 AWG |
| **Corona Start Voltage (typical)** | 800 Vac units: 950 - 1000 V RMS<br>900 Vac units: 1050 - 1100 V RMS |
| **Dielectric** | Polypropylene film; utilizing a floating common of metallized polypropylene, which provides self-healing characteristics |
| **Construction** | Non-inductively wound with extended foil, internal series section design |
| **Encapsulations** | Conformal coating of flame retardant orange epoxy (meets UL94V-0) |
| **Insulation Resistance** | 400,000 MΩ minumum at +25 ºC<br>20,000 MΩ minumum at +85 ºC<br>2,000 MΩ minumum at +105 ºC |
| **RoHS Compliant** | |

## Part Numbering System

Dimensions in inches, metric (mm) in parenthesis.

| 715P/717P | 222 | 5 | 800 | L | B | 3 | (XXXX) |
|---|---|---|---|---|---|---|---|
| **Series** | **Capacitance** | **Capacitance Tolerance** | **AC Voltage Rating** | **Case Code** | **Terminal** | **Lead Length** | **Suffix** |
| 715P Round Profile<br>717P Pressed Profile | 222 = 2200 pF | 9 = ±10%<br>5 = ±5%<br>3 = ±3%<br>2 = ±2%<br>1 = ±1% | | | A = Straight Lead<br>B = Hairpin Crimp<br>C = Captive Crimp *<br>D = Hockey Stick Crimp | 1 = 0.187 (4.7) ±0.030 (0.8)<br>2 = 0.250 (6.4) ±0.030 (0.8)<br>3 = 1.250 (32) Minimum<br>(Custom lead lengths available) | May be added by factory to denote special construction |

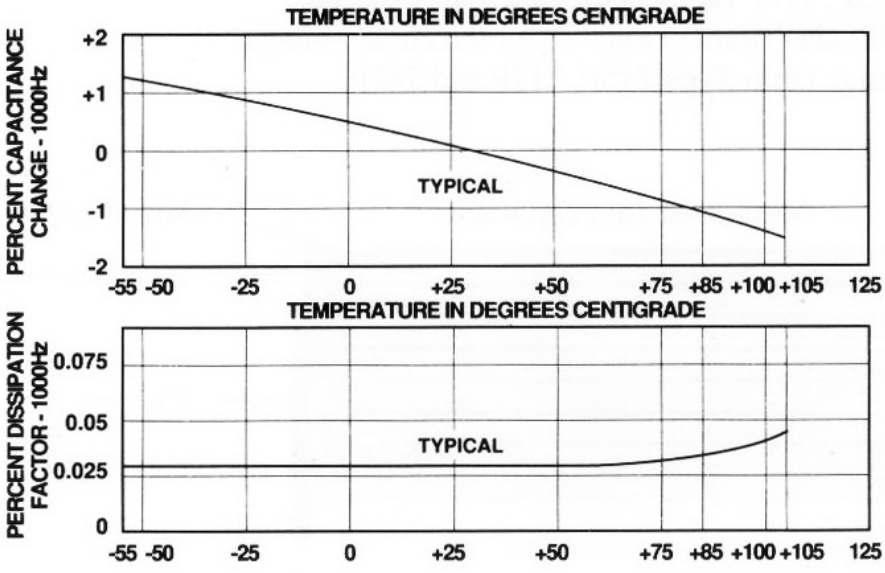
*Terminal C has a lead length of 0.156 (4.0) ±0.020 (0.5) therefore it is not necessary to indicate the lead length digit. The Captive Crimp is designed for circuit boards with hole sizes of .044 (1.1) to .048 (1.2) in diameter.

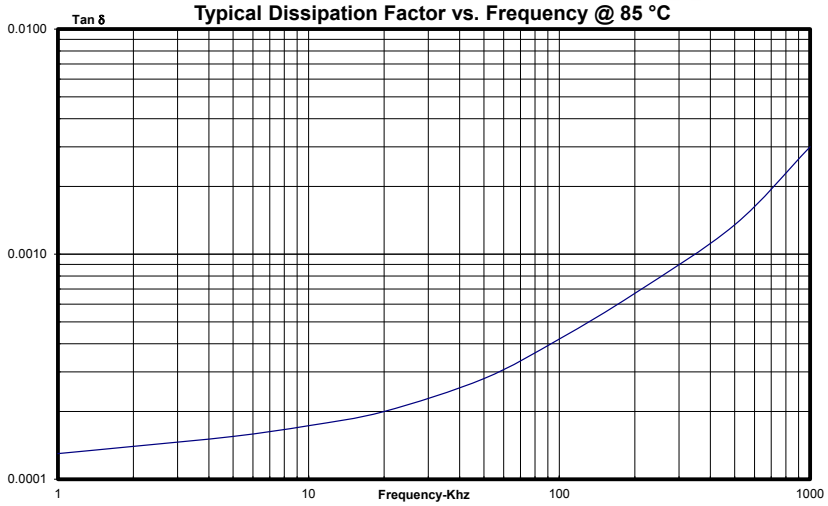
# Type 715P/717P, Orange Drop®,High Voltage, Polypropylene Film/Foil

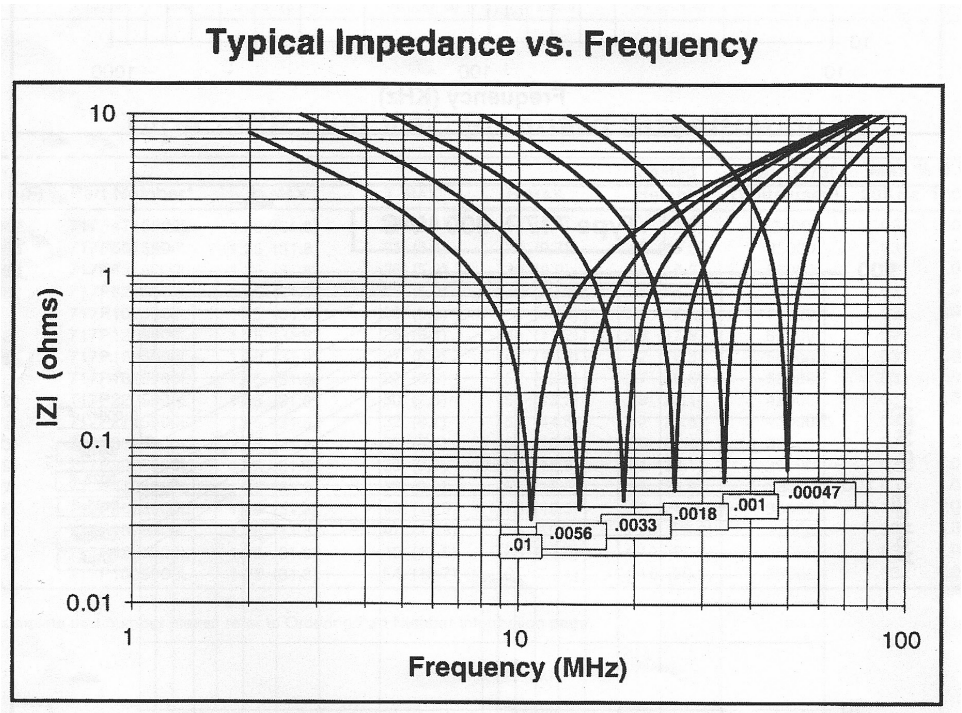
## Ratings

| Cap. (µF) | Catalog Part Number | L Max | Dia Max | H Max | Seated Height | Max dV/dt (Volts/µsec) | Max % D.F. @ 20 KHz | Max % D.F. @ 100 KHz |
|---|---|---|---|---|---|---|---|---|
| **Type 715P, 800 Vac Standard Sizes/Ratings** | | | | | | | | |
| 0.00047 | 715P4715800L | 1.125 (28.5) | .29 (7.4) | .35 (8.9) | .60 (15.3) | 95000 | 0.029 | 0.039 |
| 0.00056 | 715P5615800L | 1.125 (28.5) | .30 (7.6) | .36 (9.2) | .61 (15.5) | 87000 | 0.029 | 0.040 |
| 0.00068 | 715P6815800L | 1.125 (28.5) | .32 (8.1) | .37 (9.4) | .62 (15.8) | 79000 | 0.029 | 0.040 |
| 0.00082 | 715P8215800L | 1.125 (28.5) | .28 (7.1) | .33 (8.4) | .58 (14.7) | 72000 | 0.030 | 0.043 |
| 0.001 | 715P1025800L | 1.125 (28.5) | .28 (7.1) | .33 (8.4) | .58 (14.7) | 65000 | 0.030 | 0.043 |
| 0.0012 | 715P1225800L | 1.125 (28.5) | .29 (7.4) | .35 (8.9) | .60 (15.3) | 60000 | 0.030 | 0.044 |
| 0.0015 | 715P1525800L | 1.125 (28.5) | .31 (7.9) | .36 (9.2) | .61 (15.5) | 53000 | 0.030 | 0.044 |
| 0.0018 | 715P1825800L | 1.125 (28.5) | .32 (8.1) | .38 (9.7) | .63 (16.0) | 49000 | 0.030 | 0.044 |
| 0.0022 | 715P2225800L | 1.125 (28.5) | .34 (8.6) | .40 (10.2) | .65 (16.5) | 44000 | 0.030 | 0.045 |
| 0.0027 | 715P2725800L | 1.125 (28.5) | .36 (9.2) | .42 (10.7) | .67 (17.0) | 40000 | 0.030 | 0.045 |
| 0.0033 | 715P3325800L | 1.125 (28.5) | .38 (9.7) | .44 (11.2) | .69 (17.5) | 36000 | 0.031 | 0.046 |
| 0.0039 | 715P3925800L | 1.125 (28.5) | .41 (10.4) | .46 (11.7) | .71 (18.0) | 33000 | 0.031 | 0.046 |
| 0.0047 | 715P4725800L | 1.125 (28.5) | .43 (10.9) | .49 (12.5) | .74 (18.8) | 30000 | 0.031 | 0.047 |
| 0.0056 | 715P5625800L | 1.125 (28.5) | .46 (11.7) | .52 (13.2) | .77 (19.6) | 28000 | 0.031 | 0.048 |
| 0.0068 | 715P6825800L | 1.125 (28.5) | .49 (12.5) | .55 (14.0) | .80 (20.3) | 25000 | 0.031 | 0.049 |
| 0.0082 | 715P8225800L | 1.125 (28.5) | .53 (13.5) | .58 (14.7) | .83 (21.2) | 23000 | 0.031 | 0.051 |
| 0.01 | 715P1035800L | 1.125 (28.5) | .57 (14.5) | .63 (16.0) | .88 (22.4) | 21000 | 0.032 | 0.053 |
| 0.012 | 715P1235800L | 1.125 (28.5) | .61 (15.5) | .67 (17.0) | .92 (23.4) | 19000 | 0.032 | 0.055 |
| 0.015 | 715P1535800L | 1.125 (28.5) | .67 (17.0) | .72 (18.3) | .97 (24.6) | 17000 | 0.033 | 0.058 |
| **Type 717P, 800 Vac Standard Sizes/Ratings** | | | | | | | | |
| 0.00047 | 717P4715800L | 1.125 (28.5) | .21 (5.4) | .39 (9.9) | .64 (16.3) | 95000 | 0.029 | 0.039 |
| 0.00056 | 717P5615800L | 1.125 (28.5) | .22 (5.6) | .40 (10.2) | .65 (16.5) | 87000 | 0.029 | 0.040 |
| 0.00068 | 717P6815800L | 1.125 (28.5) | 24 (6.1) | .42 (10.7) | .67 (17.0) | 79000 | 0.029 | 0.040 |
| 0.00082 | 717P8215800L | 1.125 (28.5) | .20 (5.1) | .38 (9.7) | .63 (16.0) | 72000 | 0.030 | 0.043 |
| 0.001 | 717P1025800L | 1.125 (28.5) | .20 (5.1) | .38 (9.7) | .63 (16.0) | 65000 | 0.030 | 0.043 |
| 0.0012 | 717P1225800L | 1.125 (28.5) | .21 (5.4) | .39 (9.9) | .64 (16.3) | 60000 | 0.030 | 0.044 |
| 0.0015 | 717P1525800L | 1.125 (28.5) | .31 (7.9) | .41 (10.4) | .66 (16.8) | 53000 | 0.030 | 0.044 |
| 0.0018 | 717P1825800L | 1.125 (28.5) | .23 (5.9) | .42 (10.7) | .67 (17.0) | 49000 | 0.030 | 0.044 |
| 0.0022 | 717P2225800L | 1.125 (28.5) | 24 (6.1) | .45 (11.4) | .70 (17.8) | 44000 | 0.030 | 0.045 |
| 0.0027 | 717P2725800L | 1.125 (28.5) | .25 (6.4) | .47 (11.9) | .72 (18.3) | 40000 | 0.030 | 0.045 |
| 0.0033 | 717P3325800L | 1.125 (28.5) | .27 (6.9) | .50 (12.7) | .75 (19.1) | 36000 | 0.031 | 0.046 |
| 0.0039 | 717P3925800L | 1.125 (28.5) | .29 (7.4) | .55 (14.0) | .80 (20.3) | 33000 | 0.031 | 0.046 |
| 0.0047 | 717P4725800L | 1.125 (28.5) | .29 (7.4) | .57 (14.5) | .82 (20.8) | 30000 | 0.031 | 0.047 |
| 0.0056 | 717P5625800L | 1.125 (28.5) | .32 (8.1) | .60 (15.3) | .85 (21.6) | 28000 | 0.031 | 0.048 |
| 0.0068 | 717P6825800L | 1.125 (28.5) | .34 (8.6) | .63 (16.0) | .88 (22.4) | 25000 | 0.031 | 0.049 |
| 0.0082 | 717P8225800L | 1.125 (28.5) | .38 (9.7) | .69 (17.5) | .94 (23.9) | 23000 | 0.031 | 0.051 |
| 0.01 | 717P1035800L | 1.125 (28.5) | .43 (10.9) | .73 (18.5) | .98 (24.9) | 21000 | 0.032 | 0.053 |
| 0.012 | 717P1235800L | 1.125 (28.5) | .44 (11.2) | .79 (20.1) | 1.04 (26.4) | 19000 | 0.032 | 0.055 |
| 0.015 | 717P1535800L | 1.125 (28.5) | .50 (12.7) | .85 (21.6) | 1.10 (27.9) | 17000 | 0.033 | 0.058 |

## 800 Vac Performance Characteristics

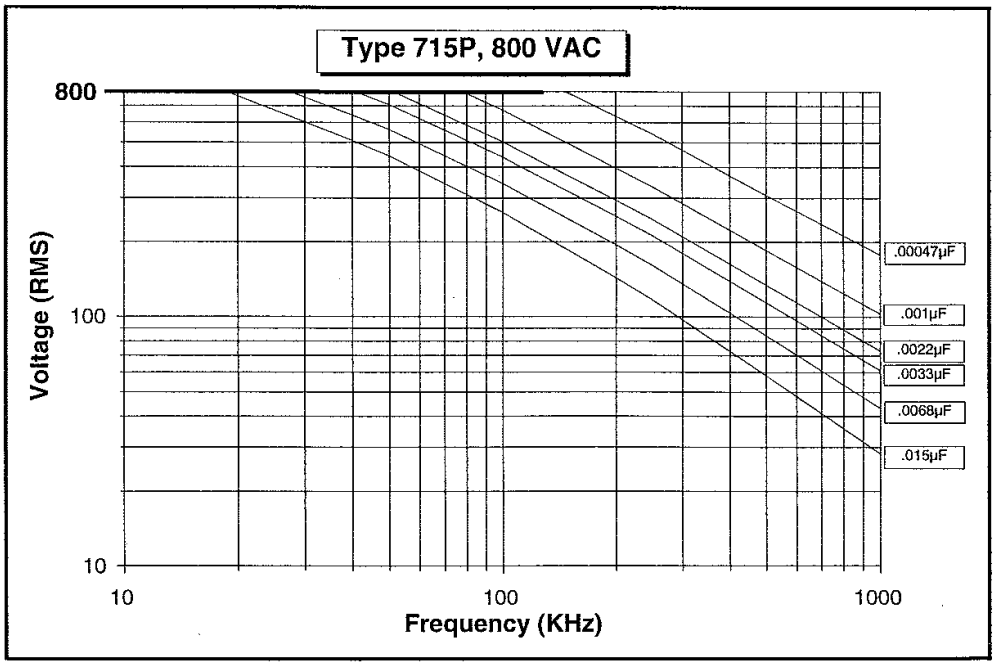


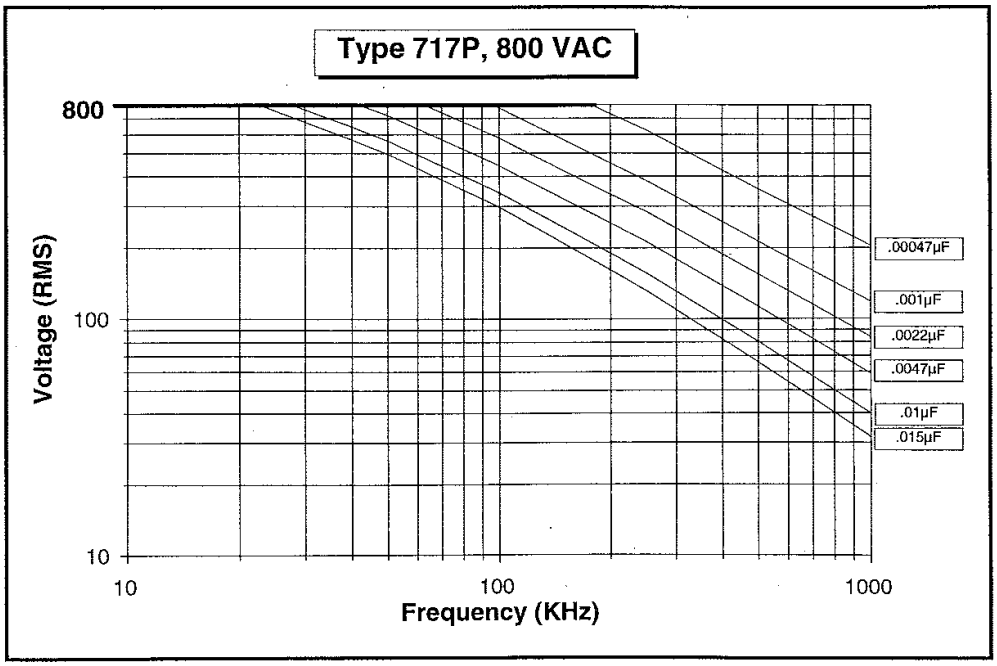



## 800 Vac Performance Characteristics

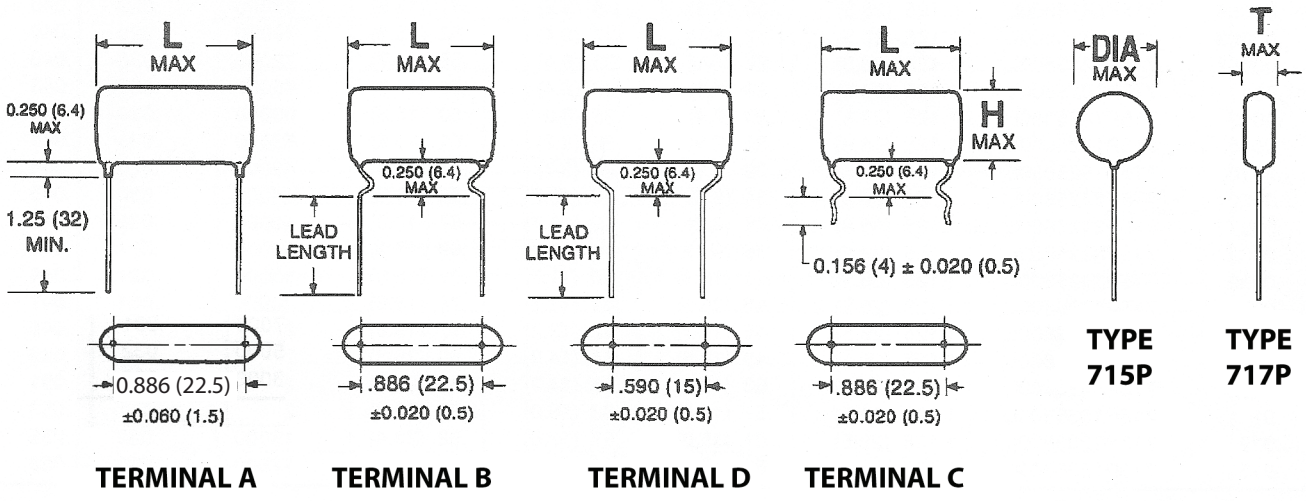
# RMS Voltage vs. Frequency @ +85 °C



# Type 715P/717P, Orange Drop®, High Voltage, Polypropylene Film/Foil

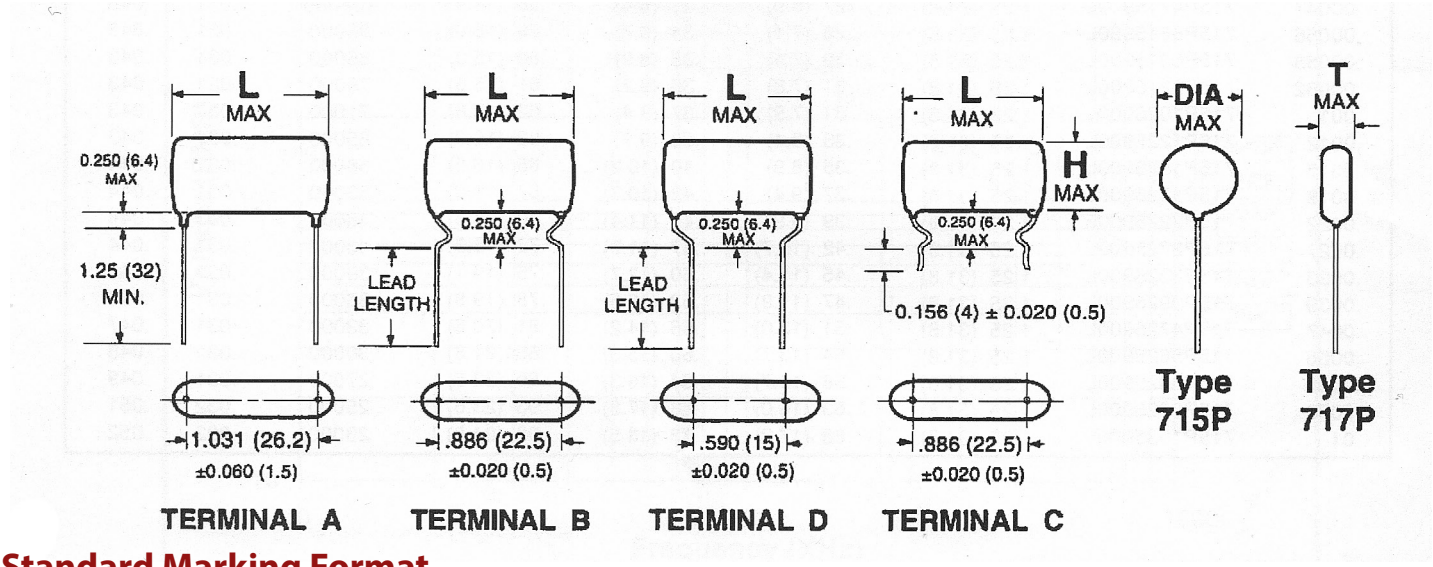
## Standard Lead Styles/Lead Spacing 800 Vac




## Standard Marking Format

| Sample Marking on unit | | Description | Tolerance codes per EIA standards | |
|---|---|---|---|---|
| | **CDE** | CDE Electronics identification | F | ±1% |
| CDE715P800VAC | **715P** | Type number | G | ±2% |
| 222J 9810 | **800VAC** | AC Voltage rating, Volts | H | ±3% |
| | **222J** | Capacitance and tolerance code | J | ±5% |
| | **9810** | Weekly date code (i.e. 10th wk of 1998) | K | ±10% |

## Standard Lead Styles/Lead Spacing 900 Vac




## Standard Marking Format

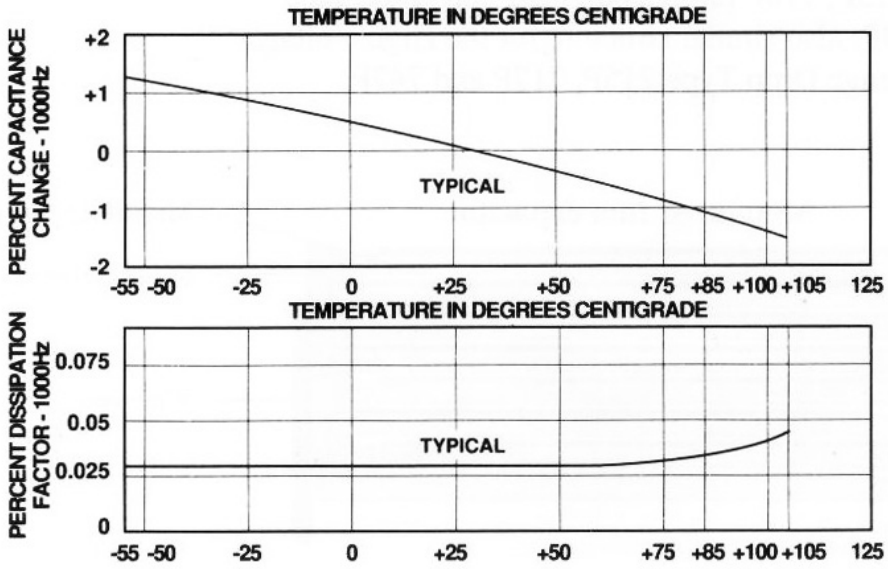
| Sample Marking on unit | | Description | Tolerance codes per EIA standards | |
|---|---|---|---|---|
| | **CDE** | CDE Electronics identification | F | ±1% |
| CDE715P900VAC | **715P** | Type number | G | ±2% |
| 222J 9810 | **900VAC** | AC Voltage rating, Volts | H | ±3% |
| | **222J** | Capacitance and tolerance code | J | ±5% |
| | **9810** | Weekly date code (i.e. 10th wk of 1998) | K | ±10% |

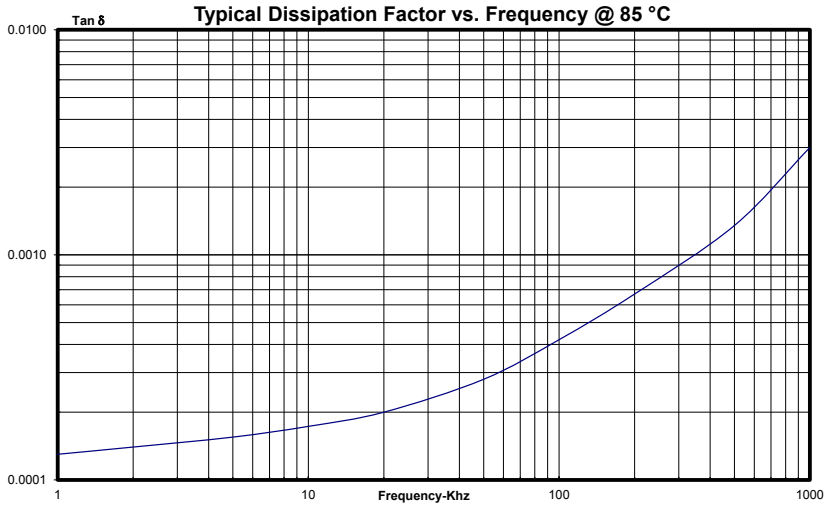
# Type 715P/717P, Orange Drop®, High Voltage, Polypropylene Film/Foil

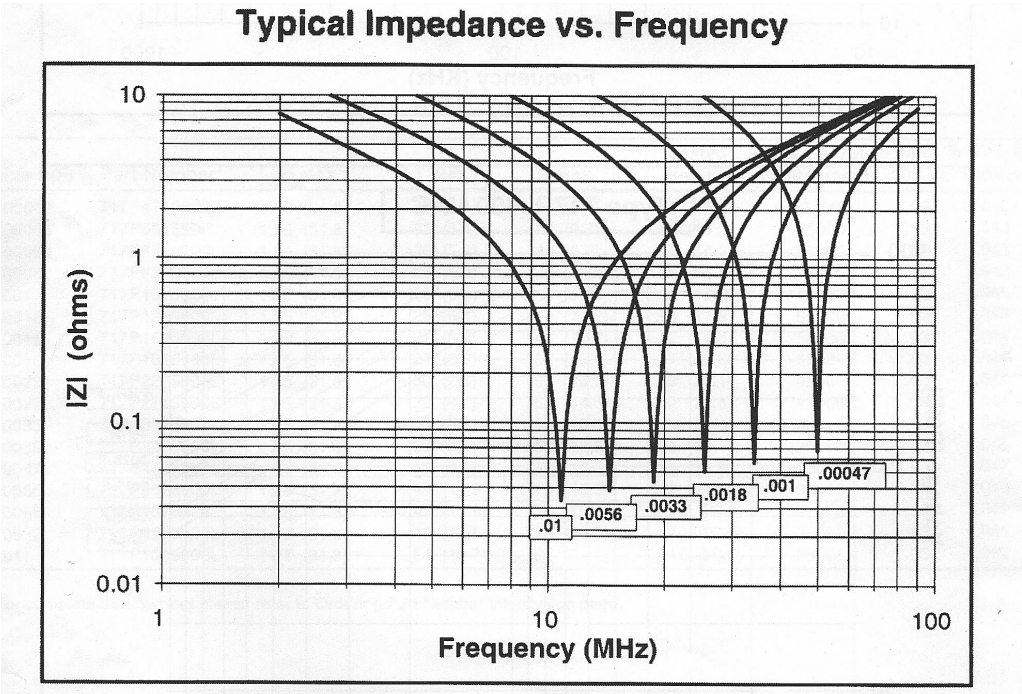
## Ratings

| Cap. (µF) | Catalog Part Number | L Max | Dia Max | H Max | Seated Height | Max dV/dt (Volts/µsec) | Max % D.F. @ 20 KHz | Max % D.F. @ 100 KHz |
|---|---|---|---|---|---|---|---|---|
| **Type 715P, 900 Vac Standard Sizes/Ratings** | | | | | | | | |
| 0.00047 | 715P4715900L | 1.25 (31.8) | .27 (6.9) | .33 (8.4) | .58 (14.8) | 104000 | 0.031 | 0.043 |
| 0.00056 | 715P5615900L | 1.25 (31.8) | .28 (7.1) | .34 (8.7) | .59 (15.0) | 95000 | 0.031 | 0.043 |
| 0.00068 | 715P6815900L | 1.25 (31.8) | .29 (7.4) | .35 (8.9) | .60 (15.3) | 86000 | 0.031 | 0.043 |
| 0.00082 | 715P8215900L | 1.25 (31.8) | .31 (7.9) | .36 (9.2) | .61 (15.5) | 78000 | 0.031 | 0.043 |
| 0.001 | 715P1025900L | 1.25 (31.8) | .31 (7.9) | .37 (9.4) | .62 (15.8) | 71000 | 0.031 | 0.043 |
| 0.0012 | 715P1225900L | 1.25 (31.8) | .33 (8.4) | .38 (9.7) | .63 (16.0) | 65000 | 0.031 | 0.043 |
| 0.0015 | 715P1525900L | 1.25 (31.8) | .35 (8.9) | .40 (10.2) | .65 (16.5) | 58000 | 0.031 | 0.044 |
| 0.0018 | 715P1825900L | 1.25 (31.8) | .37 (9.4) | .42 (10.7) | .67 (17.0) | 53000 | 0.031 | 0.044 |
| 0.0022 | 715P2225900L | 1.25 (31.8) | .39 (9.9) | .45 (11.4) | .69 (17.5) | 48000 | 0.031 | 0.044 |
| 0.0027 | 715P2725900L | 1.25 (31.8) | .42 (10.7) | .47 (11.9) | .70 (17.8) | 43000 | 0.031 | 0.044 |
| 0.0033 | 715P3325900L | 1.25 (31.8) | .45 (11.4) | .50 (12.7) | .72 (18.3) | 39000 | 0.031 | 0.046 |
| 0.0039 | 715P3925900L | 1.25 (31.8) | .47 (11.9) | .53 (13.5) | .75 (19.1) | 36000 | 0.031 | 0.046 |
| 0.0047 | 715P4725900L | 1.25 (31.8) | .51 (13.0) | .56 (14.2) | .81 (20.6) | 33000 | 0.031 | 0.047 |
| 0.0056 | 715P5625900L | 1.25 (31.8) | .54 (13.7) | .60 (15.3) | .85 (21.6) | 30000 | 0.031 | 0.048 |
| 0.0068 | 715P6825900L | 1.25 (31.8) | .58 (14.7) | .64 (16.3) | .89 (22.6) | 27000 | 0.031 | 0.049 |
| 0.0082 | 715P8225900L | 1.25 (31.8) | .63 (16.0) | .69 (17.5) | .93 (23.6) | 25000 | 0.032 | 0.051 |
| 0.01 | 715P1035900L | 1.25 (31.8) | .68 (17.3) | .73 (18.5) | .98 (24.9) | 23000 | 0.032 | 0.053 |
| **Type 717P, 900 Vac Standard Sizes/Ratings** | | | | | | | | |
| 0.00047 | 717P4715900L | 1.25 (31.8) | .20 (5.1) | .37 (9.4) | .62 (15.8) | 104000 | 0.031 | 0.043 |
| 0.00056 | 717P5615900L | 1.25 (31.8) | .21 (5.4) | .38 (9.7) | .63 (16.0) | 95000 | 0.031 | 0.043 |
| 0.00068 | 717P6815900L | 1.25 (31.8) | .23 (5.9) | .39 (9.9) | .64 (16.3) | 86000 | 0.031 | 0.043 |
| 0.00082 | 717P8215900L | 1.25 (31.8) | .23 (5.9) | .40 (10.2) | .65 (16.5) | 78000 | 0.031 | 0.043 |
| 0.001 | 717P1025900L | 1.25 (31.8) | .23 (5.9) | .43 (10.9) | .68 (17.3) | 71000 | 0.031 | 0.043 |
| 0.0012 | 717P1225900L | 1.25 (31.8) | .25 (6.4) | .44 (11.2) | .69 (17.5) | 65000 | 0.031 | 0.043 |
| 0.0015 | 717P1525900L | 1.25 (31.8) | .27 (6.9) | .47 (11.9) | .72 (18.3) | 58000 | 0.031 | 0.044 |
| 0.0018 | 717P1825900L | 1.25 (31.8) | .27 (6.9) | .52 (13.2) | .77 (19.6) | 53000 | 0.031 | 0.044 |
| 0.0022 | 717P2225900L | 1.25 (31.8) | .30 (7.6) | .54 (13.7) | .79 (20.1) | 48000 | 0.031 | 0.044 |
| 0.0027 | 717P2725900L | 1.25 (31.8) | .32 (7.6) | .57 (14.5) | .82 (20.8) | 43000 | 0.031 | 0.044 |
| 0.0033 | 717P3325900L | 1.25 (31.8) | .33 (8.4) | .63 (16.0) | .88 (22.4) | 39000 | 0.031 | 0.046 |
| 0.0039 | 717P3925900L | 1.25 (31.8) | .36 (9.2) | .66 (16.8) | .91 (23.1) | 36000 | 0.031 | 0.046 |
| 0.0047 | 717P4725900L | 1.25 (31.8) | .39 (9.9) | .69 (17.5) | .94 (23.9) | 33000 | 0.031 | 0.047 |
| 0.0056 | 717P5625900L | 1.25 (31.8) | .43 (10.9) | .73 (18.5) | .98 (24.9) | 30000 | 0.031 | 0.048 |
| 0.0068 | 717P6825900L | 1.25 (31.8) | .47 (11.9) | .78 (19.8) | 1.03 (26.2) | 27000 | 0.031 | 0.049 |
| 0.0082 | 717P8225900L | 1.25 (31.8) | .49 (12.5) | .85 (23.1) | 1.10 (27.9) | 25000 | 0.032 | 0.051 |
| 0.01 | 717P1035900L | 1.25 (31.8) | .54 (13.7) | .91 (23.1) | 1.16 (29.5) | 23000 | 0.032 | 0.053 |

## 900 Vac Performance Characteristics

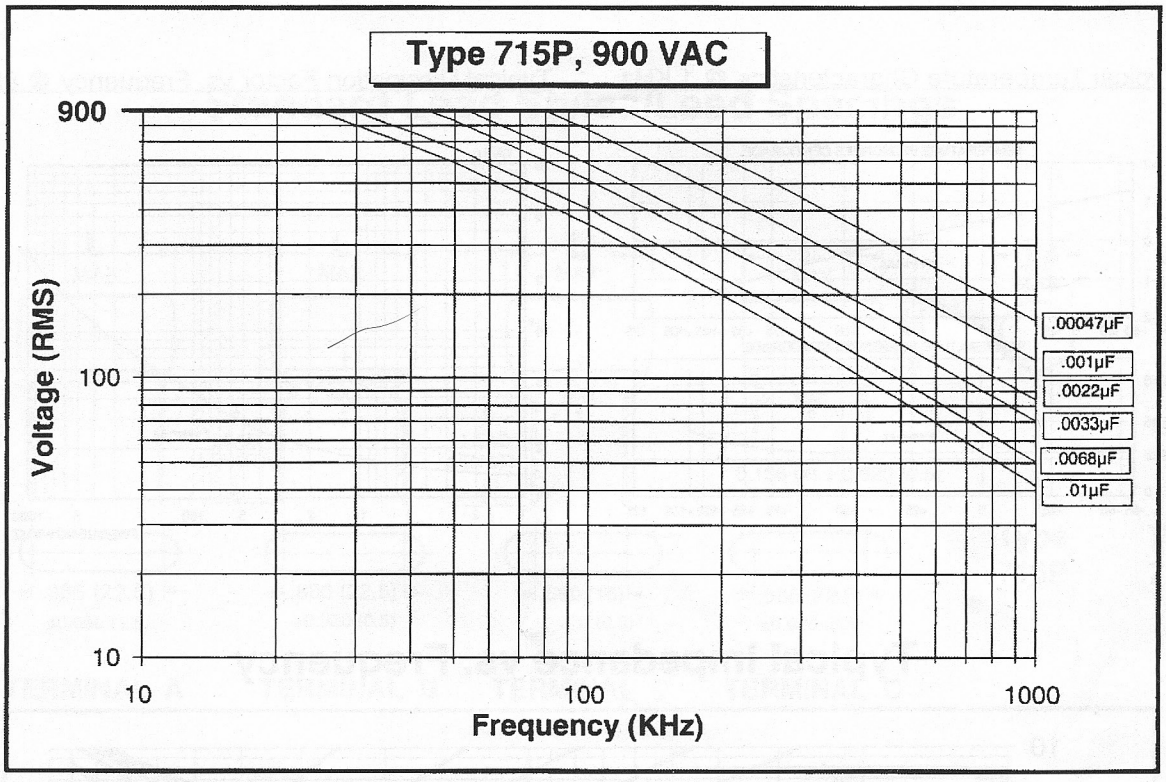


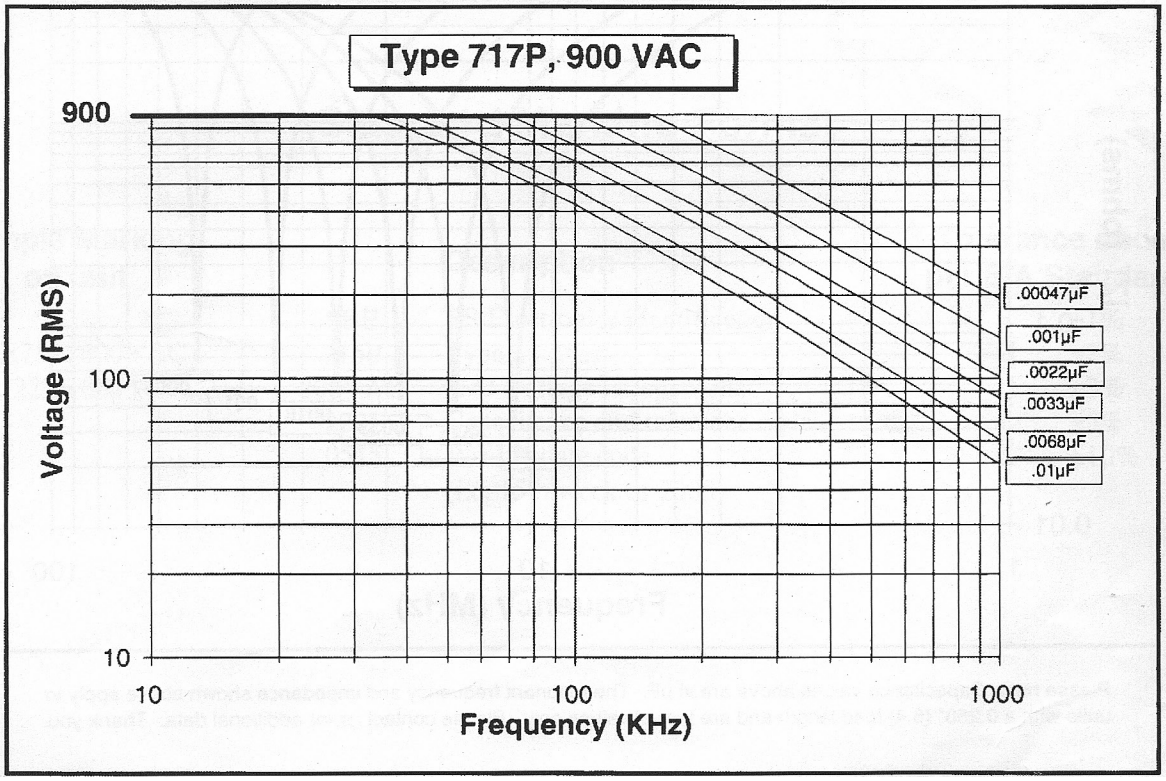



## 900 Vac Performance Characteristics

### RMS Voltage vs. Frequency @ 85 °C



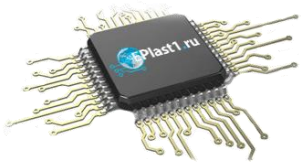
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.




**Как с нами связаться**

**Телефон:** 8 (812) 309 58 32 (многоканальный)
**Факс:** 8 (812) 320-02-42
**Электронная почта:** org@eplast1.ru
**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.