Polypropylene Film/Foil Capacitors
High Voltage, ORANGE DROP®, 800 VAC

PERFORMANCE CHARACTERISTICS
Operating Temperature: -55 °C to +85 °C. To +105 °C with proper voltage derating

Capacitance Range: 0.001 µF to 0.01 µF

Capacitance Tolerance: ±1 % to ±20 %

Voltage Rating: 800 VAC/1800 VDC

Corona Start Voltage: Typically 950 - 1000 volts rms

Dissipation Factor: 0.05 % at 20 kHz, maximum

Insulation Resistance: 400 000 Megohm minimum at +25 °C. 20 000 Megohm minimum at +85 °C. 2000 Megohm minimum at +105 °C

dv/dt: 1000 volts/microsecond minimum

FEATURES
• Designed for high AC voltage applications requiring corona free performance
• Very low dissipation factor
• Ideal in high frequency, high pulse current applications
• Excellent stability, virtually linear temperature coefficient
• Various lead lengths and crimp styles

APPLICATIONS
• Switching and high voltage power supplies, inverters, snubbers, resonant converters and electronic lighting ballasts.

PHYSICAL CHARACTERISTICS
Lead Wire: Tinned copper-clad steel 0.032 [0.813] diameter, No. 20 AWG.

Encapsulation: Conformal coating of flame retardant orange epoxy (meets UL94V-2 specifications).

Dielectric: Polypropylene film; utilizing a floating common of metalized polzproplyene, which provides self-healing characteristics.

Construction: Non-inductively wound with extended foil, internal series-section design.

DIMENSIONS in inches [millimeters]

<table>
<thead>
<tr>
<th>Terminal A</th>
<th>Terminal B</th>
<th>Terminal D</th>
<th>Terminal C</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.886 ± 0.060 [22.504 ± 1.524]</td>
<td>0.886 ± 0.030 [22.504 ± 0.762]</td>
<td>0.590 ± 0.030 [14.986 ± 0.762]</td>
<td>0.886 ± 0.020 [22.504 ± 0.508]</td>
</tr>
<tr>
<td>0.156 ± 0.015 [3.962 ± 0.381]</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RoHS COMPLIANT
**Type 715P HV**

Vishay Sprague Polypropylene Film/Foil Capacitors
High Voltage, ORANGE DROP®, 800 VAC

### STANDARD RATINGS

<table>
<thead>
<tr>
<th>CAPACITANCE (µF)</th>
<th>PART NUMBER*</th>
<th>L (Max.)</th>
<th>D (Max.)</th>
<th>H (Max.)</th>
<th>SEATED HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.001</td>
<td>715P1025800L</td>
<td>1.125 [28.575]</td>
<td>0.270 [6.858]</td>
<td>0.326 [8.280]</td>
<td>0.576 [14.630]</td>
</tr>
<tr>
<td>0.0012</td>
<td>715P1225800L</td>
<td>1.125 [28.575]</td>
<td>0.282 [7.163]</td>
<td>0.338 [8.585]</td>
<td>0.588 [14.935]</td>
</tr>
<tr>
<td>0.0015</td>
<td>715P1525800L</td>
<td>1.125 [28.575]</td>
<td>0.298 [7.569]</td>
<td>0.354 [8.992]</td>
<td>0.604 [15.342]</td>
</tr>
<tr>
<td>0.0018</td>
<td>715P1825800L</td>
<td>1.125 [28.575]</td>
<td>0.313 [7.950]</td>
<td>0.369 [9.373]</td>
<td>0.619 [15.723]</td>
</tr>
<tr>
<td>0.0027</td>
<td>715P2725800L</td>
<td>1.125 [28.575]</td>
<td>0.353 [8.966]</td>
<td>0.409 [10.389]</td>
<td>0.659 [16.739]</td>
</tr>
<tr>
<td>0.0033</td>
<td>715P3325800L</td>
<td>1.125 [28.575]</td>
<td>0.376 [9.550]</td>
<td>0.432 [10.973]</td>
<td>0.682 [17.323]</td>
</tr>
<tr>
<td>0.0039</td>
<td>715P3925800L</td>
<td>1.125 [28.575]</td>
<td>0.397 [10.084]</td>
<td>0.453 [11.506]</td>
<td>0.703 [17.856]</td>
</tr>
<tr>
<td>0.0047</td>
<td>715P4725800L</td>
<td>1.125 [28.575]</td>
<td>0.423 [10.744]</td>
<td>0.480 [12.192]</td>
<td>0.730 [18.542]</td>
</tr>
<tr>
<td>0.0068</td>
<td>715P6825800L</td>
<td>1.125 [28.575]</td>
<td>0.484 [12.294]</td>
<td>0.540 [13.716]</td>
<td>0.790 [20.066]</td>
</tr>
<tr>
<td>0.0082</td>
<td>715P0225800L</td>
<td>1.125 [28.575]</td>
<td>0.519 [13.183]</td>
<td>0.575 [14.605]</td>
<td>0.825 [20.955]</td>
</tr>
<tr>
<td>0.01</td>
<td>715P1035800L</td>
<td>1.125 [28.575]</td>
<td>0.561 [14.249]</td>
<td>0.617 [15.672]</td>
<td>0.867 [22.022]</td>
</tr>
</tbody>
</table>

*For complete Part Number please refer to Ordering Information.

### PERFORMANCE CHARACTERISTICS AT + 85 °C

- **PERCENT CAPACITANCE CHANGE - 1000 Hz**
- **PERCENT DISSIPATION CHANGE - 1000 Hz**

**Typical**

- **TEMPERATURE DEG. CENTIGRADE**
- **FREQUENCY (kHz)**

800 Vrms MAX.

- **VOLTS - rms**
- **FREQUENCY (kHz)**

- **0.001 µF**
- **0.0022 µF**
Type 715P HV
Polypropylene Film/Foil Capacitors
High Voltage, ORANGE DROP®, 800 VAC
Vishay Sprague

PERFORMANCE CHARACTERISTICS AT + 85 °C

NOTE: Complete application engineering service for optimum results in the use of the High Voltage Orange Drop® is available, including additional performance data. Samples, price quotes and delivery information is also readily available. Please contact us today.

* Terminal C has a lead length of 0.156" ± 0.015" [3.962 mm ± 0.381 mm] therefore is not necessary to indicate the lead length digit. The Captive Crimp is designed for circuit boards with hole sizes 0.044" to 0.048" [1.118 mm to 1.219 mm] in diameter. Please consult us if you have a specific requirement.

STANDARD MARKING FORMAT

SAMPLE MARKING | DESCRIPTION | TOLERANCE CODES PER EIA STANDARDS
--- | --- | ---
2715P800 VAC 222J9340 | Sprague® | F = ± 1 %
2715P800 VAC | Type Number | G = ± 2 %
222J | Capacitance and Tolerance Code | H = ± 3 %
9340 | Weekly Date Code (i.e. 40th week for 1999) | J = ± 5 %

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>715P</th>
<th>222</th>
<th>5</th>
<th>800</th>
<th>L</th>
<th>B</th>
<th>3</th>
<th>(XXXX)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TYPE</td>
<td>CAPACITANCE</td>
<td>CAPACITANCE TOLERANCE</td>
<td>AC VOLTAGE</td>
<td>CASE CODE</td>
<td>TERMINAL</td>
<td>LEAD LENGTH</td>
<td>SPECIAL CONSTRUCTION</td>
</tr>
<tr>
<td>Identifies the basic capacitor design. Also available in Type 717 P, pressed design. Contact factory for additional information on sizes.</td>
<td>This is expressed in picofarads. The first two digits are the significant figures, the third is the number of zeros to follow. (i.e. 222 = 2200 pF = 0.0022 µF)</td>
<td>0 = ± 20 %</td>
<td>See Standard Ratings table.</td>
<td>1 = 0.187 ± 0.030 [4.75 ± 0.762]</td>
<td></td>
<td>A suffix may be added by the factory to denote special construction.</td>
<td></td>
</tr>
</tbody>
</table>

A suffix may be added by the factory to denote special construction.
ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay’s knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer’s responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer’s technical experts. Product specifications do not expand or otherwise modify Vishay’s terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk and agree to fully indemnify and hold Vishay and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that Vishay or its distributor was negligent regarding the design or manufacture of the part. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.