Radial Through-Hole Ceramic Disc Capacitors
Safety Standard Recognized, 900 Series, Encapsulated, Class X1/Y1 & X1/Y2

Why Choose KEMET
KEMET applies world-class service and quality to deliver industry-leading, high performance capacitance solutions worldwide. With 95% of possible dielectric solutions, KEMET offers the world’s most complete line of surface mount and through-hole capacitor technologies across tantalum, ceramic, film, aluminum and paper dielectrics. One world. One KEMET.

Features & Benefits
- Safety standard recognized (IEC 60384-14)
- Reliable operation up to 125°C
- Class X1/Y1 and X1/Y2
- 5.0 mm, 7.5 mm and 10 mm lead spacing
- Pb-free and RoHS compliant
- Halogen-free
- High reliability
- Preformed (crimped) or straight lead configurations
- Non-polar device, minimizing installation concerns
- Encapsulation meets flammability standard UL 94V-0

Product Checklist
- Do you require an AC rated capacitor?
- Is your application “across-the-line” or “line-to-ground”?
- Does your application require a safety standard recognized capacitor?
- What is the nominal AC line voltage in your application?
- What is your capacitance requirement?
- What is your lead spacing requirement?
- Do you require a preformed (kinked) or straight lead?

Programs Supported
- Line-to-line (Class X) filtering
- Line to-ground (Class Y) filtering
- Antenna coupling
- Primary and secondary coupling (switching power supplies)
- Line disturbances suppression (motors and motor controls, relays, switching power supplies and invertors)

Electrical/Physical Characteristics

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</thead>
<tbody>
<tr>
<td>X1/Y1</td>
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<tr>
<td>X1 400 VAC / Y1 250 VAC</td>
<td>C = ± 0.25 pF</td>
<td>CH (NP0)</td>
<td>SL</td>
<td>-25°C to +125°C</td>
<td>VDE (ENEC)/IEC 60384-14</td>
<td>2.0 pF up to 4,700 pF</td>
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<tr>
<td>X1 400 VAC / Y1 400 VAC</td>
<td>D = ± 0.5 pF</td>
<td>YSP</td>
<td>Y5U</td>
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<tr>
<td>X1 760 VAC / Y1 500 VAC</td>
<td>J = ± 5 %</td>
<td>M = ± 10%</td>
<td>Y5V</td>
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<td>X1/Y2</td>
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<tr>
<td>X1 400 VAC / Y2 250 VAC</td>
<td>C = ± 0.25 pF</td>
<td>CH (NP0)</td>
<td>SL</td>
<td>-40°C to +125°C</td>
<td>VDE (ENEC)/IEC 60384-14</td>
<td>2.0 pF up to 10,000 pF</td>
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<tr>
<td>X1 440 VAC / Y2 300 VAC</td>
<td>J = ± 5 %</td>
<td>M = ± 10%</td>
<td>Y5V</td>
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### Ordering Information

<table>
<thead>
<tr>
<th>Ceramic Series</th>
<th>Body Diameter</th>
<th>Lead Spacing</th>
<th>Spec. Code</th>
<th>Capacitance Code (pF)</th>
<th>Capacitance Tolerance</th>
<th>Rated Voltage</th>
<th>Dielectric/ Temperature Characteristic</th>
<th>Design</th>
<th>Lead Configuration</th>
<th>Failure Rate</th>
<th>Packaging (C-Spec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C9 Ceramic 900 Series</td>
<td>3 = 7.0 mm</td>
<td>1 = 7.5 mm</td>
<td>U = Safety</td>
<td>2 significant digits + Number of zeros</td>
<td>±0.25 pF</td>
<td>±5%</td>
<td>±10%</td>
<td>±0.5 pF</td>
<td>±5%</td>
<td>±10%</td>
<td>±0.5 pF</td>
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<td>1 = 8.0 mm</td>
<td>1 = 8.0 mm</td>
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<td>2 = 9.0 mm</td>
<td>1 = 10.0 mm</td>
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<td>3 = 10.0 mm</td>
<td>1 = 10.0 mm</td>
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<td>4 = 11.0 mm</td>
<td>1 = 10.0 mm</td>
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<td>6 = 13.0 mm</td>
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<td>7 = 14.0 mm</td>
<td>1 = 10.0 mm</td>
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<td>8 = 15.0 mm</td>
<td>1 = 10.0 mm</td>
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- **C9** = Ceramic 900 Series
- **U** = Safety
- **S** = Specific Code
- **D** = Design
- **A** = Lead Configuration
- **A** = Failure Rate
- **7317** = Packaging (C-Spec)

**Ordering Information**

- **Rated Voltage**
  - **U** = X1 400 VAC / Y1 250 VAC
  - **V** = X1 400 VAC / Y1 400 VAC
  - **W** = X1 400 VAC / Y1 400 VAC
  - **Y** = X1 400 VAC / Y2 250 VAC
  - **Z** = X1 440 VAC / Y2 300 VAC

- **Dielectric/ Temperature Characteristic**
  - **N** = NP0 (±60PPM/°C)
  - **S** = SL (-1000~+350ppm/°C)
  - **Y** = Y5P (±10%)
  - **W** = Y5U (+20% to -55%)
  - **V** = Y5V (+30% to -80%)

- **Capacitance Tolerance**
  - **C** = ±0.25 pF
  - **D** = ±0.5 pF
  - **J** = ±5% (e.g., 2.2 pF = 229)
  - **K** = ±10%
  - **M** = ±10%

- **Lead Configuration**
  - **A** = Straight
  - **B** = Vertical Kink
  - **C** = Outside Kink
  - **D** = Inside Kink

- **Packaging**
  - **C-Spec**
    - **7317** = Armo Pack
    - **WL30** = Bulk - 3.0 mm lead length
    - **WL35** = Bulk - 3.5 mm lead length
    - **WL40** = Bulk - 4.0 mm lead length
    - **WL45** = Bulk - 4.5 mm lead length
    - **WL50** = Bulk - 5.0 mm lead length
    - **WL20** = Bulk - 20 mm lead length