RF Power Tubular Capacitors
with Mounting Tags, Class 1 Ceramic

**FEATURES**
- Small size
- High reliability
- Wide range of capacitance values

**APPLICATIONS**
- Induction and dielectric heating
- Antenna units
- Filter, bypass, and coupling circuits

**MATERIAL**
Capacitor elements made from class 1 ceramic dielectric with noble metal electrodes.

Connection terminals: made from copper / brass, silver plated.

**FINISH**
Capacitor body completely protective lacquered.
The contoured insulating rim and the ceramic base are additionally glazed.

**MARKING**
Type designator, capacitance value and tolerance, rated peak voltage, ceramic material code, production date code, manufacturer logo.

### QUICK REFERENCE DATA

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceramic Class</td>
<td>1</td>
</tr>
<tr>
<td>Ceramic Dielectric</td>
<td>R7, R42, R85</td>
</tr>
<tr>
<td>Type</td>
<td>RA 020080</td>
</tr>
<tr>
<td></td>
<td>RB 020080</td>
</tr>
<tr>
<td></td>
<td>RC 020080</td>
</tr>
<tr>
<td></td>
<td>RE 020080</td>
</tr>
<tr>
<td>Voltage (Vp)</td>
<td>4000</td>
</tr>
<tr>
<td>Min. Capacitance (pF)</td>
<td>60</td>
</tr>
<tr>
<td>Max. Capacitance (pF)</td>
<td>2000</td>
</tr>
<tr>
<td>Mounting</td>
<td>Screw terminal</td>
</tr>
</tbody>
</table>

**CAPACITANCE RANGE**
60 pF to 2.0 nF

**CAPACITANCE TOLERANCE**
± 20 %; ± 10 %; ± 5 %

**CERAMIC DIELECTRICS**
- R7 (TCC + 100 ppm/K)
- R42 (TCC - 250 ppm/K)
- R85 (TCC - 750 ppm/K)

**RATED VOLTAGE**
4.0 kVp

**DIELECTRIC STRENGTH TEST**
200 % of rated AC voltage (50 Hz, 5 minutes)

**DISSIPATION FACTOR**
- R7: max. 0.07 %
- R42, R85: max. 0.05 %

Measuring frequencies:
- 1 MHz (< 1 nF); 300 kHz or 100 kHz (≥ 1 nF)

**INSULATION RESISTANCE**
Min. 100 000 MΩ (at 25 °C)

**OPERATING TEMPERATURE RANGE**
-55 °C to +100 °C
### SAP PART NUMBER AND ELECTRICAL DATA

<table>
<thead>
<tr>
<th>PART NUMBER</th>
<th>CERAMIC</th>
<th>CAP. VALUES (pF)</th>
<th>RATED VOLTAGE (kVp)</th>
<th>RATED POWER (kvar)</th>
<th>RATED CURRENT (A RMS)</th>
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<tbody>
<tr>
<td>R#020080BD600##BF1</td>
<td>R7</td>
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<tr>
<td>R#020080BD102##BJ1</td>
<td>R85</td>
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<td>2000</td>
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### Notes
- # 2nd digit: code letter of the terminal version A, B, C, E
- ## 14th to 15th digit: capacitance tolerance code ± 20 % = 38, ± 10 % = 36, ± 5 % = 33
- (1) The surface temperature during operation must not exceed +100 °C

### DIMENSIONS in millimeters (inches)

**RA**
- 6.0 x 0.4
- 3.0 ± 0.2
- Ø 25 (0.98 Dia.)
- 80 (3.15)
- 18 ± 1 (0.71 ± 0.04)

**RB**
- 40 ± 1 (1.57 ± 0.04)
- Ø 20 (0.79 Dia.)
- 4.3 ± 0.2 (0.169 ± 0.008)
- 32.0 ± 0.3 (1.260 ± 0.012)
DIMENSIONS in millimeters (inches)

RC

- Insulating base
  - 40 ± 1 (1.57 ± 0.04)
  - 88 ± 1 (3.46 ± 0.04)

- 0.5 (0.020)
- 6 (0.24)

RE

- 81 ± 1 (3.19 ± 0.04)
- 0.5 (0.020)

- 40 (1.57)
- 32.0 ± 0.3 (1.260 ± 0.012)

RELATED DOCUMENTS

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