# RF Power Tubular Capacitors with Mounting Tags, Class 1 Ceramic




| QUICK REFERENCE DATA | |
|---|---|
| **DESCRIPTION** | **VALUE** |
| Ceramic Class | 1 |
| Ceramic Dielectric | R7, R42, R85 |
| Type | RA 020080<br>RB 020080<br>RC 020080<br>RE 020080 |
| Voltage ($V_p$) | 4000 |
| Min. Capacitance (pF) | 60 |
| Max. Capacitance (pF) | 2000 |
| Mounting | Screw terminal |

## 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.

## FEATURES

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

## APPLICATIONS

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

## 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 $kV_p$

## 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



For technical questions, contact: powcap@vishay.com

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## SAP PART NUMBER AND ELECTRICAL DATA

| PART NUMBER | CERAMIC | CAP. VALUES (pF) | RATED VOLTAGE ($kV_p$) | RATED POWER [1] (kvar) | RATED CURRENT ($A_{RMS}$) |
|---|---|---|---|---|---|
| R#020080BD600##BF1 | R7 | 60 | 4.0 | 8.0 | 6.0 |
| R#020080BD800##BF1 | | 80 | | | |
| R#020080BD101##BF1 | | 100 | | | |
| R#020080BD121##BF1 | | 120 | | | |
| R#020080BD161##BF1 | | 160 | | | |
| R#020080BD201##BH1 | R42 | 200 | | 10.5 | |
| R#020080BD251##BH1 | | 250 | | | |
| R#020080BD301##BH1 | | 300 | | | |
| R#020080BD401##BH1 | | 400 | | | |
| R#020080BD501##BH1 | | 500 | | | |
| R#020080BD601##BH1 | | 600 | | | |
| R#020080BD801##BH1 | | 800 | | | |
| R#020080BD102##BJ1 | R85 | 1000 | | | |
| R#020080BD122##BJ1 | | 1200 | | | |
| R#020080BD162##BJ1 | | 1600 | | | |
| R#020080BD202##BJ1 | | 2000 | | | |

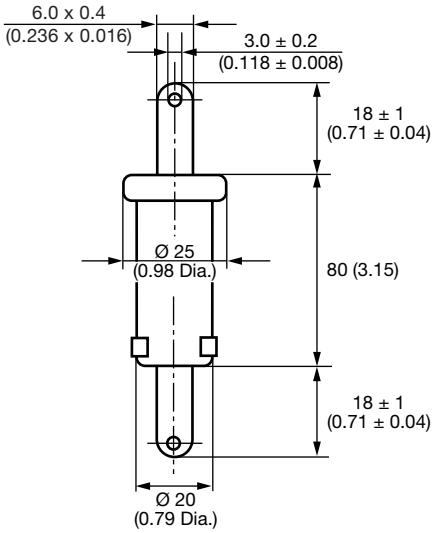
**Notes**

- # 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

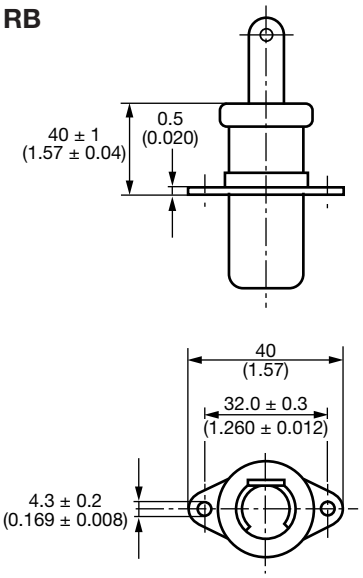
(1) The surface temperature during operation must not exceed +100 °C

## DIMENSIONS in millimeters (inches)

**RA**




**RB**

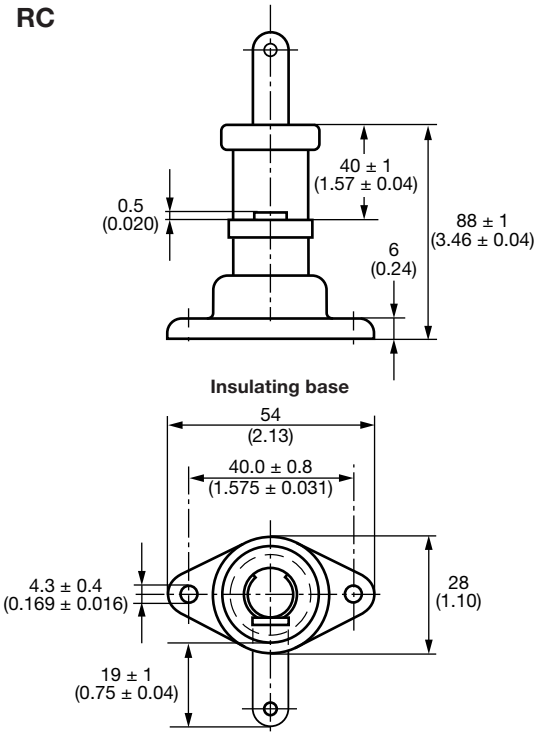




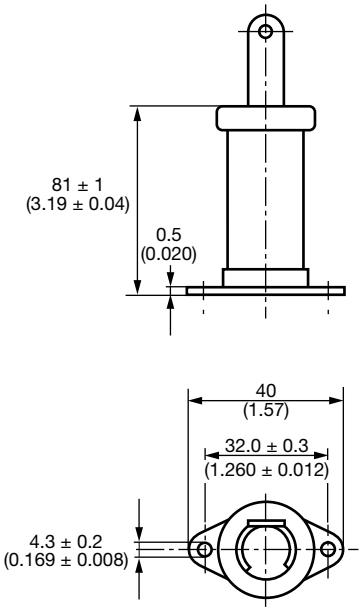
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## DIMENSIONS in millimeters (inches)

RC




RE




## RELATED DOCUMENTS

| | |
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| General Information | www.vishay.com/doc?22071 |



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