

## 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 RB 020080 RC 020080 RE 020080
Voltage (V <sub>p</sub> )	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<sub>p</sub>

### 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

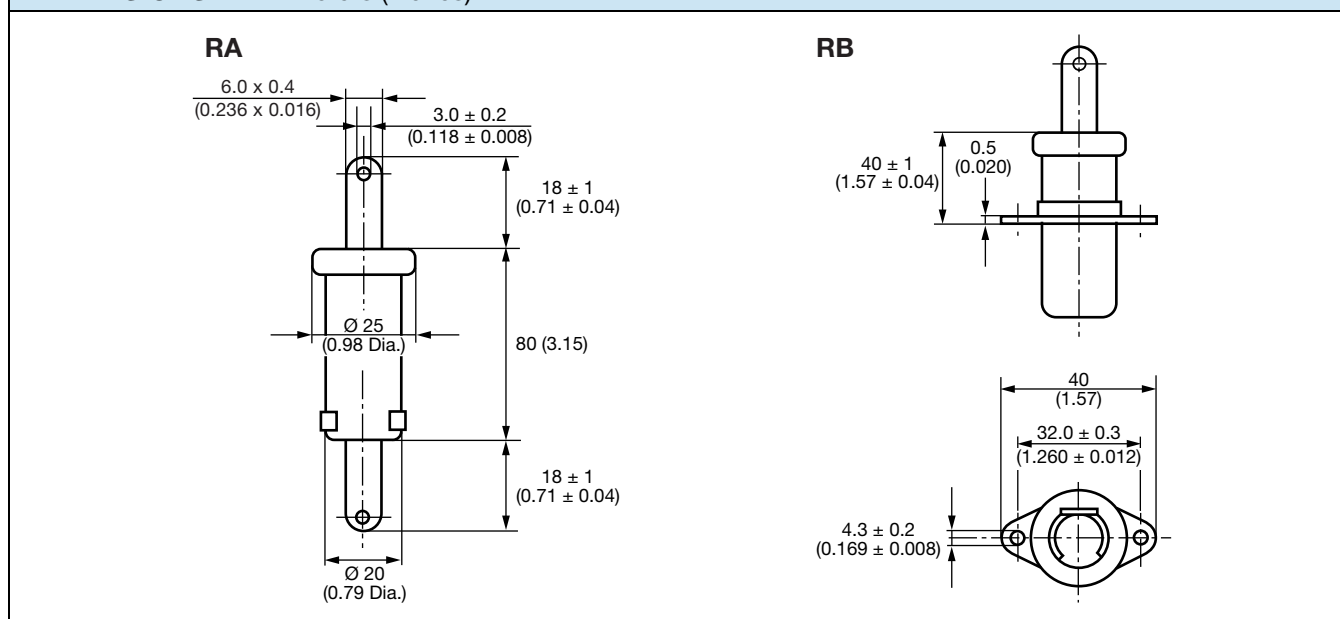
-55 °C to +100 °C

**SAP PART NUMBER AND ELECTRICAL DATA**

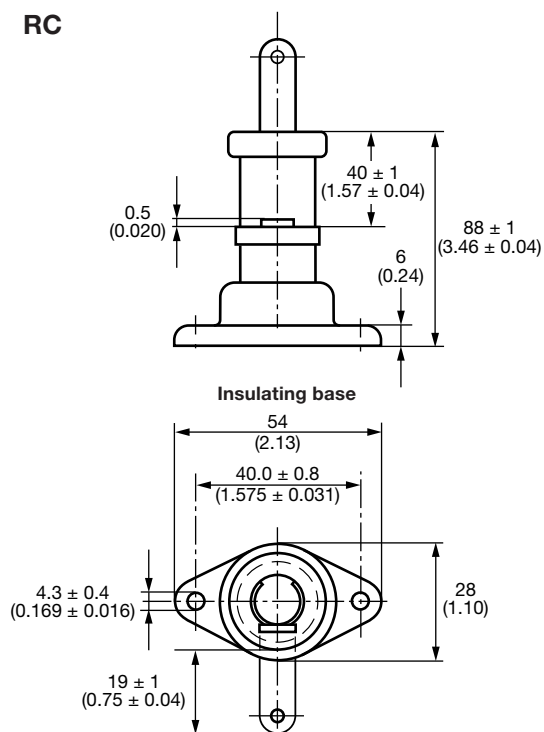
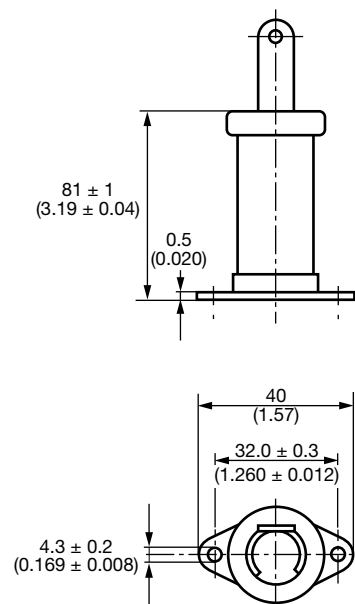
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV <sub>p</sub> )	RATED POWER <sup>(1)</sup> (kvar)	RATED CURRENT (A <sub>RMS</sub> )
R#020080BD600##BF1	R7	60	4.0	8.0	6.0
R#020080BD800##BF1		80			
R#020080BD101##BF1		100			
R#020080BD121##BF1		120			
R#020080BD161##BF1		160			
R#020080BD201##BH1	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**

- # 2<sup>nd</sup> digit: code letter of the terminal version A, B, C, E
- ## 14<sup>th</sup> to 15<sup>th</sup> digit: capacitance tolerance code  $\pm 20\% = 38$ ,  $\pm 10\% = 36$ ,  $\pm 5\% = 33$
- (1) The surface temperature during operation must not exceed +100 °C

**DIMENSIONS in millimeters (inches)**


**DIMENSIONS** in millimeters (inches)

**RC**

**RE**

**RELATED DOCUMENTS**

General Information

[www.vishay.com/doc?22071](http://www.vishay.com/doc?22071)



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