

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



QUICK REFERENCE DATA		
DESCRIPTION	VALUE	
Ceramic Class	1	
Ceramic Dielectric	R7, R16, R42, R85	
Type	RA 016040 RB 016040 RE 016040	RA 016070 RB 016070 RE 016070
Voltage (V <sub>p</sub> )	3000	
Min. Capacitance (pF)	25	50
Max. Capacitance (pF)	1000	1600
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

25 pF to 1.6 nF

### CAPACITANCE TOLERANCE

± 20 %; ± 10 %; ± 5 %

### CERAMIC DIELECTRICS

- R7 (TCC + 100 ppm/K)
- R16 (TCC + 100 ppm/K)
- R42 (TCC - 250 ppm/K)
- R85 (TCC - 750 ppm/K)

### RATED VOLTAGE

3.0 kV<sub>p</sub>

### DIELECTRIC STRENGTH TEST

200 % of rated AC voltage (50 Hz, 5 minutes)

### DISSIPATION FACTOR

R7: max. 0.07 %  
R16: max. 0.04 %  
R42, R85: max. 0.05 %

Measuring frequencies:

1 MHz (< 1 nF); 300 kHz or 100 kHz (≥ 1 nF)

### INSULATION RESISTANCE

Min. 10 000 MΩ (at 25 °C)

### OPERATING TEMPERATURE RANGE

-55 °C to +100 °C

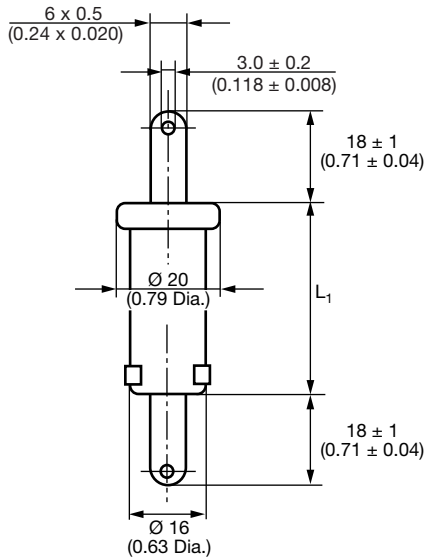
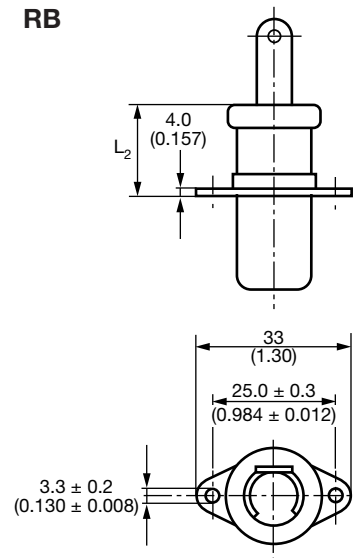
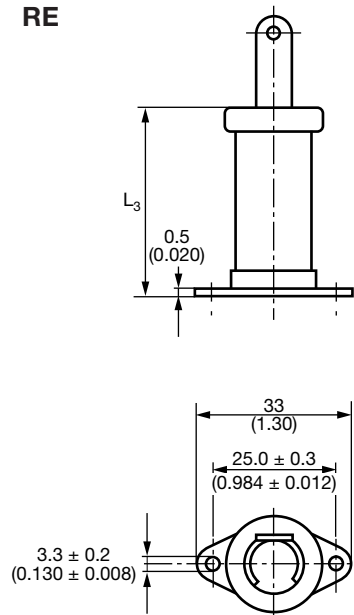


SAP PART NUMBER AND ELECTRICAL DATA												
PART NUMBER	CERAMIC	CAP. VALUES (pF)	RATED VOLTAGE (kV <sub>p</sub> )	RATED POWER <sup>(1)</sup> (kvar)	RATED CURRENT (A <sub>RM</sub> s)							
<b>TYPE R. 016040</b>												
R#016040BC250##BF1	R7	25	3.0	3.5	5.0							
R#016040BC300##BF1		30										
R#016040BC400##BF1		40										
R#016040BC500##BF1		50										
R#016040BC600##BF1		60										
R#016040BC800##BG1	R16	80										
R#016040BC101##BH1	R42	100		3.0		4.2	5.0					
R#016040BC121##BH1		120										
R#016040BC161##BH1		160										
R#016040BC201##BH1		200										
R#016040BC251##BH1		250										
R#016040BC301##BH1		300										
R#016040BC401##BJ1	R85	400				3.0		4.2	5.0			
R#016040BC501##BJ1		500										
R#016040BC601##BJ1		600										
R#016040BC801##BJ1		800										
R#016040BC102##BJ1		1000										
<b>TYPE R. 016070</b>												
R#016070BC500##BF1	R7	50	3.0		5.6			5.0				
R#016070BC600##BF1		60										
R#016070BC800##BF1		80										
R#016070BC101##BF1		100										
R#016070BC121##BG1	R16	120		3.0			5.6			5.0		
R#016070BC161##BG1		160										
R#016070BC201##BH1	R42	200			3.0						7.0	5.0
R#016070BC251##BH1		250										
R#016070BC301##BH1		300										
R#016070BC401##BH1		400										
R#016070BC501##BH1		500										
R#016070BC601##BH1		600										
R#016070BC801##BJ1	R85	800				3.0	7.0		5.0			
R#016070BC102##BJ1		1000										
R#016070BC122##BJ1		1200										
R#016070BC162##BJ1		1600										

**Notes**

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

**DIMENSIONS** in millimeters (inches)

**RA**

**RB**

**RE**


TYPE	RA 016040, RB 016040, RE 016040	RA 016070, RB 016070, RE 016070
Length L <sub>1</sub>	41 ± 1 (1.61 ± 0.04)	71 ± 1 (2.80 ± 0.04)
Length L <sub>2</sub>	20 ± 1 (0.79 ± 0.04)	35 ± 1 (1.38 ± 0.04)
Length L <sub>3</sub>	41 ± 1 (1.61 ± 0.04)	71 ± 1 (2.80 ± 0.04)

**RELATED DOCUMENTS**

General Information

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



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