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_p)	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_p

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_p)**	**RATED POWER [1] (kvar)**	**RATED CURRENT (A_{RMS})**
TYPE R. 016040					
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		4.2	
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			
R#016040BC501##BJ1		500			
R#016040BC601##BJ1		600			
R#016040BC801##BJ1		800			
R#016040BC102##BJ1		1000			
TYPE R. 016070					
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			
R#016070BC161##BG1		160		7.0	
R#016070BC201##BH1	R42	200			
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			
R#016070BC102##BJ1		1000			
R#016070BC122##BJ1		1200			
R#016070BC162##BJ1		1600			

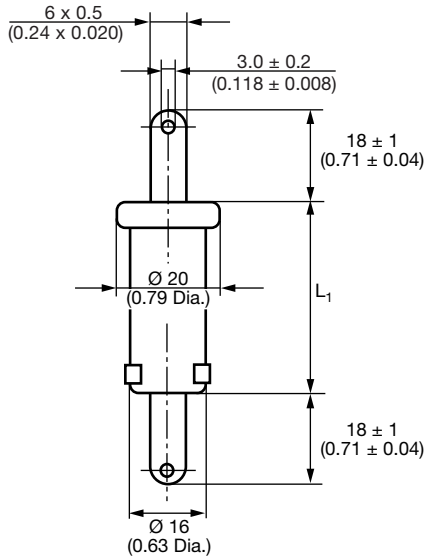
Notes

- # 2nd digit: code letter of the terminal version A, B, E
- ## 14th to 15th digit: capacitance tolerance code ± 20 % = 38, ± 10 % = 36, ± 5 % = 33

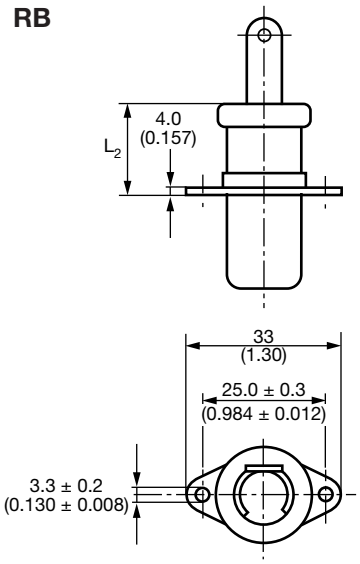
(1) The surface temperature during operation must not exceed +100 °C

DIMENSIONS in millimeters (inches)

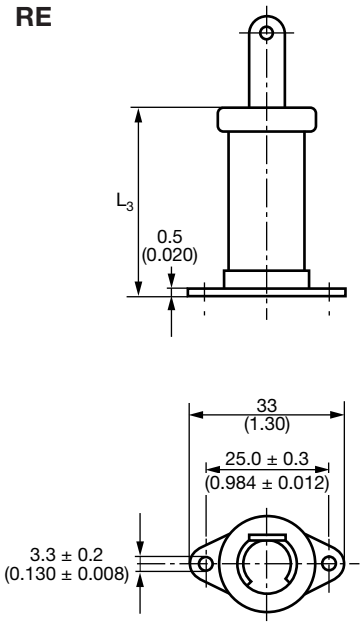
RA



RB



RE



TYPE	RA 016040, RB 016040, RE 016040	RA 016070, RB 016070, RE 016070
Length L_1	41 ± 1 (1.61 ± 0.04)	71 ± 1 (2.80 ± 0.04)
Length L_2	20 ± 1 (0.79 ± 0.04)	35 ± 1 (1.38 ± 0.04)
Length L_3	41 ± 1 (1.61 ± 0.04)	71 ± 1 (2.80 ± 0.04)

RELATED DOCUMENTS

General Information	www.vishay.com/doc?22071

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