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	RA 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

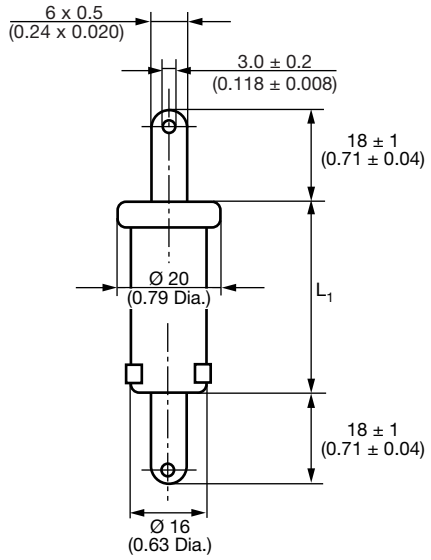
SAP PART NUMBER AND ELECTRICAL DATA					
PART NUMBER	**CERAMIC**	**CAP. VALUES (pF)**	**RATED VOLTAGE (kV_p)**	**RATED POWER [1] (kvar)**	**RATED CURRENT (A_{RMS})**
TYPE RA 016040					
RA016040BC250##BF1	R7	25	3.0	3.5	5.0
RA016040BC300##BF1		30			
RA016040BC400##BF1		40			
RA016040BC500##BF1		50			
RA016040BC600##BF1		60			
RA016040BC800##BG1	R16	80			
RA016040BC101##BH1	R42	100		4.2	
RA016040BC121##BH1		120			
RA016040BC161##BH1		160			
RA016040BC201##BH1		200			
RA016040BC251##BH1		250			
RA016040BC301##BH1		300			
RA016040BC401##BJ1	R85	400			
RA016040BC501##BJ1		500			
RA016040BC601##BJ1		600			
RA016040BC801##BJ1		800			
RA016040BC102##BJ1		1000			
TYPE RA 016070					
RA016070BC500##BF1	R7	50	3.0	5.6	5.0
RA016070BC600##BF1		60			
RA016070BC800##BF1		80			
RA016070BC101##BF1		100			
RA016070BC121##BG1	R16	120			
RA016070BC161##BG1		160		7.0	
RA016070BC201##BH1	R42	200			
RA016070BC251##BH1		250			
RA016070BC301##BH1		300			
RA016070BC401##BH1		400			
RA016070BC501##BH1		500			
RA016070BC601##BH1		600			
RA016070BC801##BJ1	R85	800			
RA016070BC102##BJ1		1000			
RA016070BC122##BJ1		1200			
RA016070BC162##BJ1		1600			

Notes

- ## 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)



TYPE	RA 016040	RA 016070
Length L_1	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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