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 012085 RE 012085	RA 012020 RB 012020 RE 012020
Voltage (V_p)	2000	
Min. Capacitance (pF)	3.0	10
Max. Capacitance (pF)	100	400
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

3.0 pF to 400 pF

CAPACITANCE TOLERANCE

< 10 pF: ± 2 pF; ± 1 pF; ± 0.5 pF

≥ 10 pF: ± 20 %; ± 10 %; ± 5 %

CERAMIC DIELECTRICS

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

RATED VOLTAGE

2.0 kV_p

DIELECTRIC STRENGTH TEST

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

DISSIPATION FACTOR

R7: max. 0.07 % (1 MHz)

R42, R85: max. 0.05 % (1 MHz)

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})**
TYPE R. 012085					
R#012085BB930##BF1	R7	3.0	2.0	0.7	4.0
R#012085BB940##BF1		4.0			
R#012085BB950##BF1		5.0			
R#012085BB960##BF1		6.0			
R#012085BB980##BF1		8.0			
R#012085BB100##BF1		10			
R#012085BB160##BH1	R42	16		0.8	
R#012085BB200##BH1		20			
R#012085BB250##BH1		25			
R#012085BB300##BH1		30			
R#012085BB400##BJ1	R85	40			
R#012085BB500##BJ1		50			
R#012085BB600##BJ1		60			
R#012085BB800##BJ1		80			
R#012085BB101##BJ1		100			
TYPE R. 012020					
R#012020BB100##BF1	R7	10	2.0	1.4	4.0
R#012020BB120##BF1		12			
R#012020BB160##BF1		16			
R#012020BB200##BF1		20			
R#012020BB250##BF1		25			
R#012020BB300##BF1		30			
R#012020BB400##BH1	R42	40		1.7	
R#012020BB500##BH1		50			
R#012020BB600##BH1		60			
R#012020BB800##BH1		80			
R#012020BB101##BJ1	R85	100			
R#012020BB121##BJ1		120			
R#012020BB161##BJ1		160			
R#012020BB201##BJ1		200			
R#012020BB251##BJ1		250			
R#012020BB301##BJ1		300			
R#012020BB401##BJ1		400			

Notes

- # 2nd digit: code letter of the terminal version A, B, E (RB 012085 is not available)
- ## 14th to 15th digit: capacitance tolerance code < 10 pF: ± 2 pF = 15, ± 1 pF = 14, ± 0.5 pF = 13
  ≥ 10 pF: ± 20 % = 38, ± 10 % = 36, ± 5 % = 33

[1] The surface temperature during operation must not exceed +100 °C

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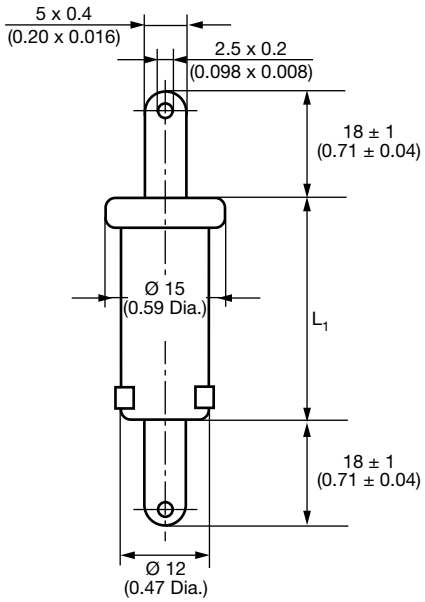
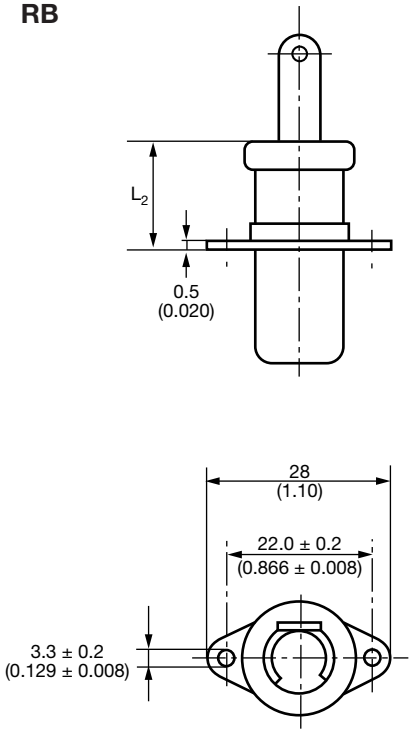
DIMENSIONS in millimeters (inches)

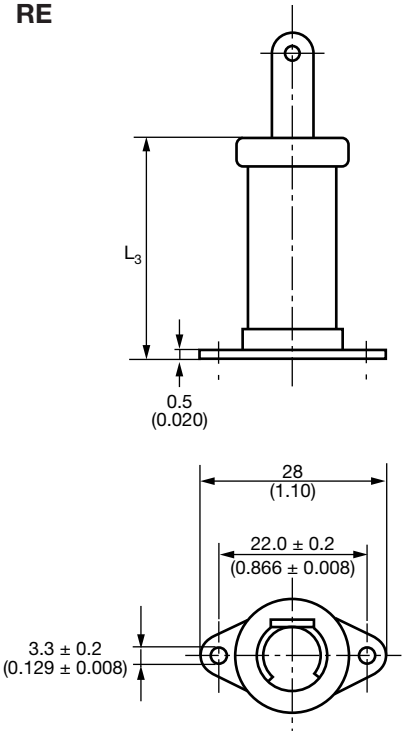
RA



RB



RE



TYPE	RA 012085 RE 012085	RA 012020 RB 012020 RE 012020
Length L_1	8.5 (0.335)	20 (0.79)
Length L_2	RB 012085 is not available	10 ± 1 (0.39 ± 0.04)
Length L_3	10 ± 1 (0.39 ± 0.04)	22 ± 1 (0.87 ± 0.04)

RELATED DOCUMENTS

General Information	www.vishay.com/doc?22071

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