# R. 016040, R. 016070



**Vishay Draloric** 

### **RF Power Tubular Capacitors** with Mounting Tags, Class 1 Ceramic



QUICK REFERENCE DATA						
DESCRIPTION	VALUE					
Ceramic Class	1					
Ceramic Dielectric	R7, R16, R42, R85					
Туре	RA 016040 RB 016040 RC 016040 RE 016040	RA 016070 RB 016070 RC 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 laquered

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 % (1 MHz)
R16:	Max. 0.04 % (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



Vishay Draloric

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> )	
TYPE R. 016040				·		
R#016040BC250##BF1		25		3.5		
R#016040BC300##BF1	R7	30				
R#016040BC400##BF1		40				
R#016040BC500##BF1		50				
R#016040BC600##BF1		60				
R#016040BC800##BG1	R16	80				
R#016040BC101##BH1		100		4.2	5.0	
R#016040BC121##BH1		120	3.0			
R#016040BC161##BH1	R42	160				
R#016040BC201##BH1	N42	200				
R#016040BC251##BH1		250				
R#016040BC301##BH1		300				
R#016040BC401##BJ1		400				
R#016040BC501##BJ1	R85	500				
R#016040BC601##BJ1		600				
R#016040BC801##BJ1		800				
R#016040BC102##BJ1		1000				
TYPE R. 016070						
R#016070BC500##BF1	R7	50		5.6		
R#016070BC600##BF1		60				
R#016070BC800##BF1		80				
R#016070BC101##BF1		100				
R#016070BC121##BG1	R16	120				
R#016070BC161##BH1		160	3.0	7.0	5.0	
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

• # 2<sup>nd</sup> digit: Code letter of the terminal version A, B, C, E

• ##  $14^{th}$  to  $15^{th}$  digit: Capacitance tolerance code  $\pm 20 \% = 38, \pm 10 \% = 36, \pm 5 \% = 33$ 

 $^{(1)}$  The surface temperature during operation must not exceed + 100 °C

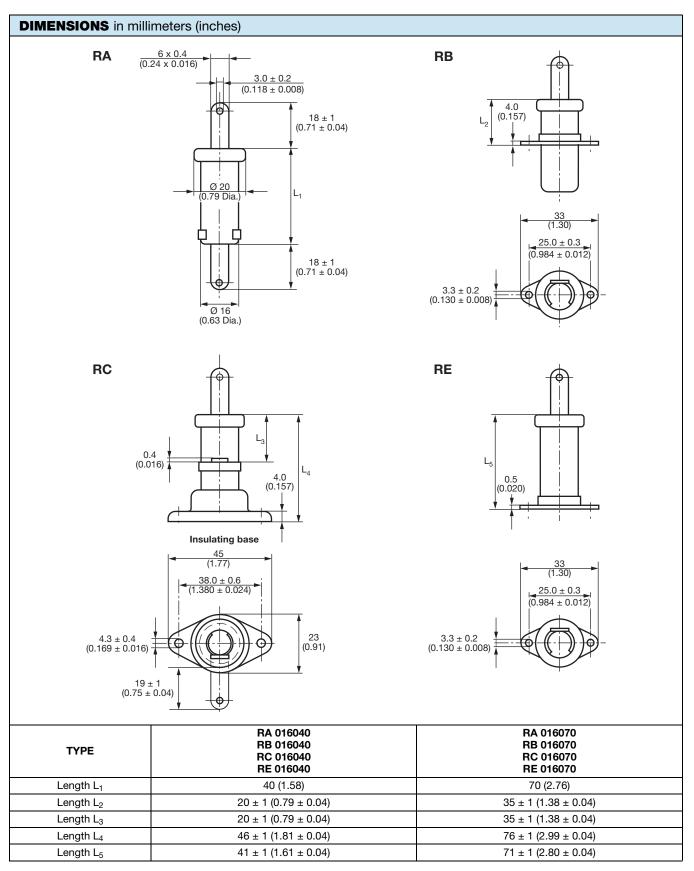
2

Document Number: 22109



### R. 016040, R. 016070

Vishay Draloric



Revision: 05-Mar-13

Document Number: 22109

For technical questions, contact: <a href="mailto:powcap@vishay.com">powcap@vishay.com</a> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <a href="http://www.vishay.com/doc?91000">www.vishay.com/doc?91000</a>



Vishay

# Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and/or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

# **Material Category Policy**

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.

Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.

Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as Halogen-Free follow Halogen-Free requirements as per JEDEC JS709A standards. Please note that some Vishay documentation may still make reference to the IEC 61249-2-21 definition. We confirm that all the products identified as being compliant to IEC 61249-2-21 conform to JEDEC JS709A standards.