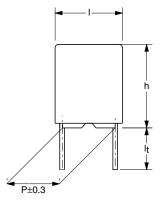
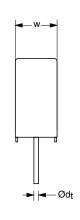
### Vishay BCcomponents

# VISHAY.

# Metallized Polypropylene Filter Film Capacitors MKP Radial Potted Type for Surge Voltage Applications





Dimensions in mm

#### **APPLICATIONS**

Low losses due to low contact resistance and low loss dielectric result in applications where high frequency occur or high stability is preferred. Their small dimensions make them suitable for circuits with high packaging density.

#### **MARKING**

C-value; rated voltage; tolerance; code for manufacturer; year and week of manufacture; manufacturers type designation

#### **DIELECTRIC**

Polypropylene film

#### **ELECTRODES**

Vacuum deposited aluminum

#### **ENCAPSULATION**

Flame retardant plastic case and epoxy resin (UL-class 94 V-0)

#### CONSTRUCTION

Wound mono construction

#### **LEADS**

Tinned wire

#### **CAPACITANCE RANGE (E24 SERIES)**

0.001 to 0.047  $\mu\text{F}$ 

#### **FEATURES**

7.5 and 10 mm lead pitch. Supplied loose in box and ammopack. Withstand surge voltages up to 1.5 kV.

Lead (Pb)-free product

RoHS-compliant product





ROHS

#### CAPACITANCE TOLERANCE

± 5 %; ± 2 %

#### RATED (DC) VOLTAGE

630 V

#### RATED (AC) VOLTAGE

160 V

#### **RATED PEAK-TO-PEAK VOLTAGE**

450 V

#### **CLIMATIC CATEGORY**

55/085/56

#### **RATED TEMPERATURE (DC)**

85 °C

#### **RATED TEMPERATURE (AC)**

85 °C

#### **MAXIMUM APPLICATION TEMPERATURE**

85 °C

#### REFERENCE SPECIFICATIONS

IEC 60384-16

#### **PERFORMANCE GRADE**

Grade 1 (long life)

#### **STABILITY GRADE**

Grade 1

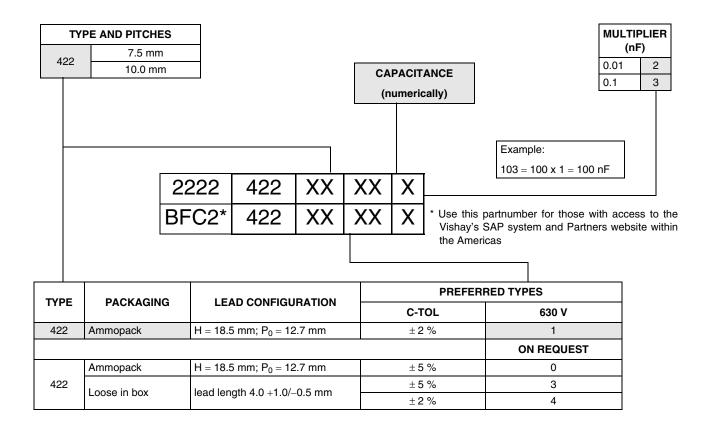
#### **DETAIL SPECIFICATION**

For more detailed data and test requirements contact: <a href="mailto:filmcaps.roeselare@vishay.com">filmcaps.roeselare@vishay.com</a>



# Metallized Polypropylene Filter Film Capacitors Vishay BCcomponents MKP Radial Potted Type for Surge Voltage Applications

#### **COMPOSITION OF CATALOG NUMBER**



#### **SPECIFIC REFERENCE DATA**

DESCRIPTION	VAI	VALUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz	
$C \le 0.0047 \ \mu F$	≤ 5 × 10 <sup>-4</sup>	≤ 15 × 10 <sup>-4</sup>	
Rated voltage pulse slope (dU/dt) <sub>R</sub> at 630 V (DC)	50 \	50 V/μs	
R between leads at 500 V; 1 minute	> 1000	> 100000 MΩ	
R between interconnected leads and case at 500 V; 1 minute	> 1000	> 100000 MΩ	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	1000 V;	1000 V; 1 minute	
Withstanding (DC) voltage between leads and case	2840 V;	2840 V; 1 minute	

## **MKP 422**

# Vishay BCcomponents Metallized Polypropylene Filter Film Capacitors MKP Radial Potted Type for Surge Voltage Applications



 $U_{Rdc} = 630 \ V; \ U_{Rac} = 160 \ V; \ U_{p\text{-}p} = 450 \ V$ 

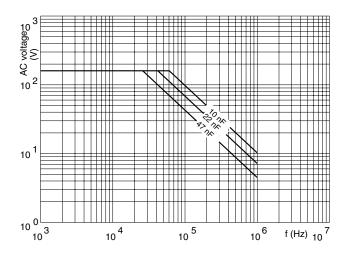
C (E 24) (µF)	DIMENSIONS b × h × l (mm)		CATALOGUE NUMBER AND PACKAGING			
			AMMOPACK		LOOSE IN BOX  It = 4.0 + 1.0/- 0.5 mm	
		MASS	H = 18.5 mm			
		(g)	C-tol = ± 2 %  last 5 digits of catalog number		SPQ	
				SPQ		
Pitch = 7.5 ± 0.4	4 mm; d <sub>t</sub> = 0.50 ± 0.05 mm					
0.001			11002			
0.0011			11102			
0.0012			11202			
0.0013			11302			
0.0015			11502			
0.0016	4.0 × 9.0 × 10.0	0.50	11602	1250	1500	
0.0018			11802			
0.002			12002			
0.0022			12202			
0.0024			12402			
0.0027			12702			
0.003			13002		1000	
0.0033	5.0 × 10.5 × 10.0	0.90	13302	1000		
0.0036			13602			
0.0039			13902			
0.0039			14302			
0.0043	$6.0 \times 11.5 \times 10.0$	1.0	14702	750	750	
	$d_{ m t} = 0.60 \pm 0.06 \ { m mm}$		14702			
0.0051	1 mm, ut – 0.00 ± 0.00 mm		15102			
0.0051			15602	750	1000	
0.0056	4.0 × 10.0 × 12.5 0.60	0.60	16202			
0.0062			16802			
			17502			
0.0075						
0.0082			18202			
0.01			11003			
0.011			11103			
0.012			11203			
0.013			11303			
0.015			11503			
0.016			11603			
0.018			11803			
0.02	5.0 × 11.0 × 12.5 0.85	0.85	12003	600	1000	
0.022			12203			
0.024			12403			
0.027			12703			
0.03			13003			
0.033	6.0 × 12.0 × 12.5 1.10	1.10	13303	500	750	
0.036			13603			
0.039			13903			
0.043			14303			
0.047			14703			

Document Number: 28151 Revision: 21-Nov-05

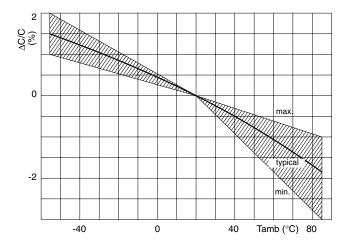


# Metallized Polypropylene Filter Film Capacitors Vishay BCcomponents MKP Radial Potted Type for Surge Voltage Applications

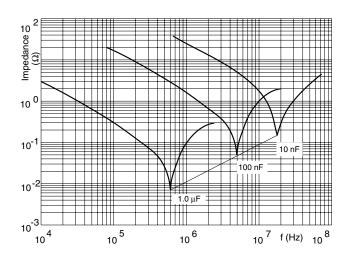
### MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY



#### **CAPACITANCE**



#### **IMPEDANCE**





Vishay

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Document Number: 91000 www.vishay.com Revision: 18-Jul-08