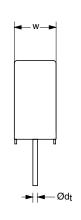
Vishay BCcomponents

VISHAY.

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

P±0.3



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

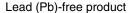
Tinned wire

CAPACITANCE RANGE (E24 SERIES)

0.001 to 0.047 μF

FEATURES

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



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

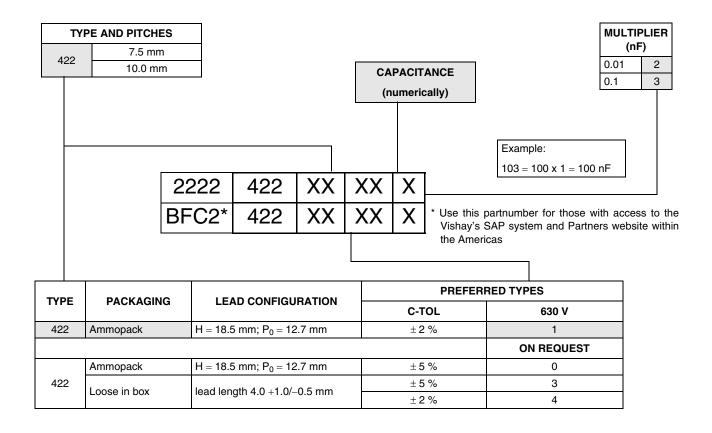
DETAIL SPECIFICATION

For more detailed data and test requirements contact: filmcaps.roeselare@vishay.com



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

COMPOSITION OF CATALOG NUMBER



SPECIFIC REFERENCE DATA

DESCRIPTION	VA	VALUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz	
C ≤ 0.0047 µF	≤ 5 × 10 ⁻⁴	≤ 15 × 10 ⁻⁴	
Rated voltage pulse slope (dU/dt) _R 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



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

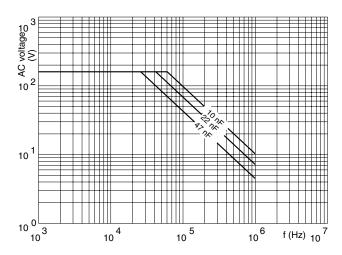
	DIMENSIONS b × h × l (mm)		CATALOGUE NUMBER AND PACKAGING			
			AMMOPACK		LOOSE IN BOX	
C (5.04)		MASS	H = 18.5 mm		It = 4.0 + 1.0/- 0.5 mm	
(E 24) (μF)		(g)	C-tol = ± 2 %		SPQ	
			last 5 digits of catalog number	SPQ		
Pitch = 7.5 \pm 0.4	I mm; $d_t = 0.50 \pm 0.05$ mm					
0.001			11002			
0.0011			11102			
0.0012			11202			
0.0013			11302			
0.0015			11502			
0.0016	$4.0\times 9.0\times 10.0$	0.50	11602	1250	1500	
0.0018			11802			
0.002			12002			
0.0022			12202			
0.0024			12402			
0.0027			12702			
0.003	5.0 × 10.5 × 10.0		13002	1000	1000	
0.0033		0.90	13302			
0.0036			13602			
0.0039			13902			
0.0043			14302	750	750	
0.0047	$6.0\times11.5\times10.0$	1.0	14702			
Pitch = 10.0 ± 0	.4 mm; $d_t = 0.60 \pm 0.06$ mm					
0.0051			15102	750	1000	
0.0056			15602			
0.0062		0.60	16202			
0.0068			16802			
0.0075	4.0 × 10.0 × 12.5		17502			
0.0082			18202			
0.01			11003			
0.011			11103			
0.012			11203			
0.013			11303			
0.015			11503			
0.016			11603			
0.018	5.0 × 11.0 × 12.5 0.85		11803	600	1000	
0.02		0.85	12003			
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		1	13903		7.00	
0.039			14303			
0.043			14703			
0.047			14700			

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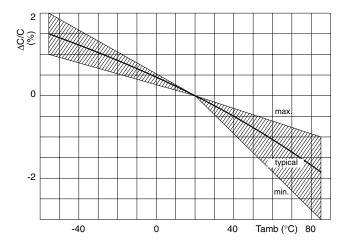


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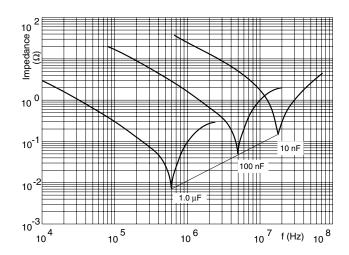
MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY



CAPACITANCE



IMPEDANCE





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