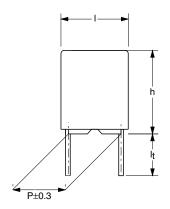
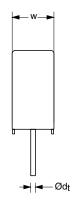


Vishay BCcomponents

Metallized Polypropylene Film Capacitors MKP Radial Potted Type





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 $1.2 \,\mu\text{F}$

FEATURES

5, 10 and 15 mm lead pitch. Supplied loose in box, in ammopack and taped on reel. Intermediate values are available of the E96 series



RoHS-compliant product





RoHS

CAPACITANCE TOLERANCE

±5%; ±2%

RATED (DC) VOLTAGE

63 V; 160 V; 250 V; 400 V; 630 V

RATED (AC) VOLTAGE

25 V; 63 V;100 V; 125 V; 160 V

RATED PEAK-TO-PEAK VOLTAGE

70 V; 180 V; 280 V; 350 V; 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

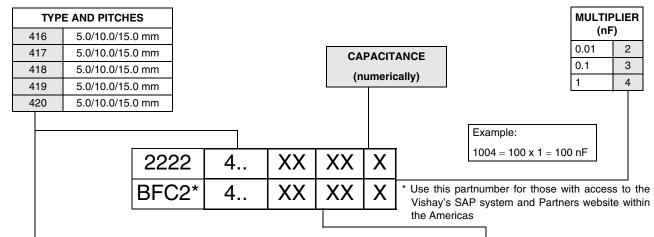
DETAIL SPECIFICATION

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

Vishay BCcomponents Metallized Polypropylene Film Capacitors MKP Radial Potted Type



COMPOSITION OF CATALOG NUMBER



	240/4000	PITCH	I FAR CONFIGURATION			PREFERF	ERRED TYPES				
TYPE	PACKAGING	(mm)	LEAD CONFIGURATION	C-TOL	63 V	160 V	250 V	400 V	630 V		
440	Taped; see note	5/10/15	H = 18.5 mm; P ₀ = 12.7 mm	±2%	1						
416	Loose in box	15	lead length 3.5 ± 0.3 mm	±2%	7						
447	Taped; see note	5/10/15	H = 18.5 mm; P ₀ = 12.7 mm	±2%		1					
417	Loose in box	15	lead length 3.5 ± 0.3 mm	±2%		7					
410	Taped; see note	5/10/15	H = 18.5 mm; P ₀ = 12.7 mm	±2%			1				
418	Loose in box	15	lead length 3.5 ± 0.3 mm	±2%			7				
419	Taped; see note	5/10/15	H = 18.5 mm; P ₀ = 12.7 mm	±2%				1			
419	Loose in box	15	lead length 3.5 ± 0.3 mm	±2%				7			
400	Taped; see note	5/10/15	H = 18.5 mm; P ₀ = 12.7 mm	±2%					1		
420	Loose in box	15	lead length 3.5 ± 0.3 mm	±2%					7		
						10	N REQUE	ST			
	Taped; see note	5/10/15	$H = 18.5 \text{ mm}; P_0 = 12.7 \text{ mm}$	±5%	0						
440		E/40	lead breath 40, 40/ 05 mm	±5%	3						
416	Loose in box	5/10	lead length 4.0 + 1.0/- 0.5 mm	±2%	4			1 7 1 7			
		15	lead length 3.5 ± 0.3 mm	±5%	6						
	Taped; see note	5/10/15	H = 18.5 mm; P ₀ = 12.7 mm	±5%		0					
417		5/10	load longth 4.0 : 1.0/ 0.5 mm	±5%		3					
417	Loose in box	5/10	lead length 4.0 + 1.0/- 0.5 mm			4					
		15	lead length 3.5 ± 0.3 mm	±5%		6					
	Taped; see note	5/10/15	H = 18.5 mm; P ₀ = 12.7 mm	±5%			0				
418		5/10	lead length 4.0 : 1.0/ 0.5 mm	±5%			3				
410	Loose in box	5/10	lead length 4.0 + 1.0/- 0.5 mm	± 2 %			4				
		15	lead length 3.5 ± 0.3 mm	±5%			6				
	Taped; see note	5/10/15	H = 18.5 mm; P ₀ = 12.7 mm	±5%				0			
419		5/10		± 5 %				3			
419	Loose in box	5/10	lead length 4.0 + 1.0/- 0.5 mm	±2%				4			
	15		lead length 3.5 ± 0.3 mm	±5%				6			
	Taped; see note	5/10/15	$H = 18.5 \text{ mm}; P_0 = 12.7 \text{ mm}$	± 5 %					0		
420		5/10	load longth 4.0 + 1.0/ .0.5 mm	±5%					3		
420	Loose in box	5/10	lead length 4.0 + 1.0/- 0.5 mm	±2%					4		
		15	lead length 3.5 ± 0.3 mm	±5%					6		

Note:

Pitch = 5 and 10 mm: taped on ammopack

Pitch = 15 mm: taped on reel with diameter = 356 mm



SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE								
Tangent of loss angle:		at 10 kHz		at 100 kHz					
C ≤ 0.0091 μF		≤ 5 × 10 ⁻⁴		≤ 10 × 10 ⁻⁴					
0.0091 μF < C ≤ 0.027 μF		≤ 5 × 10 ⁻⁴			≤ 15 × 10 ⁻	-4			
0.027 μF < C ≤ 0.075 μF		≤ 5 × 10 ⁻⁴			≤ 20 × 10 ⁻¹	-4			
0.075 μF < C ≤ 0.11 μF		≤ 5 × 10 ⁻⁴			≤ 25 × 10 ⁻	-4			
0.11 μF < C ≤ 0.18 μF	≤	10×10^{-4}			≤ 30 × 10 ⁻	-4			
0.18 μF < C ≤ 0.27 μF	≤	10×10^{-4}			≤ 35 × 10 ⁻	-4			
0.27 μF < C ≤ 0.39 μF	≤	10×10^{-4}			≤ 40 × 10 ⁻	-4			
0.39 μF < C ≤ 0.56 μF	≤	10 × 10 ⁻⁴			≤ 45 × 10 ⁻	-4			
0.56 μF < C ≤ 0.75 μF	≤	10 × 10 ⁻⁴			≤ 50 × 10 ⁻	-4			
0.75 μF < C ≤ 1.1 μF	≤	10×10^{-4}			$\leq 50 \times 10^{-4}$ $\leq 60 \times 10^{-4}$				
Rated voltage pulse slope (dU/dt) _R :	at 63 V (DC)	at 100 V (DC)	at 250 V ((DC)	at 400 V (DC)	at 630 V (DC)			
P = 5 mm	50 V/μs	50 V/μs	50 V/μ	ıs	50 V/μs	50 V/μs			
P = 10 mm	20 V/μs	20 V/μs	20 V/μ	ıs	20 V/μs	50 V/μs			
P = 15 mm	50 V/μs	50 V/μs	50 V/μ	ıs	50 V/μs	50 V/μs			
R between leads, for C \leq 0.33 μ F:									
at 50 V; 1 minute	> 100000 MΩ								
at 100 V; 1 minute		> 100000 MΩ	> 100000	$M\Omega$	$>$ 100000 M Ω	$>$ 100000 M Ω			
RC between leads, for C > 0.33 μ F at 10 V; 1 minute	> 30000 s	>30000 s	>30000) s	>30000 s				
R between interconnecting leads and casing; 50 V; 1 minute	> 100000 MΩ	> 100000 MΩ	> 100000	ΜΩ	> 100000 MΩ	> 100000 MΩ			
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	100 V; 1 minute	260 V; 1 minute	400 V; 1 m	ninute	640 V; 1 minute	1000 V; 1 minute			
Withstanding (DC) voltage between leads and case	2840 V; 1 minute	2840 V; 1 minute	2840 V; 1 n	ninute	2840 V; 1 minute	1260 V; 1 minute			

MKP 416 to 420

Vishay BCcomponents Metallized Polypropylene Film Capacitors MKP Radial Potted Type



 $U_{Rdc} = 63 \ V; \ U_{Rac} = 25 \ V; \ U_{p\text{-}p} = 70 \ V$

				С	ATALOG NUMB	416 AND PA	AND PACKAGING			
			AMMOPACK		LOOSE IN E	зох	REEL		LOOSE IN BOX It = 3.5 ± 0.3 mm	
C (E 24)	DIMENSIONS w × h × l	MASS	H = 18.5 m P ₀ = 12.7 n		It = 4.0 + 1.0/- 0.	5 mm	H = 18.5 mm; P ₀ = 12.7 mm			
(μF)	(mm)	(g)	C-tol = ± 2 %		C-tol = ± 2 %		C-tol = ± 2 %		C-tol = ± 2 %	
			last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ
Pitch =	${f 5.0}\pm 0.3~{ m mm};~{ m d_t}=0.3$	50 ± 0.05	mm							
0.036 0.039 0.043	4.5 × 9.0 × 7.2	0.45	13603 13903 14303	1000	43603 43903 44303	2000				
0.047			14703		44703		-			
0.051 0.056 0.062			15103 15603 16203		45103 45603 46203					
0.068 0.075	6.0 × 11.0 × 7.2	0.60	16803 17503	750	46803 47503	1500				
0.082 0.091 <mark>0.1</mark>	0.0 × 11.0 × 7.2	0.00	18203 19103 11004	730	48203 49103 41004	1300				
0.11 0.12			11104 11204		41104 41204					
Pitch = 1	10.0 \pm 0.4 mm; d _t = 0	0.60 ± 0.0	6 mm							
0.13 0.15	5.0 × 11.0 × 12.5	0.85	11304 11504	600	41304 41504	1000				
0.16 0.18 0.20	00 400 405	4.40	11604 11804 12004	500	41604 41804 42004	750				
0.22 0.24	6.0 × 12.0 × 12.5	1.10	12204 12404	500	42204 42404	750				
0.27 Pitch = 1	$\frac{1}{15.0 \pm 0.4}$ mm; d _t = 0) 0.60 + 0.0	12704 6 mm		42704					
0.3	1						13004		73004	
0.33 0.36 0.39	6.0 × 12.0 × 17.5	1.4					13304 13604 13904	900	73304 73604 73904	1000
Pitch =	15.0 \pm 0.4 mm; d _t = 0	0.80 ± 0.0	8 mm							
0.43 0.47 0.51 0.56	7.0 × 13.5 × 17.5	1.9					14304 14704 15104 15604	800	74304 74704 75104 75604	750
0.62 0.68 0.75	8.5 × 15.0 × 17.5	2.6					16204 16804 17504	650	76204 76804 77504	750
0.82 0.91 1.0 1.1	10.0 × 16.5 × 17.5	3.1					18204 19104 11005 11105	600	78204 79104 71005 71105	500

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 $U_{Rdc}=160\ V;\ U_{Rac}=63\ V;\ U_{p\text{-}p}$ = 180 V

			CATALOG NUMBER 2222 417 AND PACKAGING									
	DIMENSIONS		AMMOPACK LOOSE IN BOX REEL						LOOSE IN E	зох		
С		MASS	H = 18.5 mm; P ₀ = 12.7 mm		It = 4.0 + 1.0/- 0.5	5 mm	H = 18.5 m P ₀ = 12.7 n		It = 3.5 ± 0.3 mm			
(Ε 24) (μF)	w × h × l	(g)	C-tol = ± 2 %		C-tol = ± 2 %	, ,,,,,,	C-tol = ± 2 %		C-tol = ± 2 %			
(μι)	(mm)	(5)	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ		
Pitch = 5	$5.0 \pm 0.3 \; \mathrm{mm}; \; \mathrm{d_t} = 0.3 \; \mathrm{d_t}$.50 ± 0.05	mm									
0.024			12403		42403							
0.027	4.5 × 9.0 × 7.2	0.45	12703	1000	42703	2000						
0.03	4.5 × 9.0 × 7.2	0.43	13003	1000	43003	2000						
0.033			13303		43303							
0.036			13603		43603							
0.039			13903		43903							
0.043			14303		44303							
0.047	6.0 × 11.0 × 7.2	0.60	14703	750	44703	1500						
0.051	0.0 × 11.0 × 1.2	0.00	15103	15103 15603 16203	45103	1300						
0.056			15603		45603							
0.062			16203		46203							
0.068			16803		46803							
Pitch = 1	10.0 \pm 0.4 mm; d _t =	0.60 ± 0.0	6 mm									
0.075			17503		47503							
0.082	40100105	0.00	18203	750	48203	1000						
0.091	$4.0 \times 10.0 \times 12.5$	0.60	19103	750	49103	1000						
0.1			11004		41004							
0.11			11104		41104							
0.12	5.0 × 11.0 × 12.5	0.85	11204	1 600 1	1000							
0.13	5.0 × 11.0 × 12.5	0.65	11304	600	41304	1000						
0.15			11504		41504							
0.16			11604		41604							
0.18			11804		41804							
0.20	$6.0\times12.0\times12.5$	1.10	12004	500	42004	750						
0.22			12204		42204							
0.24			12404		42404							
Pitch = 1	15.0 ± 0.4 mm; d _t =	0.60 ± 0.0	6 mm									
0.27	5.0 × 11.0 × 17.5	1.2					12704	1100	72704	1250		
0.3							13004		73004			
0.33	6.0 × 12.0 × 17.5	1.4					13304	900	73304	1000		
0.36	0.0 × 12.0 × 17.5	1.4					13604	900	73604	1000		
0.39							13904		73904			
Pitch =	15.0 \pm 0.4 mm; d _t =	0.80 ± 0.0	8 mm	_		_						
0.43							14304		74304			
0.47	70 10 - :						14704	0	74704			
0.51	$7.0 \times 13.5 \times 17.5$	1.9					15104	800	75104	750		
0.56							15604		75604			
0.62			1				16204		76204			
0.68	0.5 4.5						16804	0	76804	750		
0.75	$8.5 \times 15.0 \times 17.5$	2.6					17504	650	77504			
0.82							18204		78204			
0.91			1				19104		79104			
1.0	10.0 × 16.5 × 17.5	3.1					11005	600	71005	500		
1.1							11105		71105			

MKP 416 to 420

Vishay BCcomponents Metallized Polypropylene Film Capacitors MKP Radial Potted Type



 $U_{Rdc}=$ 250 V; $U_{Rac}=$ 25 V; $U_{p-p}=$ 70 V

				С	ATALOG NUMB	ER 2222	418 AND PA	CKAGIN	IG				
	DIMENSIONS		AMMOPA	CK	LOOSE IN I	зох	REEL		LOOSE IN E	зох			
С			H = 18.5 m		lt =	_	H = 18.5 m		lt =	SPQ			
(E 24)	$\mathbf{w} \times \mathbf{h} \times \mathbf{I}$	MASS (g)	P ₀ = 12.7 n	nm	4.0 + 1.0/- 0.9	o mm	P ₀ = 12.7 r	nm	3.5 ± 0.3 mm				
(μF)	(mm)	(8)	C-tol = ± 2 % last 5 digits of catalog number	SPQ	C-tol = ± 2 % last 5 digits of catalog number	SPQ	C-tol = ± 2 % last 5 digits of catalog number	SPQ	C-tol = ± 2 % last 5 digits of catalog number	SPQ			
Pitch =	5.0 ± 0.3 mm; $d_t=0.0$	$.50 \pm 0.05$	mm										
0.01			11003		41003								
0.011	05 00 70	0.05	11103	4500	41103	0000							
0.012	$3.5\times8.0\times7.2$	0.35	11203	1500	41203	3000							
0.013 0.015			11303		41303								
0.015			11503 11603		41503 41603		-						
0.018			11803		41803								
0.010	$4.5 \times 9.0 \times 7.2$	0.45	12003	1000	42003	2000							
0.022	4.0 × 0.0 × 7.2	0.40	12203	1000	42203	2000							
0.024			12403		42403								
0.027			12703		42703		1						
0.03			13003		43003								
0.033			13303	43303	4500								
0.036	$6.0 \times 11.0 \times 7.2$	0.60	13603	750	43603	1500							
0.039			13903		43903								
0.043			14303		44303								
Pitch = 1	10.0 ± 0.4 mm; $d_t = 0.0$	0.60 ± 0.0	6 mm										
0.047			14703		44703								
0.051		0.60			15103	15103		45103					
0.056	$4.0\times10.0\times12.5$		15603	750	45603	1000							
0.062			16203 46203										
0.068			16803		46803								
0.075			17503		47503								
0.082	$5.0 \times 11.0 \times 12.5$	0.85	18203	600	48203	1000							
0.091			19103		49103		1						
0.1			11004		41004								
0.11	6.0 × 12.0 × 12.5	1.10	11104	500	41104	750							
0.12			11204		41204								
0.13	15.0 ± 0.4 mm, d	0.60 0.6	11304		41304								
	15.0 \pm 0.4 mm; d _t =	0.60 ± 0.0					11504	ı	71504	ı			
0.15 0.16	5.0 × 11.0 × 17.5	1.2					11504	1100	71504	1250			
0.18			-				11604 11804		71604 71804				
0.10							12004		72004				
0.22	$6.0 \times 12.0 \times 17.5$	1.4					12204	900	72204	1000			
0.24							12404		72404				
	15.0 \pm 0.4 mm; d _t = 0	0.80 + 0.0)8 mm					<u>I</u>		l			
0.27	1						12704		72704				
0.3							13004		73004				
0.33	$7.0 \times 13.5 \times 17.5$	1.9				13304	800	73304	750				
0.36							13604		73604				
0.39			1				13904		73904				
0.43	0.5 \(15.0 \) 17.5	0.6					14304	e e o	74304	750			
0.47	8.5 × 15.0 × 17.5	2.6					14704	650	74704	750			
0.51							15104	<u> </u>	75104	<u> </u>			
0.56							15604		75604				
0.62	$10.0\times16.5\times17.5$	3.1					16204	600	76204	500			
0.68		l					16804	l	76804	I			

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 $U_{Rdc}=400\ V;\ U_{Rac}=125\ V;\ U_{p\text{-}p}=350\ V$

				С	ATALOG NUMB	ER 2222	2222 419 AND PACKAGING					
			AMMOPA	CK	LOOSE IN E	зох	REEL		LOOSE IN I	вох		
C (E 24)	DIMENSIONS w × h × l	MASS	H = 18.5 m P ₀ = 12.7 m		It = 4.0 + 1.0/- 0.5	5 mm	H = 18.5 m P ₀ = 12.7 n		It = 3.5 ± 0.3 m	nm		
(µF)	(mm)	(g)	C-tol = ± 2 %		C-tol = ± 2 %		C-tol = ± 2 %		C-tol = ± 2 %			
			last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ		
Pitch = 5	5.0 ± 0.3 mm; $d_t = 0.5$.50 ± 0.05	mm									
0.001			11002		41002							
0.0011			11102		41102							
0.0012			11202		41202							
0.0013			11302		41302							
0.0015			11502		41502							
0.0016			11602		41602							
0.0018			11802		41802							
0.002	$3.5\times8.0\times7.2$	0.35	12002	1500	42002	3000						
0.0022			12202		42202							
0.0024			12402		42402							
0.0027			12702		42702							
0.003			13002		43002							
0.0033			13302		43302							
0.0036			13602		43602							
0.0039			13902		43902							
0.0043			14302		44302		1					
0.0047		14702	44702									
0.0051			15102		45102							
0.0056			15602		45602							
0.0062			16202		46202							
0.0068			16802		46802							
0.0075	$4.5\times 9.0\times 7.2$	0.45	17502	1000	47502	2000						
0.0073			18202		48202							
0.0082			19102		49102							
0.0031			11003		41003							
0.011 0.012			11103 11203		41103							
			11303		41203 41303		1					
0.013			11503									
0.015	60 × 11 0 × 70	0.60		750	41503	1500						
0.016	$6.0 \times 11.0 \times 7.2$	0.60	11603	750	41603	1500						
0.018			11803		41803							
0.02	100104	0.00 + 0.0	12003		42003							
	10.0 \pm 0.4 mm; d _t = 0	U.6U ± U.0			125		1					
0.022			12203		42203							
0.024			12403		42403							
0.027	$4.0 \times 10.0 \times 12.5$	0.60	12703	750	42703	1000						
0.03			13003		43003							
0.033			13303		43303]					
0.036			13603		43603							
0.039	$5.0 \times 11.0 \times 12.5$	0.85	13903	600	43903	1000						
0.043			14303		44303							

MKP 416 to 420



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Vishay BCcomponents Metallized Polypropylene Film Capacitors MKP Radial Potted Type

				С	ATALOG NUMB	ER 2222	419 AND PA	CKAGIN	IG		
			AMMOPA	CK	LOOSE IN E	зох	REEL		LOOSE IN I	OX	
C (E 24)	DIMENSIONS w × h × l	MASS	H = 18.5 mm; P ₀ = 12.7 mm		It = 4.0 + 1.0/- 0.5	It = 4.0 + 1.0/– 0.5 mm		m; nm	It = 3.5 ± 0.3 mm		
(μF)	(mm)	(g)	C-tol = ± 2 %		C-tol = ± 2 %		C-tol = ± 2 %		C-tol = ± 2 %		
			last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	1250	
0.047			14703		44703						
0.051			15103		45103						
0.056	$6.0\times12.0\times12.5$	1.10	15603	500	45603	750					
0.062			16203		46203						
0.068			16803		46803						
Pitch =	15.0 \pm 0.4 mm; d _t = 0	0.60 ± 0.0	06 mm								
0.075	50 440 475						17503	4400	77503	4050	
0.082	5.0 × 11.0 × 17.5	1.2					18203	1100	78203	1250	
0.091							19103		79103		
0.1							11004		71004		
0.11	$6.0 \times 12.0 \times 17.5$	1.4					11104	900	71104	1000	
0.12							11204		71204		
0.13							11304		71304		
Pitch =	15.0 \pm 0.4 mm; d _t = 0	0.80 ± 0.0	8 mm								
0.15							11504		71504		
0.16	$7.0\times13.5\times17.5$	1.9					11604	800	71604	750	
0.18							11804		71804		
0.2							12004		72004		
0.22	8.5 × 15.0 × 17.5	2.6					12204	650	72204	750	
0.24	6.5 × 15.0 × 17.5	2.0					12404	650	72404	750	
0.27							12704		72704		
0.3							13004		73004		
0.33	$10.0\times16.5\times17.5$	3.1					13304	600	73304	500	
0.36							13604		73604		



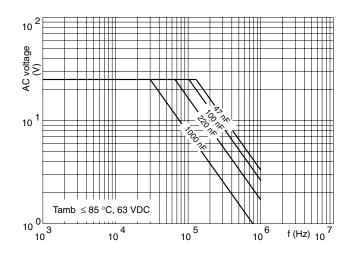
 $U_{Rdc} = 630 \ V; \ U_{Rac} = 160 \ V; \ U_{p\text{-}p} = 450 \ V$

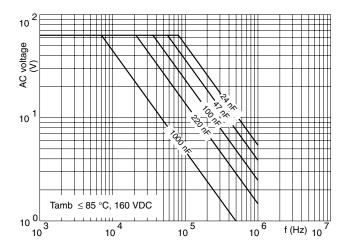
			CATALOG NUMBER 2222 420 AND PACKAGING									
			AMMOPA	CK	LOOSE IN E	зох	REEL		LOOSE IN E	зох		
C (F.24)	DIMENSIONS	MASS	H = 18.5 m P ₀ = 12.7 n		lt = 4.0 + 1.0/- 0.5	5 mm	H = 18.5 m P ₀ = 12.7 n		It = 3.5 ± 0.3 n	ım		
(E 24) (µF)	$\mathbf{w} \times \mathbf{h} \times \mathbf{l}$ (mm)	(g)	C-tol = ± 2 %		C-tol = ± 2 %		C-tol = ± 2 %		C-tol = ± 2 %			
		last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ	last 5 digits of catalog number	SPQ			
	$6.0 \pm 0.3 \; \mathrm{mm}; \; \mathrm{d_t} = 0.3 \; \mathrm{mm}; \; \mathrm{d_t} = 0.3 \; \mathrm{d_t}$.50 ± 0.05										
0.0015 0.0016 0.0018 0.002	3.5 × 8.0 × 7.2	0.35	11502 11602 11802 12002	1500	41502 41602 41802 42002	3000						
0.0022 0.0024 0.0027 0.003			12202 12402 12702 13002		42202 42402 42702 43002							
0.0033 0.0036 0.0039	4.5 × 9.0 × 7.2	0.45	13302 13602 13902	1000	43302 43602 43902	2000						
0.0043 0.0047 0.0051 0.0056 0.0062	6.0 × 11.0 × 7.2	0.60	14302 14702 15102 15602 16202	750	44302 44702 45102 45602 46202	1500						
0.0068			16802		46802							
	0.0 ± 0.4 mm; $d_t = 0.0$	0.60 ± 0.0					1					
0.01 0.011 0.012 0.013 0.015 0.016	4.0 × 10.0 × 12.5	0.60	11003 11103 11203 11303 11503 11603	750	41003 41103 41203 41303 41503 41603	1000						
0.018 0.02 0.022 0.024	5.0 × 11.0 × 12.5	0.85	11803 12003 12203 12403	600	41803 42003 42203 42403	1000						
0.027 0.03 0.033 0.036 0.039 0.043 0.047	6.0 × 12.0 × 12.5	1.10	12703 13003 13303 13603 13903 14303 14703	500	42703 43003 43303 43603 43903 44303 44703	750						
	5.0 ± 0.4 mm; d _t = 0	0.60 ± 0.0			11700							
0.051 0.056	6.0 × 12.0 × 17.5	1.4					15103 15603	900	75103 75603	1000		
Pitch = 1	5.0 ± 0.4 mm; $d_t = 0.0$	0.80 ± 0.0	8 mm									
0.062 0.068 0.075 0.082	7.0 × 13.5 × 17.5	1.9					16203 16803 17503 18203	800	76203 76803 77503 78203	750		
0.091 0.1 0.11 0.12	8.5 × 15.0 × 17.5	2.6					19103 11004 11104 11204	650	79103 71004 71104 71204	750		
0.13 0.15 0.16	10.0 × 16.5 × 17.5	3.1					11304 11504 11604	600	71304 71504 71604	500		

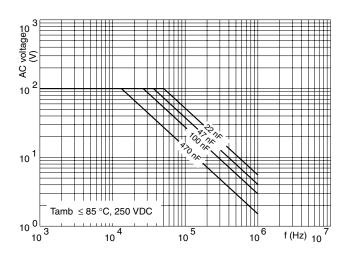
Vishay BCcomponents Metallized Polypropylene Film Capacitors MKP Radial Potted Type

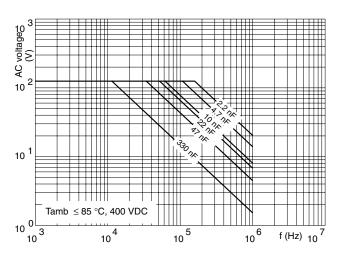


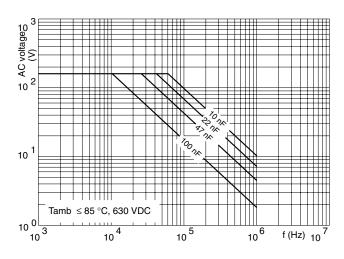
MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY







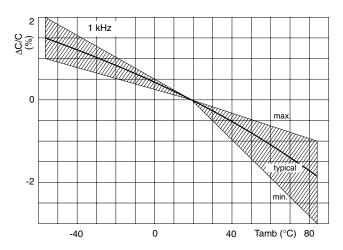




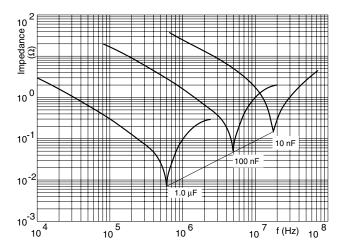
Document Number: 28128 Revision: 21-Nov-05



CAPACITANCE



IMPEDANCE





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