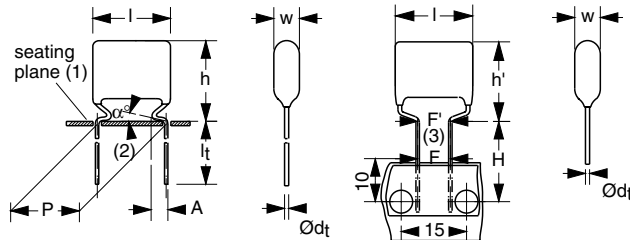


Metallized Polyester Film Capacitors

MKT Radial Epoxy Lacquered Type



Dimensions in mm

- (1) Hole \varnothing 1.3 for $d_t = 0.8$ mm
- (2) $0 \leq \alpha < 50^\circ$
- (3) $|F - F'| < 0.3$ mm
 $F = 7.5 + 0.6/-0.1$ mm
- (4) $A = 2.5 + 1.4/-0.5$ mm

APPLICATIONS

Blocking and coupling. Bypass and energy reservoir

MARKING

C-value; tolerance; rated voltage; code for manufacturer; manufacturer's type designation; manufacturer's symbol

DIELECTRIC

Polyester film

ELECTRODES

Vacuum deposited aluminum

COATING

Flame retardant epoxy material (UL-class 94 V-0)

CONSTRUCTION

Wound mono construction

LEADS

Tinned wire

CAPACITANCE RANGE (E12 SERIES)

0.001 to 10 μ F

FEATURES

Available taped and loose in box

Lead (Pb)-free product

RoHS-compliant product

CAPACITANCE TOLERANCE

$\pm 10\%$; $\pm 5\%$

RATED (DC) VOLTAGE

100 V; 250 V; 400 V; 630 V; 1000 V

RATED (AC) VOLTAGE

63 V; 160 V; 220 V; 250 V; 250 V

CLIMATIC CATEGORY

55/105/56

RATED TEMPERATURE

85 $^\circ$ C

MAXIMUM APPLICATION TEMPERATURE

105 $^\circ$ C

REFERENCE SPECIFICATIONS

IEC 60384-2

PERFORMANCE GRADE

Grade 1 (long life)

MATERIALS

Qualified in accordance with UL94 V-0

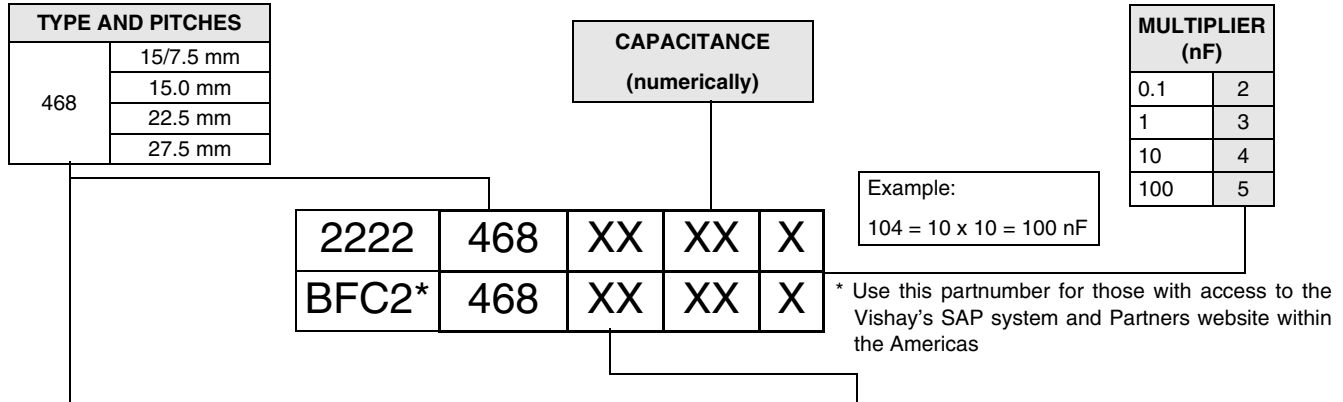
DETAIL SPECIFICATION

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



RoHS
COMPLIANT

COMPOSITION OF CATALOG NUMBER



TYPE	PACKAGING	LEAD CONFIGURATION	PREFERRED TYPES					
			C-TOL	100 V	250 V	400 V	630 V	1000 V
MKT 468	loose in box	lead length 3.5 + 1.0/- 0.5 mm	± 10 %	04	16	28	40	-
			± 5 %	05	17	29	41	-
	Taped on reel (bent back)	H = 16.0 mm; P ₀ = 15.0 mm; reel diameter = 500 mm	± 10 %	61	63	65	67	-
			± 5 %	62	64	66	68	-
dimensions of these code numbers stay between brackets								
MKT/MKT 468	loose in box	lead length 3.5 + 1.0/- 0.5 mm	± 10 %	-	-	-	-	60
			ON REQUEST					
MKT 468	loose in box	long leads: 19.0 ± 4.0 mm for lead pitch = 15.0 mm 25.0 ± 4.0 mm for lead pitch = 22.5 mm 24.0 ± 4.0 mm for lead pitch = 27.5 mm	± 10 %	51	53	55	57	-
			± 5 %	52	54	56	58	-
	taped on reel	H = 16.0 mm; P ₀ = 12.7 mm; reel diameter = 500 mm	± 10 %	06	18	30	42	-
			± 5 %	07	19	31	43	-

SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE				
	at 1 kHz		at 10 kHz		at 100 kHz
Tangent of loss angle:					
C ≤ 0.1 μF	≤ 75 × 10 ⁻⁴		≤ 120 × 10 ⁻⁴		≤ 200 × 10 ⁻⁴
0.1 μF < C ≤ 0.47 μF	≤ 75 × 10 ⁻⁴		≤ 120 × 10 ⁻⁴		≤ 225 × 10 ⁻⁴
0.47 μF < C ≤ 10 μF	≤ 75 × 10 ⁻⁴		≤ 120 × 10 ⁻⁴		-
Rated voltage pulse slope (dU/dt) _R :	at 100 V (DC)	at 250 V (DC)	at 400 V (DC)	at 630 V (DC)	at 1000 V (DC)
I _{max} = 17.5 mm	20 V/μs	45 V/μs	65 V/μs	90 V/μs	200 V/μs
I _{max} = 26.0 mm	10 V/μs	20 V/μs	30 V/μs	35 V/μs	120 V/μs
I _{max} = 30.0 mm		15 V/μs	25 V/μs	30 V/μs	100 V/μs
R between leads, for C ≤ 0.33 μF:					
at 100 V; 1 minute		> 30000 MΩ	> 30000 MΩ		
at 500 V; 1 minute				> 30000 MΩ	> 30000 MΩ
RC between leads, for C > 0.33 μF: 1 minute					
at 100 V; 1 minute	> 5000 s	> 10000 s	> 10000 s		
at 500 V; 1 minute				> 10000 s	
R between interconnecting leads and casing; 100 V; 1 minute	> 30000 MΩ	> 30000 MΩ	> 30000 MΩ	> 30000 MΩ	> 30000 MΩ
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	160 V; 1 minute	400 V; 1 minute	640 V; 1 minute	1008 V; 1 minute	1600 V; 1 minute
Withstanding (DC) voltage between leads and case	200 V; 1 minute	500 V; 1 minute	800 V; 1 minute	1260 V; 1 minute	2000 V; 1 minute



Metallized Polyester Film Capacitors Vishay BCcomponents
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$U_{Rdc} = 100\text{ V}$; $U_{Rac} = 63\text{ V}$

C (μF)	DIMENSIONS $W_{\text{max}} \times H\text{ (H')}_{\text{max}} \times L_{\text{max}}$ (mm)	MASS (g)	CATALOG NUMBER 2222 468 AND PACKAGING							
			LOOSE IN BOX				REEL			
			It = 3.5 ± 0.5 mm		SHORT LEADS	LONG LEADS	ORIGIN AL PITCH	pitch = 7.5 mm (bent back)		
			C-tol = ± 10 %	C-tol = ± 5 %				C-tol = ± 10 %	C-tol = ± 5 %	SPQ
LAST 5 DIGITS OF CATALOG NUMBER		SPQ	SPQ	SPQ	LAST 5 DIGITS OF CATALOG NUMBER		SPQ			
Pitch = 15.0 ± 0.4 mm; $d_t = 0.80 \pm 0.08\text{ mm}$								pitch = 7.5 mm (bent back)		
1.2	5.5 × 14.5 (16.0) × 17.5	0.7	04125	05125	2000	1250	1100	61125	62125	900
1.5	6.0 × 15.0 (16.5) × 17.5	0.9	04155	05155	2000	1250	1000	61155	62155	800
1.8	6.5 × 15.5 (17.0) × 17.5	1.0	04185	05185	1500	1000	900	61185	62185	750
2.2	7.0 × 16.0 (17.5) × 17.5	1.2	04225	05225	1250	1000	800	61225	62225	700
2.7	8.0 × 17.0 (18.5) × 17.5	1.4	04275	05275	1000	1000	750	61275	62275	600
3.3	8.5 × 17.5 (19.0) × 17.5	1.5	04335	05335	1000	1000	700	61335	62335	550
Pitch = 22.5 ± 0.4 mm; $d_t = 0.80 \pm 0.08\text{ mm}$								pitch = 7.5 mm (bent back)		
3.9	6.5 × 18.5 × 26.0	2.8	04395	05395	1000	750	650			
4.7	7.0 × 19.5 × 26.0	3.2	04475	05475	900	700	550			
5.6	7.5 × 20.0 × 26.0	3.5	04565	05565	750	600	500			
6.8	8.5 × 21.5 × 26.0	4.1	04685	05685	750	500	450			
8.2	9.5 × 22.5 × 26.0	4.8	04825	05825	700	500	400			
10.0	10.5 × 23.5 × 26.0	5.5	04106	05106	500	400	350			

$U_{Rdc} = 250\text{ V}$; $U_{Rac} = 160\text{ V}$

C (μF)	DIMENSIONS $W_{\text{max}} \times H\text{ (H')}_{\text{max}} \times L_{\text{max}}$ (mm)	MASS (g)	CATALOG NUMBER 2222 468 AND PACKAGING							
			LOOSE IN BOX				REEL			
			It = 3.5 ± 0.5 mm		SHORT LEADS	LONG LEADS	ORIGIN AL PITCH	pitch = 7.5 mm (bent back)		
			C-tol = ± 10 %	C-tol = ± 5 %				C-tol = ± 10 %	C-tol = ± 5 %	SPQ
LAST 5 DIGITS OF CATALOG NUMBER		SPQ	SPQ	SPQ	LAST 5 DIGITS OF CATALOG NUMBER		SPQ			
Pitch = 15.0 ± 0.4 mm; $d_t = 0.80 \pm 0.08\text{ mm}$								pitch = 7.5 mm (bent back)		
0.27	5.0 × 14.0 (15.5) × 17.5	0.6	16274	17274	2000	1250	1200	63274	64274	1000
0.33	5.5 × 14.5 (16.0) × 17.5	0.7	16334	17334	2000	1250	1100	63334	64334	900
0.39	6.0 × 15.0 (16.5) × 17.5	0.9	16394	17394	2000	1250	1000	63394	64394	800
0.47	6.5 × 15.5 (17.0) × 17.5	1.0	16474	17474	1500	1000	900	63474	64474	750
0.56	7.5 × 16.5 (18.0) × 17.5	1.3	16564	17564	1250	1000	800	63564	64564	650
0.68	8.0 × 17.0 (18.5) × 17.5	1.4	16684	17684	1000	1000	750	63684	64684	600
0.82	8.5 × 17.5 (19.0) × 17.5	1.5	16824	17824	1000	1000	700	63824	64824	550
1.0	8.0 × 20.0 (21.5) × 17.5	1.7	16105	17105	1000	900	750	63105	64105	600
Pitch = 22.5 ± 0.4 mm; $d_t = 0.80 \pm 0.08\text{ mm}$								pitch = 7.5 mm (bent back)		
1.2	7.0 × 19.0 × 26.0	3.2	16125	17125	1000	700	550			
1.5	8.0 × 21.0 × 26.0	3.8	16155	17155	750	500	500			
1.8	9.0 × 22.0 × 26.0	4.1	16185	17185	750	500	450			
2.2	9.8 × 23.0 × 26.0	4.8	16225	17225	750	450	400			
2.7	11.0 × 24.0 × 26.0	5.9	16275	17275	500	400	350			

C (μ F)	DIMENSIONS $W_{max} \times H (H')_{max} \times L_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 468 AND PACKAGING							
			LOOSE IN BOX				REEL			
			It = 3.5 ± 0.5 mm		SHORT LEADS	LONG LEADS	ORIGIN AL PITCH	pitch = 7.5 mm (bent back)		
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$				C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	
LAST 5 DIGITS OF CATALOG NUMBER		SPQ	SPQ	SPQ	LAST 5 DIGITS OF CATALOG NUMBER		SPQ			
3.3	12.5 × 25.5 × 26.0	6.9	16335	17335	500	300	350			
3.9	13.5 × 26.5 × 26.0	7.5	16395	17395	400	300	300			
4.7	14.9 × 28.0 × 26.0	8.6	16475	17475	250	250	250			
Pitch = 27.5 ± 0.4 mm; $d_t = 0.80 \pm 0.08$ mm; A = 2.5 + 1.4/- 0.5 mm								pitch = 7.5 mm (bent back)		
5.6	15.0 × 28.0 × 30.0	9.1	16565	17565	300	200				

$U_{Rdc} = 400$ V; $U_{Rac} = 220$ V

C (μ F)	DIMENSIONS $W_{max} \times H (H')_{max} \times L_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 468 AND PACKAGING							
			LOOSE IN BOX				REEL			
			It = 3.5 ± 0.5 mm		SHORT LEADS	LONG LEADS	ORIGIN AL PITCH	pitch = 7.5 mm (bent back)		
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$				C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	
LAST 5 DIGITS OF CATALOG NUMBER		SPQ	SPQ	SPQ	LAST 5 DIGITS OF CATALOG NUMBER		SPQ			
Pitch = 15.0 ± 0.4 mm; $d_t = 0.80 \pm 0.08$ mm								pitch = 7.5 mm (bent back)		
0.12	5.0 × 14.0 (15.5) × 17.5	0.6	28124	29124	2000	1250	1200	65124	66124	1000
0.15	5.8 × 15.0 (16.5) × 17.5	0.9	28154	29154	1750	1250	1100	65154	66154	850
0.18	6.5 × 15.5 (17.0) × 17.5	1.0	28184	29184	1500	1000	900	65184	66184	750
0.22	7.0 × 15.5 (17.5) × 17.5	1.2	28224	29224	1500	1000	800	65224	66224	700
0.27	7.4 × 16.5 (18.0) × 17.5	1.3	28274	29274	1250	1250	800	65274	66274	650
0.33	8.5 × 17.5 (19.0) × 17.5	1.5	28334	29334	1000	1000	700	65334	66334	550
0.39	7.4 × 19.5 (21.0) × 17.5	1.3	28394	29394	1000	1000	800	65394	66394	650
0.47	8.4 × 20.5 (22.0) × 17.5	1.5	28474	29474	750	850	700	65474	66474	550
Pitch = 22.5 ± 0.4 mm; $d_t = 0.80 \pm 0.08$ mm								pitch = 7.5 mm (bent back)		
0.56	7.5 × 19.5 × 26.0	3.2	28564	29564	1000	650	550			
0.68	8.0 × 21.0 × 26.0	3.8	28684	29684	750	500	500			
0.82	9.0 × 22.0 × 26.0	4.5	28824	29824	750	500	450			
1.0	9.9 × 23.0 × 26.0	5.2	28105	29105	750	450	400			
1.2	11.0 × 24.0 × 26.0	5.9	28125	29125	500	400	350			
Pitch = 27.5 ± 0.4 mm; $d_t = 0.80 \pm 0.08$ mm; A = 2.5 + 1.4/- 0.5 mm								pitch = 7.5 mm (bent back)		
1.5	11.5 × 24.5 × 30.0	6.5	28155	29155	450	300				
1.8	12.5 × 25.5 × 30.0	7.1	28185	29185	350	250				
2.2	14.0 × 27.0 × 30.0	8.2	28225	29225	300	200				



Metallized Polyester Film Capacitors Vishay BCcomponents
MKT Radial Epoxy Lacquered Type

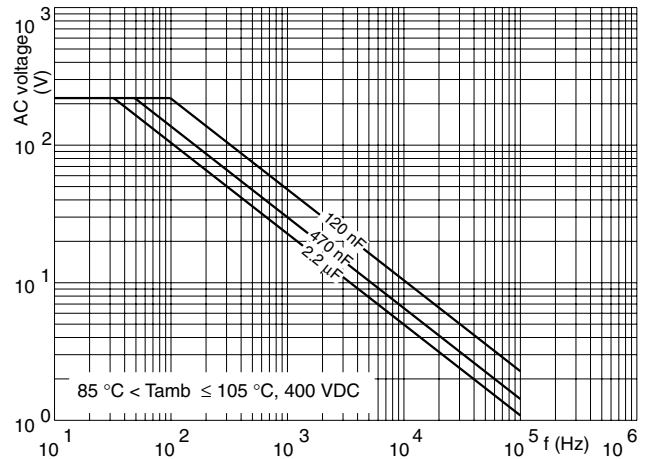
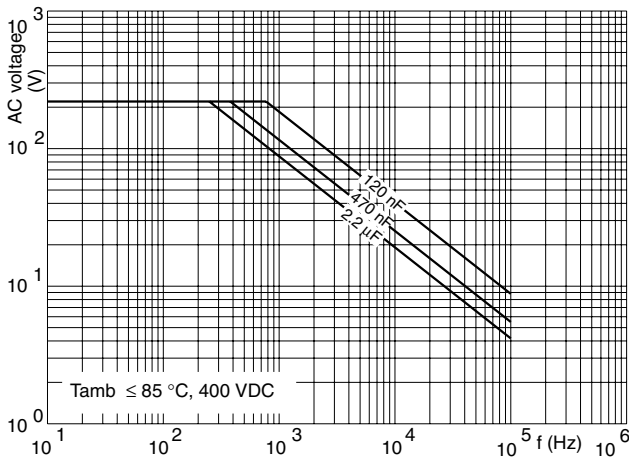
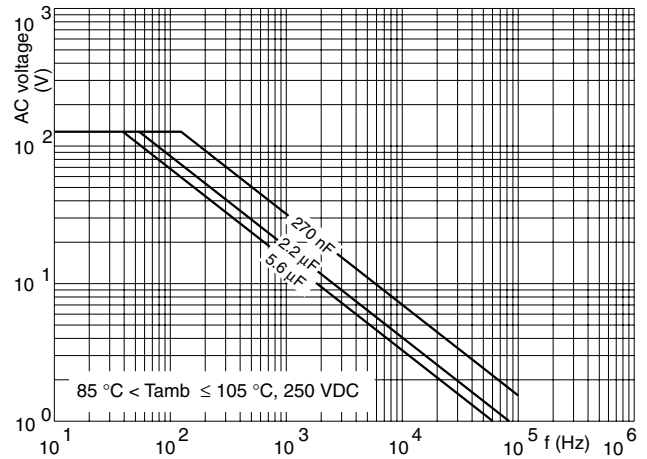
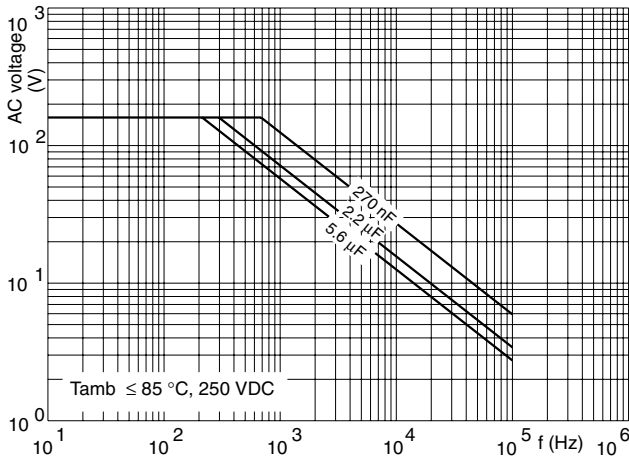
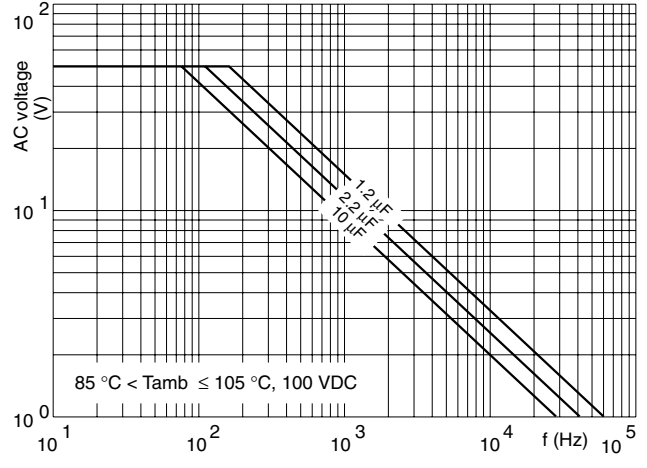
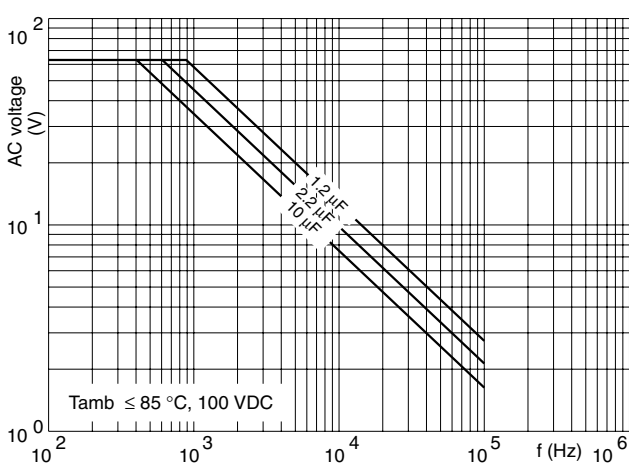
$U_{Rdc} = 630\text{ V}$; $U_{Rac} = 250\text{ V}$

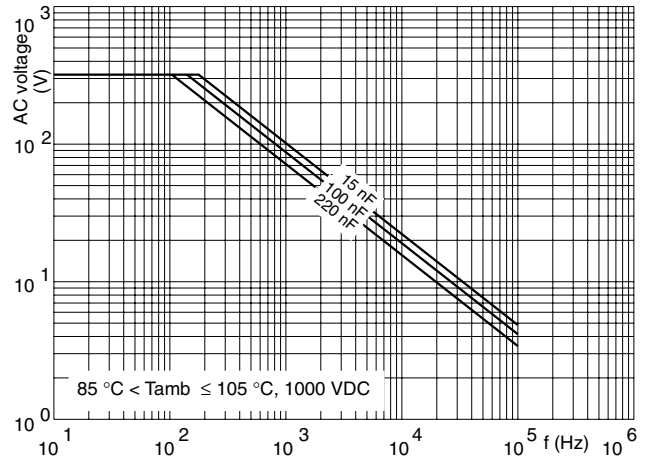
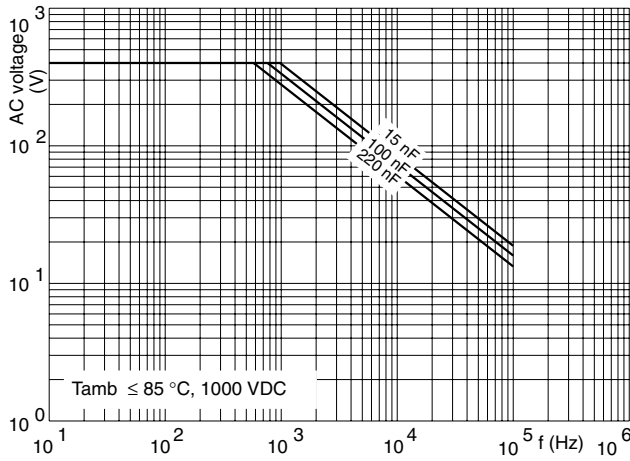
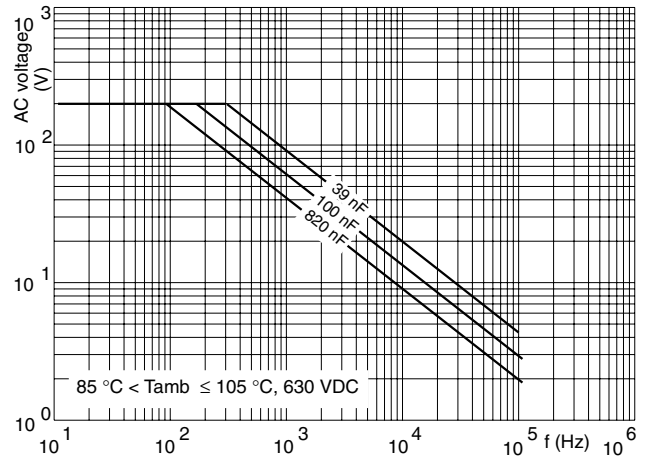
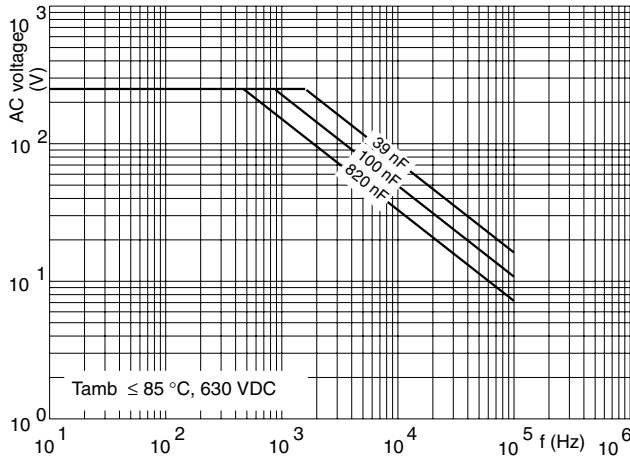
C (μF)	DIMENSIONS $W_{max} \times H (H')_{max} \times L_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 468 AND PACKAGING							
			LOOSE IN BOX				REEL			
			It = 3.5 \pm 0.5 mm		SHORT LEADS	LONG LEADS	ORIGINAL PITCH	pitch = 7.5 mm (bent back)		SPQ
			C-tol = $\pm 10\%$	C-tol = $\pm 5\%$				C-tol = $\pm 10\%$	C-tol = $\pm 5\%$	
LAST 5 DIGITS OF CATALOG NUMBER		SPQ	SPQ	SPQ	LAST 5 DIGITS OF CATALOG		SPQ			
Pitch = 15.0 \pm 0.4 mm; $d_t = 0.80 \pm 0.08$ mm								pitch = 7.5 mm (bent back)		
0.039	5.0 \times 14.0 (15.5) \times 17.5	0.6	40393	41393	2000	1250	1200	67393	68393	1000
0.047	5.5 \times 14.5 (16.0) \times 17.5	0.7	40473	41473	2000	1250	1100	67473	68473	900
0.056	5.9 \times 15.0 (16.5) \times 17.5	0.9	40563	41563	1750	1250	1000	67563	68563	850
0.068	6.5 \times 16.0 (17.5) \times 17.5	1.2	40683	41683	1500	1000	800	67683	68683	750
0.082	7.3 \times 16.5 (18.0) \times 17.5	1.3	40823	41823	1500	1000	800	67823	68823	650
0.1	7.9 \times 17.0 (18.5) \times 17.5	1.4	40104	41104	1250	1000	750	67104	68104	600
0.12	7.5 \times 19.5 (21.0) \times 17.5	1.3	40124	41124	1250	1000	800	67124	68124	650
0.15	8.5 \times 20.5 (22.0) \times 17.5	1.5	40154	41154	1000	850	700	67154	68154	550
Pitch = 22.5 \pm 0.4 mm; $d_t = 0.80 \pm 0.08$ mm								pitch = 7.5 mm (bent back)		
0.18	7.5 \times 19.5 \times 26.0	3.5	40184	41184	1000	650	550			
0.22	8.0 \times 21.0 \times 26.0	3.8	40224	41224	750	500	500			
0.27	9.0 \times 22.0 \times 26.0	4.5	40274	41274	750	500	450			
0.33	10.0 \times 23.0 \times 26.0	5.2	40334	41334	700	450	400			
0.39	11.5 \times 24.0 \times 26.0	5.9	40394	41394	600	400	350			
0.47	12.5 \times 25.5 \times 26.0	6.9	40474	41474	500	300	350			
0.56	13.5 \times 26.6 \times 26.0	7.5	40564	41564	450	300	300			
0.68	15.0 \times 28.0 \times 26.0	8.6	40684	41684	400	250	250			
Pitch = 27.5 \pm 0.4 mm; $d_t = 0.80 \pm 0.08$ mm; A = 2.5 + 1.4/- 0.5 mm								pitch = 7.5 mm (bent back)		
0.82	15.0 \times 28.0 \times 30.0	8.8	40824	41824	300	200				

$U_{Rdc} = 1000\text{ V}$; $U_{Rac} = 400\text{ V}$

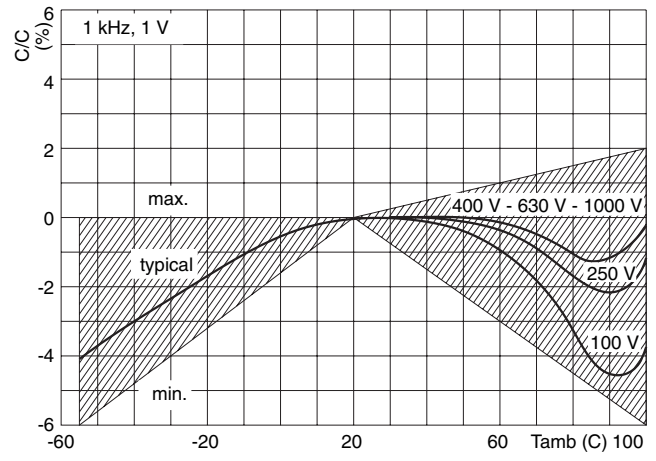
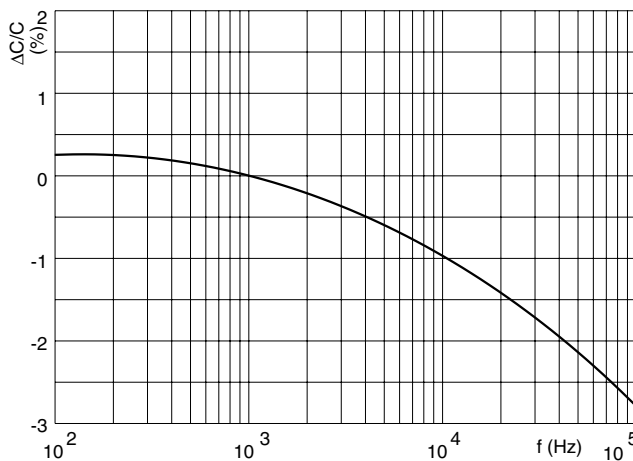
C (μF)	DIMENSIONS $W_{max} \times H (H')_{max} \times L_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 468 AND PACKAGING		
			LOOSE IN BOX		
			It = 3.5 \pm 0.5 mm		
			C-tol = $\pm 10\%$		SPQ
LAST 5 DIGITS OF CATALOG					
Pitch = 15.0 \pm 0.4 mm; $d_t = 0.80 \pm 0.08$ mm					
0.015	6.0 \times 15.0 \times 17.5	0.6	60153		2000
0.018	6.5 \times 15.5 \times 17.5	0.7	60183		1500
0.022	7.2 \times 16.2 \times 17.5	0.9	60223		1500
0.027	8.0 \times 17.0 \times 17.5	1.0	60273		1500
0.033	8.8 \times 17.8 \times 17.5	1.4	60333		1000
0.039	9.6 \times 18.6 \times 17.5	1.5	60393		1000
0.047	10.6 \times 19.6 \times 17.5	1.8	60473		900
Pitch = 22.5 \pm 0.4 mm; $d_t = 0.80 \pm 0.08$ mm					
0.056	7.0 \times 20.0 \times 26.0	3.2	60563		900
0.068	8.0 \times 21.0 \times 26.0	3.8	60683		750
0.082	8.5 \times 21.5 \times 26.0	4.1	60823		750
0.1	9.5 \times 22.5 \times 26.0	4.8	60104		700
0.12	10.5 \times 23.5 \times 26.0	5.5	60124		500
Pitch = 27.5 \pm 0.4 mm; $d_t = 0.80 \pm 0.08$ mm					
0.15	10.5 \times 23.5 \times 30.0	5.8	60154		500
0.18	11.5 \times 24.5 \times 30.0	6.5	60184		450
0.22	13.0 \times 26.0 \times 30.0	7.5	60224		350

MAXIMUM RMS VOLTAGE (SENAWE) AS A FUNCTION OF FREQUENCY





CAPACITANCE

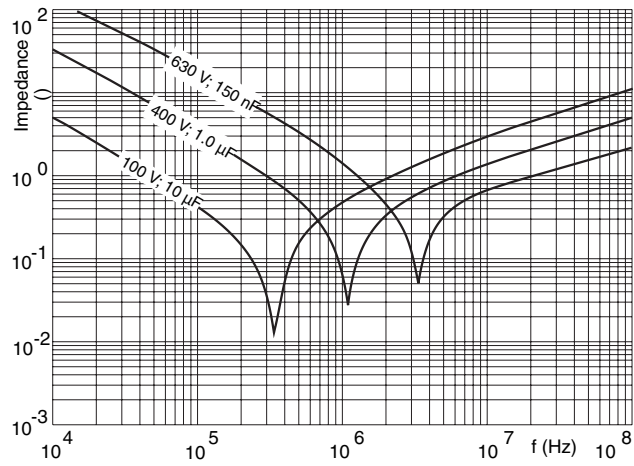


MKT 468 MKT/MKT 468

Vishay BCcomponents Metallized Polyester Film Capacitors
MKT Radial Epoxy Lacquered Type



IMPEDANCE





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