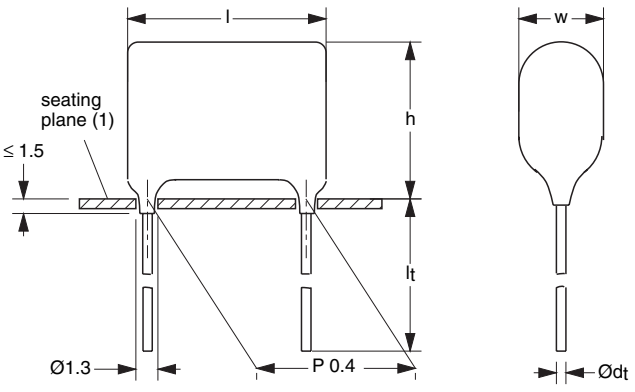
Metallized Polyester Film Capacitors
MKT Radial Epoxy Lacquered Type



Dimensions in mm
(1) Hole ∅ 1.0 for d_t = 0.6 mm

APPLICATIONS

Blocking and coupling. Bypass and energy reservoir

MARKING

C-value; tolerance; rated voltage; manufacturer's symbol; code for dielectric material and construction

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 1.0 µF

FEATURES

Available taped and loose in box

Lead (Pb)-free product

RoHS-compliant product

Pb-free

e3

RoHS COMPLIANT

CAPACITANCE TOLERANCE

± 10 %; ± 5 %

RATED (DC) VOLTAGE

100 V; 250 V; 400 V; 630 V

RATED (AC) VOLTAGE

63 V; 160 V; 220 V; 250 V

CLIMATIC CATEGORY

55/105/56

RATED TEMPERATURE

85 °C

MAXIMUM APPLICATION TEMPERATURE

105 °C

REFERENCE SPECIFICATIONS

IEC 60384-2

PERFORMANCE GRADE

Grade 1 (long life)

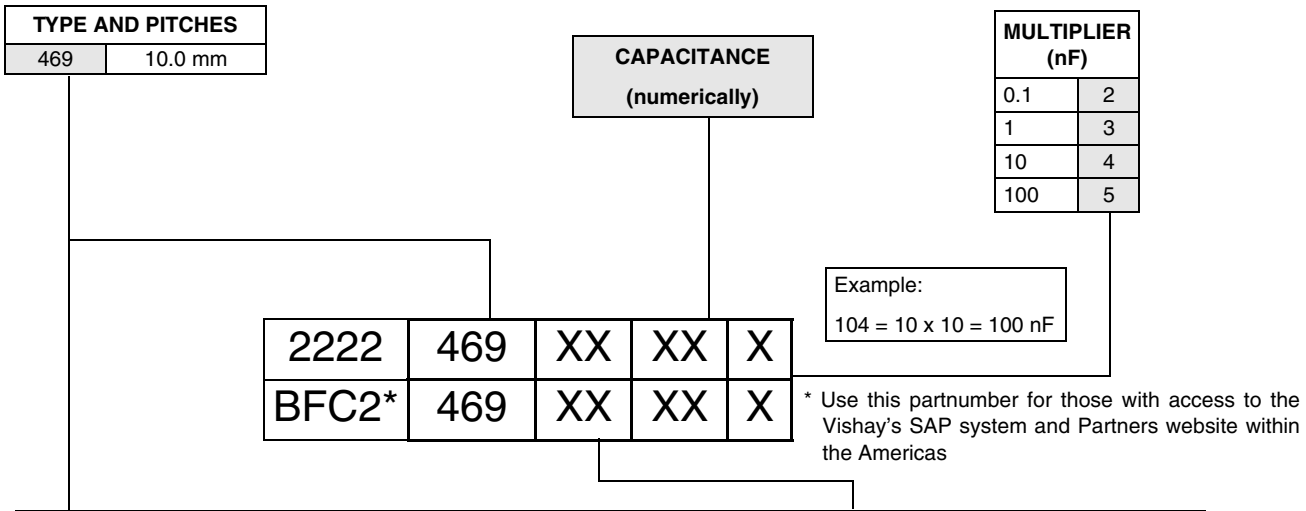
MATERIALS

Qualified in accordance with UL94 V-0

DETAIL SPECIFICATION

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

COMPOSITION OF CATALOG NUMBER



TYPE	PACKAGING	LEAD CONFIGURATION	ON REQUEST				
			C-TOL	100 V	250 V	400 V	630 V
MKT 469	loose in box	lead length 4.0+ 1.0/– 0.5 mm	± 10 %	25	45	55	65
			± 5 %	26	46	56	66
		lead length 22.0 ± 4.0 mm	± 10 %	21	41	51	61
			± 5 %	22	42	52	62
	taped on reel	H = 18.5 mm; P_0 = 12.7 mm; reel diameter = 500 mm	± 10 %	28	48	58	68
			± 5 %	29	49	59	69

SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE			
Tangent of loss angle:	at 1 kHz	at 10 kHz	at 100 kHz	
$C \leq 0.1$ µF	$\leq 75 \times 10^{-4}$	$\leq 120 \times 10^{-4}$	$\leq 200 \times 10^{-4}$	
0.1 µF < C ≤ 0.47 µF	$\leq 75 \times 10^{-4}$	$\leq 120 \times 10^{-4}$	$\leq 225 \times 10^{-4}$	
0.47 µF < C ≤ 1.0 µF	$\leq 75 \times 10^{-4}$	$\leq 120 \times 10^{-4}$	–	
Rated voltage pulse slope $(dU/dt)_R$ at 100 V (DC)	at 100 V (DC)	at 250 V (DC)	at 400 V (DC)	at 630 V (DC)
	30 V/µs	120 V/µs	170 V/µs	120 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
RC between leads, for C > 0.33 µF at 100 V; 1 minute	> 5000 s			
R between interconnecting leads and casing; 100 V; 1 minute	> 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
Withstanding (DC) voltage between leads and case	200 V; 1 minute	500 V; 1 minute	800 V; 1 minute	1260 V; 1 minute

U_{Rdc} = 100 V; U_{Rac} = 63 V

C (µF)	DIMENSIONS wmax × h max × lmax (mm)	MASS (g)	CATALOG NUMBER 2222 469 ..... AND PACKAGING			
			LOOSE IN BOX			REEL
			lt = 4.0 + 1.0/– 0.5 mm		lt = 22.0 ± 4.0 mm	
			C-tol = ± 10 %			
			last 5 digits of catalog number	SPQ	SPQ	SPQ
Pitch = 10.0 ± 0.4 mm; d_t = 0.60 ± 0.06 mm						
0.056 0.068 0.082 0.1	4.0 × 11.0 × 12.5	0.4	25563 25683 25823 25104	2000	1500	1500
0.12	4.3 × 11.3 × 12.5	0.5	25124	2000	1500	1500
0.15	3.9 × 10.9 × 12.5	0.4	25154	2000	1500	1500
0.18	4.2 × 11.2 × 12.5	0.4	25184	2000	1500	1500
0.22	4.5 × 11.5 × 12.5	0.5	25224	2000	1500	1300
0.27	4.2 × 11.2 × 12.5	0.4	25274	2000	1500	1500
0.33	4.6 × 11.6 × 12.5	0.5	25334	2000	1500	1300
0.39	4.0 × 11.0 × 12.5	0.4	25394	2000	1500	1500
0.47	4.2 × 11.2 × 12.5	0.4	25474	2000	1500	1500
0.56	4.6 × 11.6 × 12.5	0.5	25564	2000	1500	1300
0.68	5.0 × 12.0 × 12.5	0.5	25684	1500	1250	1200
0.82	5.5 × 12.5 × 12.5	0.6	25824	1500	1000	1100
1.0	6.0 × 13.0 × 12.5	0.6	25105	1250	1000	1000

U_{Rdc} = 250 V; U_{Rac} = 160 V

C (µF)	DIMENSIONS wmax × h max × lmax (mm)	MASS (g)	CATALOG NUMBER 2222 469 ..... AND PACKAGING			
			LOOSE IN BOX			REEL
			lt = 4.0 + 1.0/– 0.5 mm		lt = 22.0 ± 4.0 mm	
			C-tol = ± 10 %			
			last 5 digits of catalog number	SPQ	SPQ	SPQ
Pitch = 10.0 ± 0.4 mm; d_t = 0.60 ± 0.06 mm						
0.027	4.2 × 11.2 × 12.5	0.4	45273	2000	1500	1500
0.033	4.6 × 11.6 × 12.5	0.5	45333	2000	1500	1300
0.039	4.0 × 11.0 × 12.5	0.4	45393	2000	1500	1500
0.047	4.1 × 11.1 × 12.5	0.4	45473	2000	1500	1500
0.056	4.0 × 11.0 × 12.5	0.4	45563	2000	1500	1500
0.068	4.1 × 11.1 × 12.5	0.4	45683	2000	1500	1500
0.082	4.4 × 11.4 × 12.5	0.5	45823	2000	1500	1500
0.1	4.0 × 11.0 × 12.5	0.4	45104	2000	1500	1500
0.12	4.3 × 11.3 × 12.5	0.5	45124	2000	1500	1500
0.15	4.8 × 11.8 × 12.5	0.5	45154	2000	1250	1300
0.18	5.2 × 12.2 × 12.5	0.5	45184	1500	1000	1200
0.22	5.8 × 12.8 × 12.5	0.6	45224	1500	1000	1100

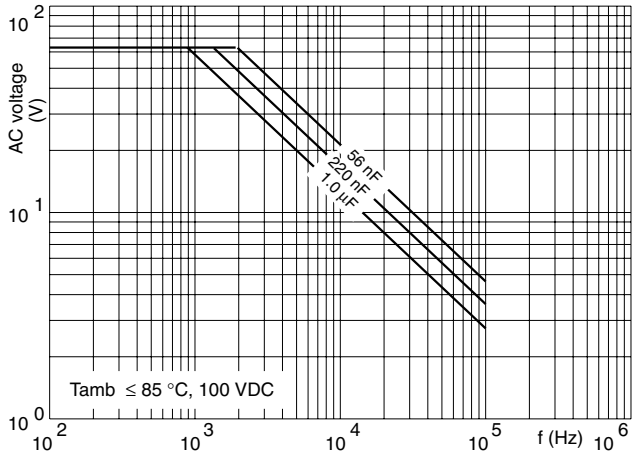
U_{Rdc} = 400 V; U_{Rac} = 220 V

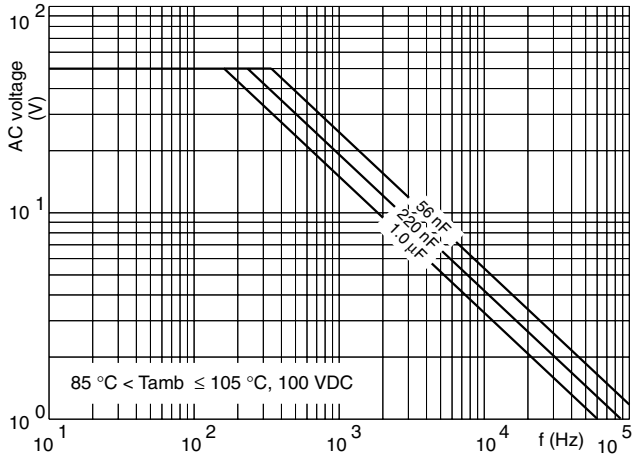
C (µF)	DIMENSIONS wmax × h max × lmax (mm)	MASS (g)	CATALOG NUMBER 2222 469 ..... AND PACKAGING			
			LOOSE IN BOX			REEL
			lt = 4.0 + 1.0/– 0.5 mm		lt = 22.0 ± 4.0 mm	
			C-tol = ± 10 %			
			last 5 digits of catalog number	SPQ	SPQ	SPQ
Pitch = 10.0 ± 0.4 mm; d_t = 0.60 ± 0.06 mm						
0.001 0.0012 0.0015 0.0018	4.5 × 11.5 × 12.5	0.5	55102 55122 55152 55182	2000	1500	1300
0.0022	4.0 × 11.0 × 12.5	0.4	55222	2000	1500	1500
0.0027	4.3 × 11.3 × 12.5	0.5	55272	2000	1500	1500
0.0033	4.6 × 11.6 × 12.5	0.5	55332	2000	1500	1300
0.0039	4.0 × 11.0 × 12.5	0.4	55392	2000	1500	1500
0.0047	4.1 × 11.1 × 12.5	0.4	55472	2000	1500	1500
0.0056	4.6 × 11.6 × 12.5	0.5	55562	2000	1500	1300
0.0068	4.2 × 11.2 × 12.5	0.4	55682	2000	1500	1500
0.0082	4.6 × 11.6 × 12.5	0.5	55822	2000	1500	1300
0.01	4.1 × 11.1 × 12.5	0.4	55103	2000	1500	1500
0.012	4.5 × 11.5 × 12.5	0.5	55123	2000	1500	1300
0.015	4.1 × 11.1 × 12.5	0.4	55153	2000	1500	1500
0.018	4.5 × 11.5 × 12.5	0.5	55183	2000	1500	1300
0.022	4.0 × 11.0 × 12.5	0.4	55223	2000	1500	1500
0.027	4.2 × 11.2 × 12.5	0.4	55273	2000	1500	1500
0.033	4.6 × 11.6 × 12.5	0.5	55333	2000	1500	1300
0.039	5.0 × 12.0 × 12.5	0.5	55393	1500	1250	1200
0.047	4.1 × 11.1 × 12.5	0.4	55473	2000	1500	1500
0.056	4.4 × 11.4 × 12.5	0.5	55563	2000	1500	1500
0.068	4.8 × 11.8 × 12.5	0.5	55683	2000	1250	1300
0.082	5.4 × 12.4 × 12.5	0.6	55823	1500	1000	1200
0.1	5.7 × 12.7 × 12.5	0.6	55104	1500	1000	1100

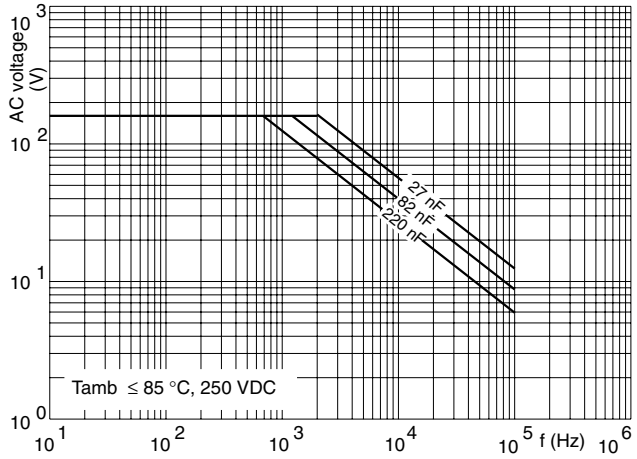
U_{Rdc} = 630 V; U_{Rac} = 250 V

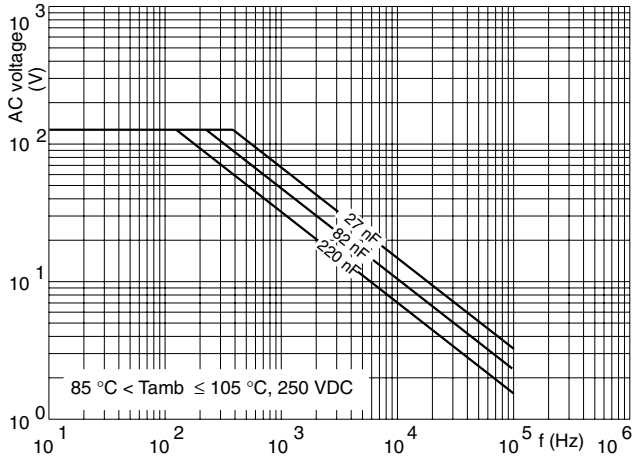
C (µF)	DIMENSIONS wmax × h max × lmax (mm)	MASS (g)	CATALOG NUMBER 2222 469 ..... AND PACKAGING			
			LOOSE IN BOX			REEL
			lt = 4.0 + 1.0/– 0.5 mm		lt = 22.0 ± 4.0 mm	
			C-tol = ± 10 %			
			last 5 digits of catalog number	SPQ	SPQ	SPQ
Pitch = 10.0 ± 0.4 mm; d_t = 0.60 ± 0.06 mm						
0.01	4.1 × 11.1 × 12.5	0.4	65103	2000	1500	1500
0.012	4.5 × 11.5 × 12.5	0.5	65123	2000	1500	1300
0.015	4.9 × 11.9 × 12.5	0.5	65153	2000	1250	1200
0.018	5.4 × 12.4 × 12.5	0.6	65183	1500	1000	1100
0.022	4.8 × 11.8 × 12.5	0.5	65223	2000	1250	1300
0.027	5.3 × 12.3 × 12.5	0.6	65273	2000	1000	1200
0.033	5.9 × 12.9 × 12.5	0.6	65333	1500	1000	1100

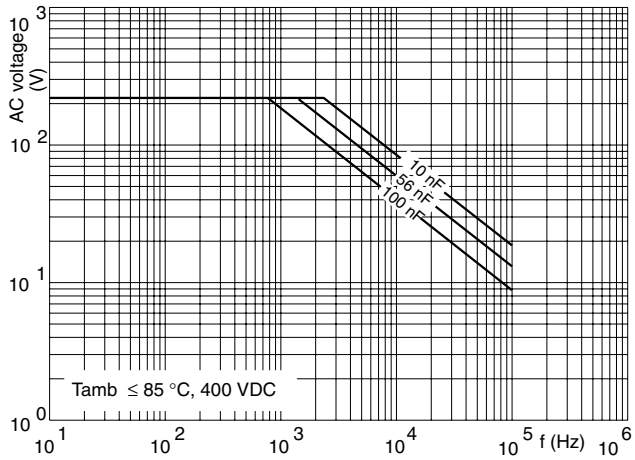
MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY

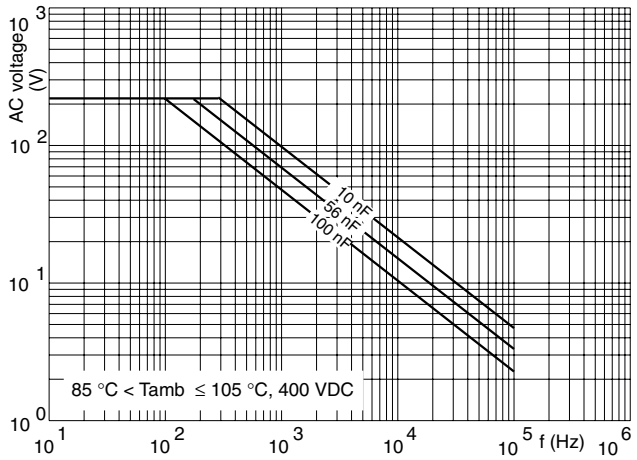


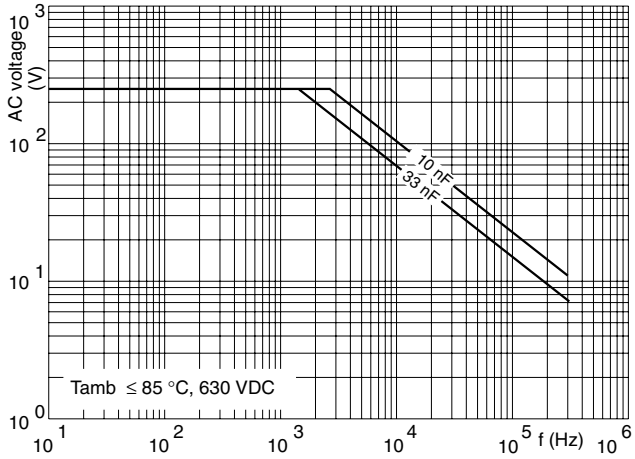


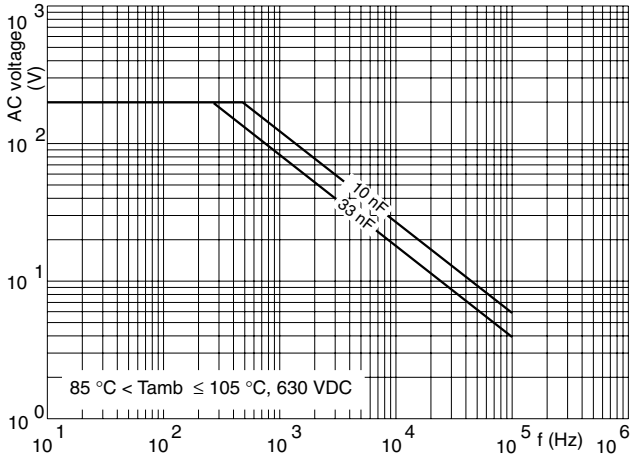




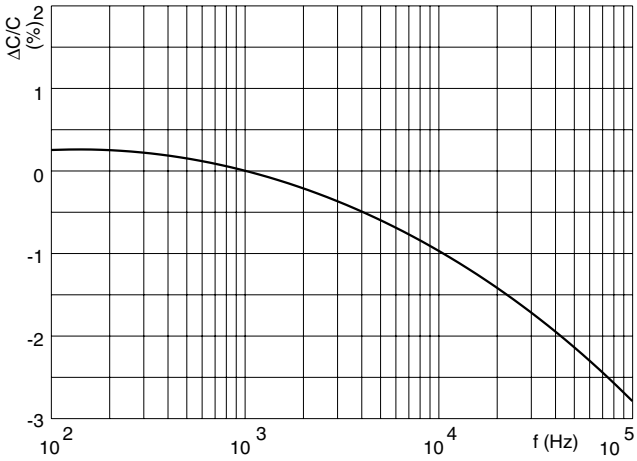


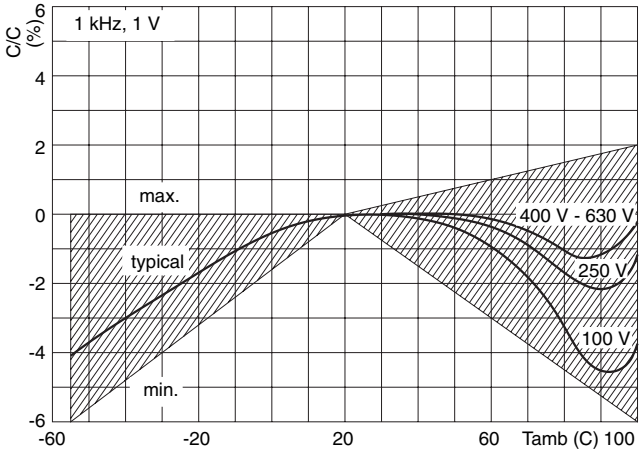




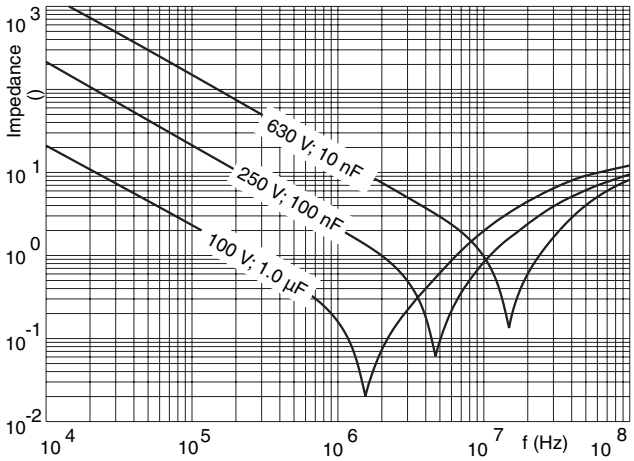


CAPACITANCE





IMPEDANCE



For technical questions contact: filmcaps.roeselare@vishay.com

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