Metallized Polyester Film Capacitors
MKT Radial Potted Type

APPLICATIONS

Blocking and coupling. Bypass and energy reservoir

MARKING

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

DIELECTRIC

Polyester 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

e3

CAPACITIANCE RANGE (E12 SERIES)

0.0039 to 1.0 μF

CAPACITANCE TOLERANCE

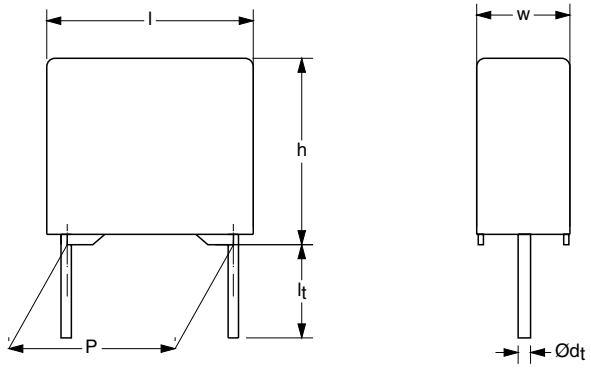
±10%; ±5%

RATED (DC) VOLTAGE

63 V; 100 V; 250 V; 400 V

RATED (AC) VOLTAGE

40 V; 63 V; 160 V; 220 V



Dimensions in mm

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)

FEATURES

Available taped and loose in box

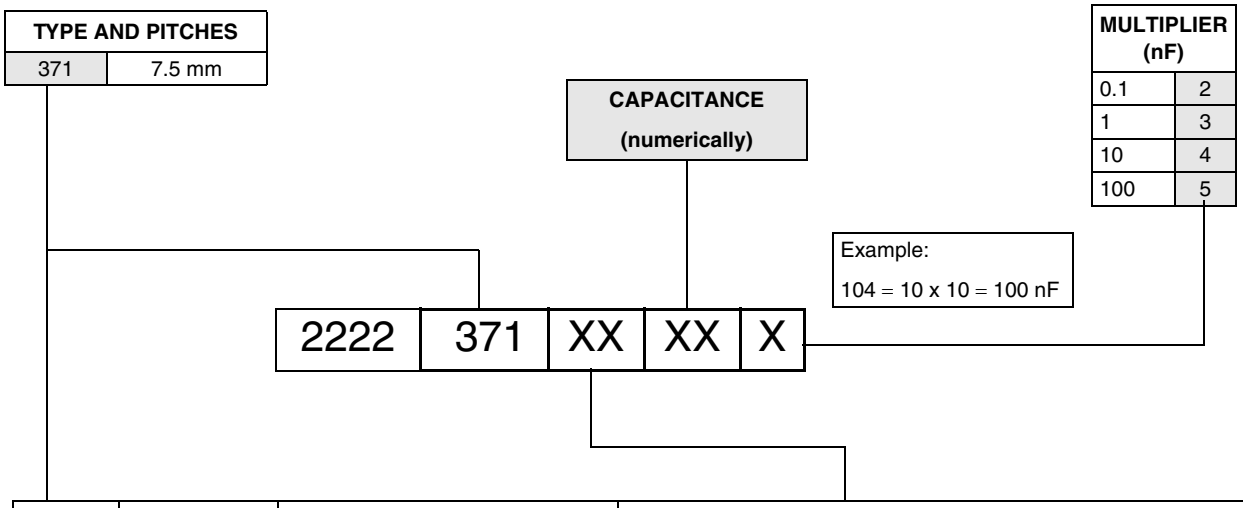
Lead (Pb)-free product

Pb-free

DETAIL SPECIFICATION

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

COMPOSITION OF CATALOG NUMBER



TYPE	PACKAGING	LEAD CONFIGURATION	PREFERRED TYPES					
			C-TOL	63 V	100 V	250 V	400 V	630 V
371	loose in box	lead length 4.0 +1.0/–0.5 mm	±10%	11	21	41	51	–
			±5%	12	22	42	52	–
	ammopack	H = 18.5 mm; P_0 = 12.7 mm	±10%	38	68	78	88	–
			±5%	39	69	79	89	–
			ON REQUEST					
371	loose in box	lead length 26.0 ±2.0 mm	±10%	15	25	45	55	–
			±5%	16	26	46	56	–
	taped on reel	H = 18.5 mm; P_0 = 12.7 mm; reel diameter 356 mm	±10%	35	65	75	85	–
			±5%	36	66	76	86	–

SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE			
Tangent of loss angle:	at 1 kHz	at 10 kHz	at 100 kHz	
$C \leq 0.1\ \mu F$	$\leq 75 \times 10^{-4}$	$\leq 130 \times 10^{-4}$	$\leq 250 \times 10^{-4}$	
$0.1\ \mu F < C \leq 0.47\ \mu F$	$\leq 75 \times 10^{-4}$	$\leq 130 \times 10^{-4}$	$\leq 300 \times 10^{-4}$	
$0.47\ \mu F < C \leq 1.0\ \mu F$	$\leq 75 \times 10^{-4}$	$\leq 130 \times 10^{-4}$	–	
Rated voltage pulse slope $(dU/dt)_R$	at 63 V (DC)	at 100 V (DC)	at 250 V (DC)	at 400 V (DC)
	18 V/µs	36 V/µs	70 V/µs	190 V/µs
R between leads, for $C \leq 0.33\ \mu F$:				
at 10 V; 1 minute	>15000 MΩ			
at 100 V; 1 minute		>15000 MΩ	>30000 MΩ	>30000 MΩ
RC between leads, for:				
$C > 0.33\ \mu F$ at 10 V; 1 minute	>5000 s			
$C > 0.33\ \mu F$ at 100 V; 1 minute		>5000 s		
R between interconnected leads and case (foil method)	>30000 MΩ	>30000 MΩ	>30000 MΩ	>30000 MΩ
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	100 V; 1 minute	160 V; 1 minute	400 V; 1 minute	640 V; 1 minute
Withstanding (DC) voltage between leads and case	200 V; 1 minute	200 V; 1 minute	500 V; 1 minute	800 V; 1 minute

U_{Rdc} = 63 V; U_{Rac} = 40 V

C (µF)	DIMENSIONS w × h × l (mm)	MASS (g)	CATALOG NUMBER 2222 371 ..... AND PACKAGING							
			LOOSE IN BOX				AMMOPACK			REEL
			l_t = 4.0 +1.0/–0.5 mm		short leads	long leads	H = 18.5 mm; P_0 = 12.7 mm			
			C-tol = ±10%	C-tol = ±5%			C-tol = ±10%	C-tol = ±5%		
			last 5 digits of catalog number		SPQ	SPQ	last 5 digits of catalog number		SPQ	SPQ
Pitch = 7.62 +0.30/–0.40 mm; d_t = 0.50 ±0.05 mm										
0.056	2.5 × 6.5 × 10.0	0.3	11563	12563	1000	1000	38563	39563	2000	2000
0.068			11683	12683			38683	39683		
0.082			11823	12823			38823	39823		
0.1			11104	12104			38104	39104		
0.12	3.0 × 8.0 × 10.0	0.4	11124	12124	1000	1000	38124	39124	1500	1500
0.15			11154	12154			38154	39154		
0.18			11184	12184			38184	39184		
0.22			11224	12224			38224	39224		
0.27	4.0 × 9.0 × 10.0	0.5	11274	12274	1000	1000	38274	39274	1000	1500
0.33			11334	12334			38334	39334		
0.39			11394	12394			38394	39394		
0.47			11474	12474			38474	39474		
0.56			11564	12564			38564	39564		
0.68			11684	12684			38684	39684		
0.82	5.0 × 10.5 × 10.0	0.7	11824	12824	1000	1000	38824	39824	1000	1000
1			11105	12105			38105	39105		

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

C (µF)	DIMENSIONS w × h × l (mm)	MASS (g)	CATALOG NUMBER 2222 371 ..... AND PACKAGING							
			LOOSE IN BOX				AMMOPACK			REEL
			l_t = 4.0 +1.0/–0.5 mm		short leads	long leads	H = 18.5 mm; P_0 = 12.7 mm			
			C-tol = ±10%	C-tol = ±5%			C-tol = ±10%	C-tol = ±5%		
			last 5 digits of catalog number		SPQ	SPQ	last 5 digits of catalog number		SPQ	SPQ
Pitch = 7.62 +0.30/–0.40 mm; d_t = 0.50 ±0.05 mm										
0.018	2.5 × 6.5 × 10.0	0.3	21183	22183	1000	1000	68183	69183	2000	2000
0.022			21223	22223			68223	69223		
0.027			21273	22273			68273	69273		
0.033			21333	22333			68333	69333		
0.039	2.5 × 6.5 × 10.0	0.3	21393	22393	1000	1000	68393	69393	2000	2000
0.047			21473	22473			68473	69473		
0.056	3.0 × 8.0 × 10.0	0.4	21563	22563	1000	1000	68563	69563	1500	1500
0.068			21683	22683			68683	69683		
0.082			21823	22823			68823	69823		
0.1			21104	22104			68104	69104		
0.12	4.0 × 9.0 × 10.0	0.5	21124	22124	1000	1000	68124	69124	1000	1500
0.15			21154	22154			68154	69154		
0.18			21184	22184			68184	69184		
0.22			21224	22224			68224	69224		
0.27	5.0 × 10.5 × 10.0	0.7	21274	22274	1000	1000	68274	69274	1000	1000
0.33			21334	22334			68334	69334		
0.39			21394	22394			68394	69394		
0.47			21474	22474			68474	69474		

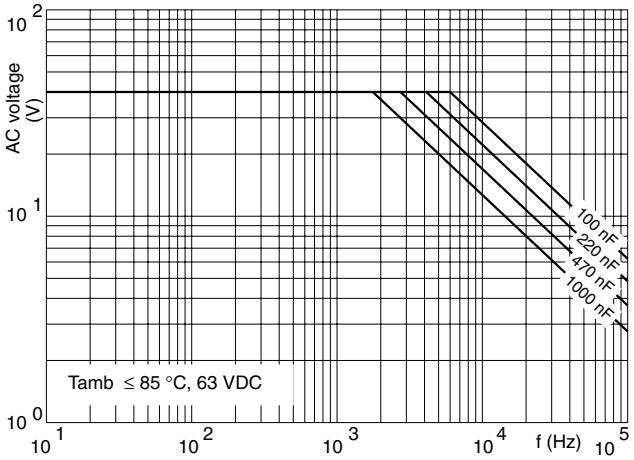
U_{Rdc} = 250 V; U_{Rac} = 160 V

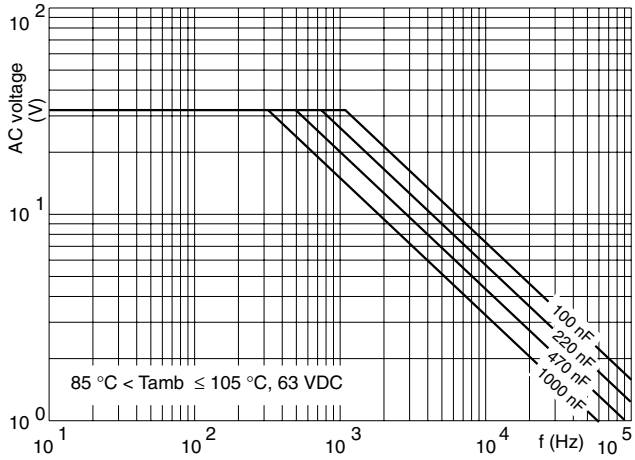
C (µF)	DIMENSIONS w × h × l (mm)	MASS (g)	CATALOG NUMBER 2222 371 ..... AND PACKAGING							
			LOOSE IN BOX				AMMOPACK			REEL
			l_t = 4.0 +1.0/–0.5 mm		short leads	long leads	H = 18.5 mm; P_0 = 12.7 mm			
			C-tol = ±10%	C-tol = ±5%			C-tol = ±10%	C-tol = ±5%		
			last 5 digits of catalog number		SPQ	SPQ	last 5 digits of catalog number		SPQ	SPQ
Pitch = 7.62 +0.30/–0.40 mm; d_t = 0.50 ±0.05 mm										
0.0082	2.5 × 6.5 × 10.0	0.3	41822	42822	1000	1000	78822	79822	2000	2000
0.01			41103	42103			78103	79103		
0.012			41123	42123			78123	79123		
0.015			41153	42153			78153	79153		
0.018	3.0 × 8.0 × 10.0	0.4	41183	42183	1000	1000	78183	79183	1500	1500
0.022			41223	42223			78223	79223		
0.027			41273	42273			78273	79273		
0.033			41333	42333			78333	79333		
0.039			41393	42393			78393	79393		
0.047			41473	42473			78473	79473		
0.056	4.0 × 9.0 × 10.0	0.5	41563	42563	1000	1000	78563	79563	1000	1500
0.068			41683	42683			78683	79683		
0.082			41823	42823			78823	79823		
0.1			41104	42104			78104	79104		
0.12	5.0 × 10.5 × 10.0	0.7	41124	42124	1000	1000	78124	79124	1000	1000

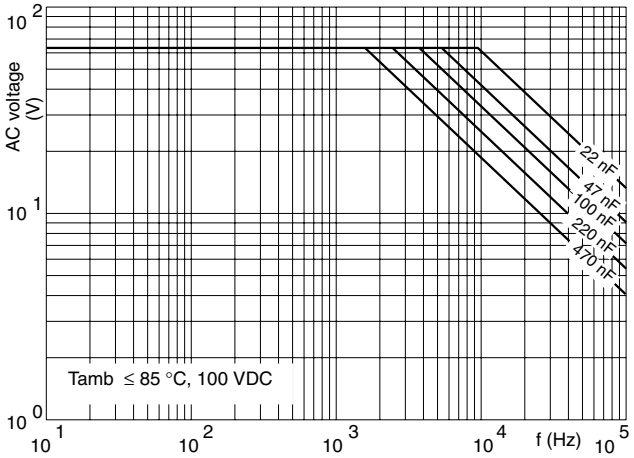
U_{Rdc} = 400 V; U_{Rac} = 220 V

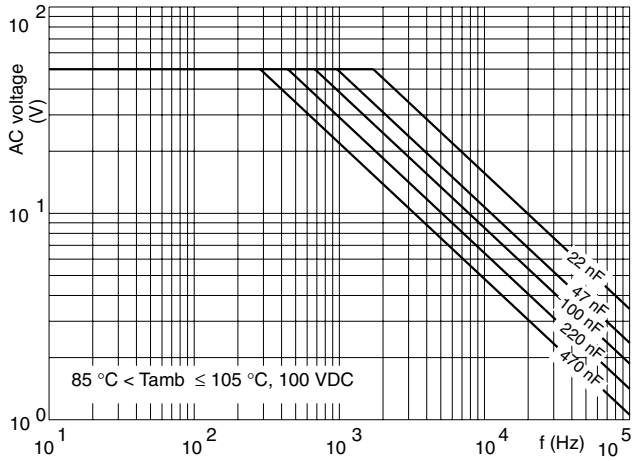
C (µF)	DIMENSIONS w × h × l (mm)	MASS (g)	CATALOG NUMBER 2222 371 ..... AND PACKAGING							
			LOOSE IN BOX				AMMOPACK			REEL
			l_t = 4.0 +1.0/–0.5 mm		short leads	long leads	H = 18.5 mm; P_0 = 12.7 mm			
			C-tol = ±10%	C-tol = ±5%			C-tol = ±10%	C-tol = ±5%		
			last 5 digits of catalog number		SPQ	SPQ	last 5 digits of catalog number		SPQ	SPQ
Pitch = 7.62 +0.30/–0.40 mm; d_t = 0.50 ±0.05 mm										
0.0039	2.5 × 6.5 × 10.0	0.3	51392	52392	1000	1000	88392	89392	2000	2000
0.0047			51472	52472			88472	89472		
0.0056			51562	52562			88562	89562		
0.0068			51682	52682			88682	89682		
0.0082	3.0 × 8.0 × 10.0	0.4	51822	52822	1000	1000	88822	89822	1500	1500
0.01			51103	52103			88103	89103		
0.012	4.0 × 9.0 × 10.0	0.5	51123	52123	1000	1000	88123	89123	1000	1500
0.015			51153	52153			88153	89153		
0.018	5.0 × 10.5 × 10.0	0.7	51183	52183	1000	1000	88183	89183	1000	1000
0.022			51223	52223			88223	89223		
0.027			51273	52273			88273	89273		
0.033			51333	52333			88333	89333		
0.039			51393	52393			88393	89393		

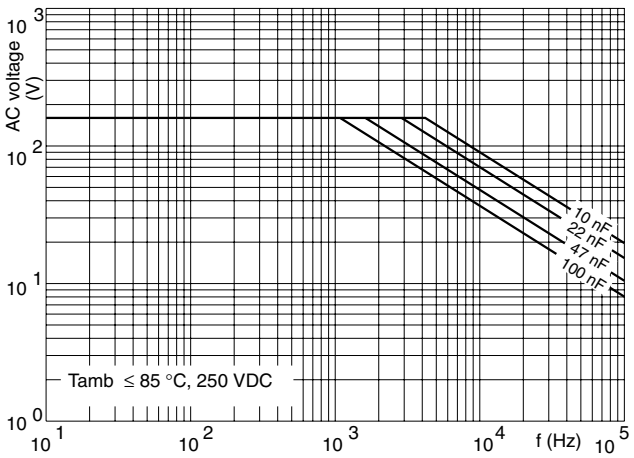
MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY

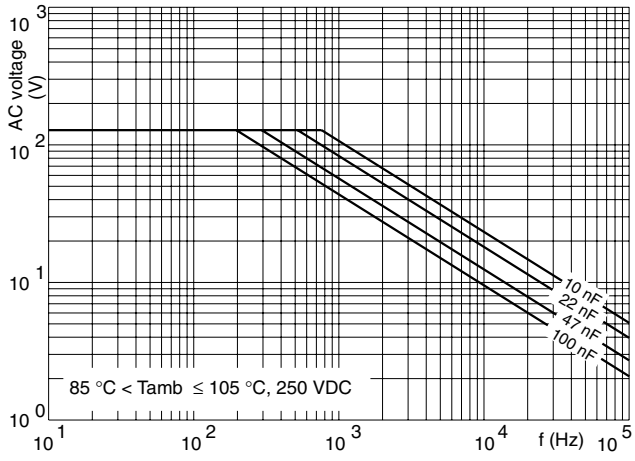


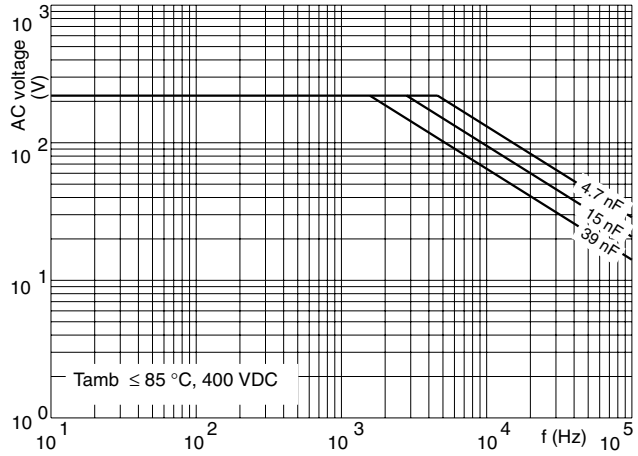


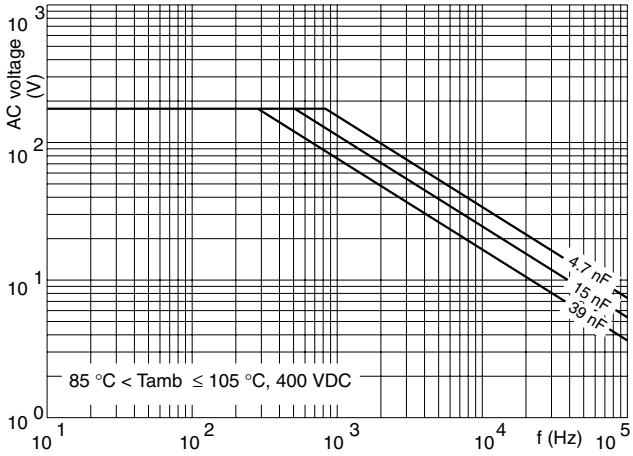




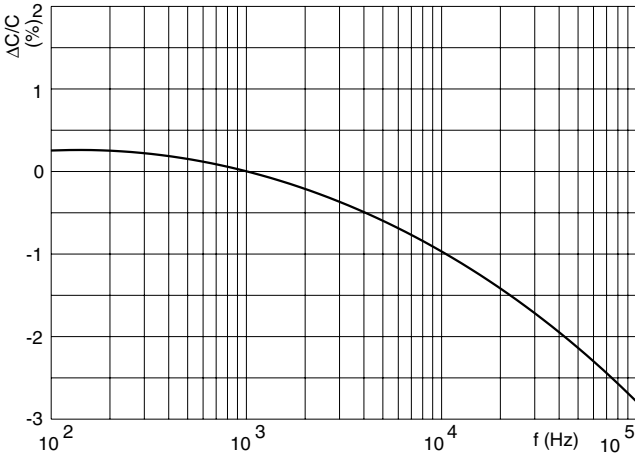


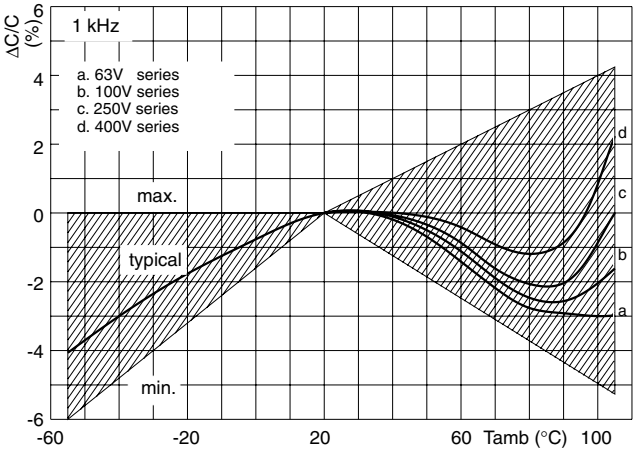






CAPACITANCE





IMPEDANCE