



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

CAPACITANCE RANGE (E12 SERIES)

0.0039 to 1.0 μF

CAPACITANCE TOLERANCE

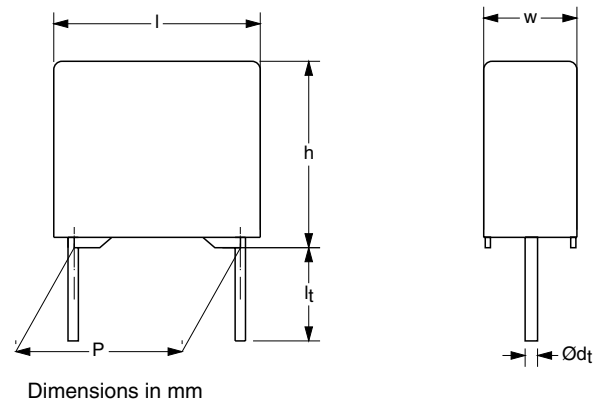
$\pm 10\%$; $\pm 5\%$

RATED (DC) VOLTAGE

63 V; 100 V; 250 V; 400 V

RATED (AC) VOLTAGE

40 V; 63 V; 160 V; 220 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)

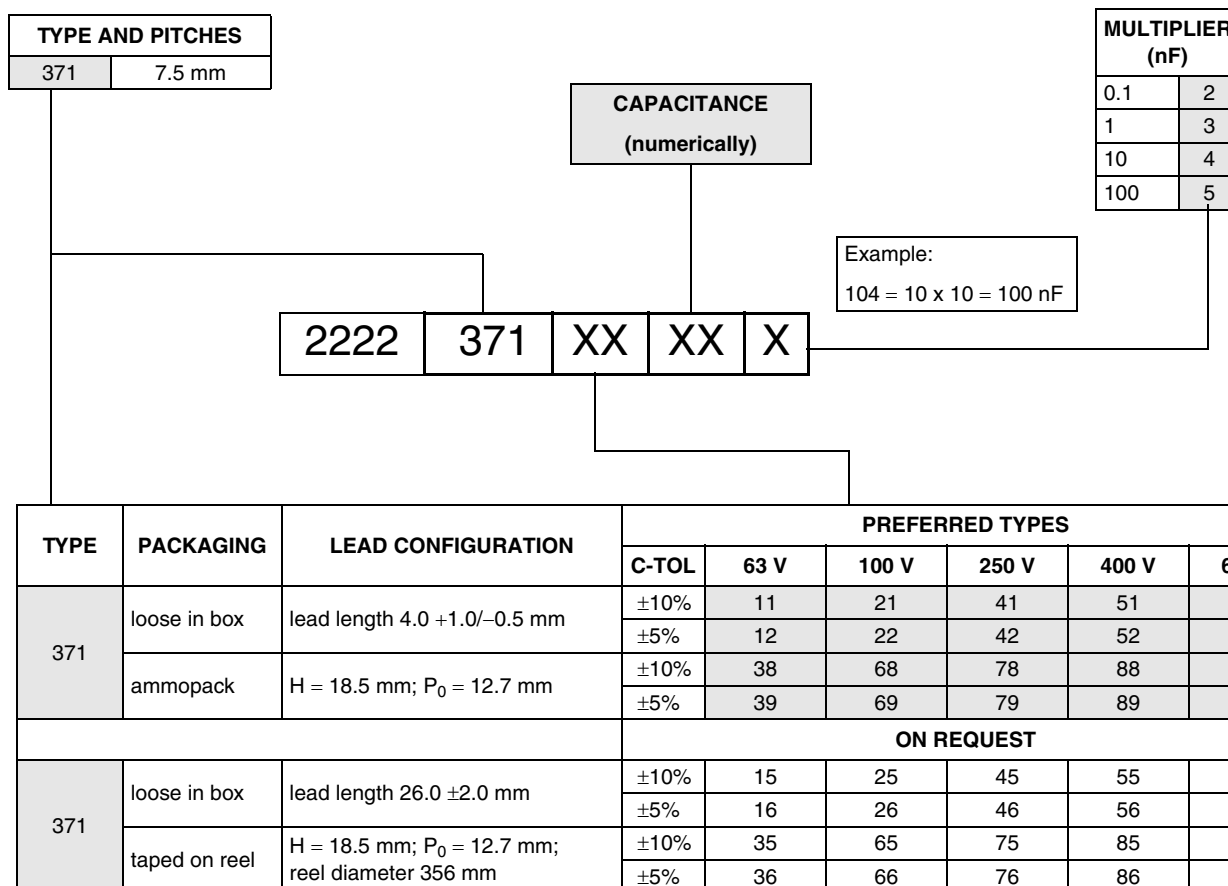
FEATURES

Available taped and loose in box

DETAIL SPECIFICATION

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

COMPOSITION OF CATALOG NUMBER



SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE			
Tangent of loss angle: C ≤ 0.1 μF 0.1 μF < C ≤ 0.47 μF 0.47 μF < C ≤ 1.0 μF	at 1 kHz	at 10 kHz	at 100 kHz	
	≤75 × 10 ⁻⁴	≤130 × 10 ⁻⁴	≤250 × 10 ⁻⁴	
	≤75 × 10 ⁻⁴	≤130 × 10 ⁻⁴	≤300 × 10 ⁻⁴	
	≤75 × 10 ⁻⁴	≤130 × 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 ≤ 0.33 μF: at 10 V; 1 minute at 100 V; 1 minute	>15000 MΩ	>15000 MΩ	>30000 MΩ	>30000 MΩ
RC between leads, for: C > 0.33 μF at 10 V; 1 minute C > 0.33 μF at 100 V; 1 minute	>5000 s	>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



**Metallized Polyester Film Capacitors
MKT Radial Potted Type**

Vishay BCcomponents

$U_{Rdc} = 63\text{ V}$; $U_{Rac} = 40\text{ V}$

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 0.068 0.082 0.1	2.5 × 6.5 × 10.0	0.3	11563 11683 11823 11104	12563 12683 12823 12104	1000	1000	38563 38683 38823 38104	39563 39683 39823 39104	2000	2000
0.12 0.15 0.18 0.22	3.0 × 8.0 × 10.0	0.4	11124 11154 11184 11224	12124 12154 12184 12224	1000	1000	38124 38154 38184 38224	39124 39154 39184 39224	1500	1500
0.27 0.33 0.39 0.47 0.56 0.68	4.0 × 9.0 × 10.0	0.5	11274 11334 11394 11474 11564 11684	12274 12334 12394 12474 12564 12684	1000	1000	38274 38334 38394 38474 38564 38684	39274 39334 39394 39474 39564 39684	1000	1500
0.82 1	5.0 × 10.5 × 10.0	0.7	11824 11105	12824 12105	1000	1000	38824 38105	39824 39105	1000	1000

$U_{Rdc} = 100\text{ V}$, $U_{Rac} = 63\text{ V}$

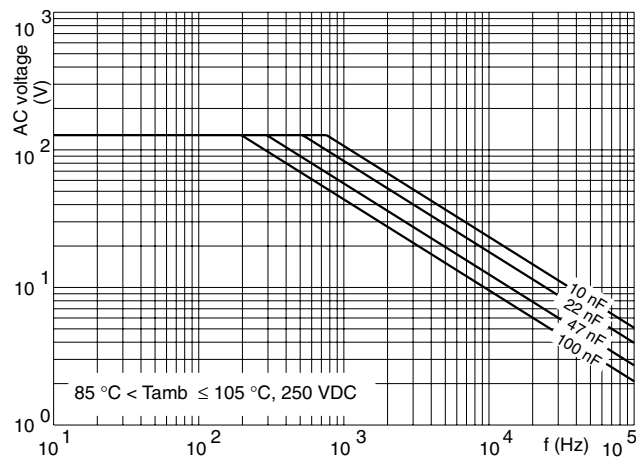
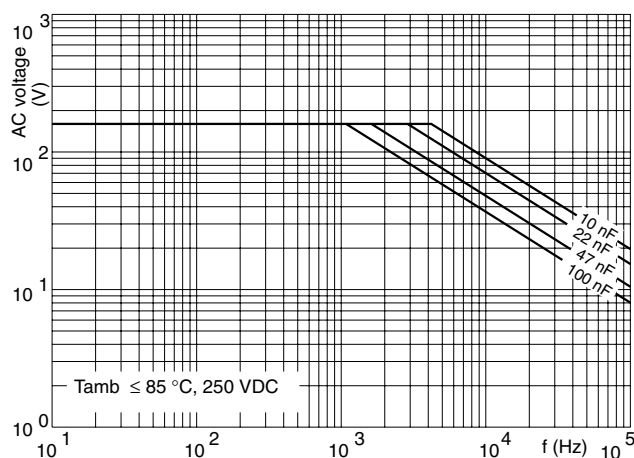
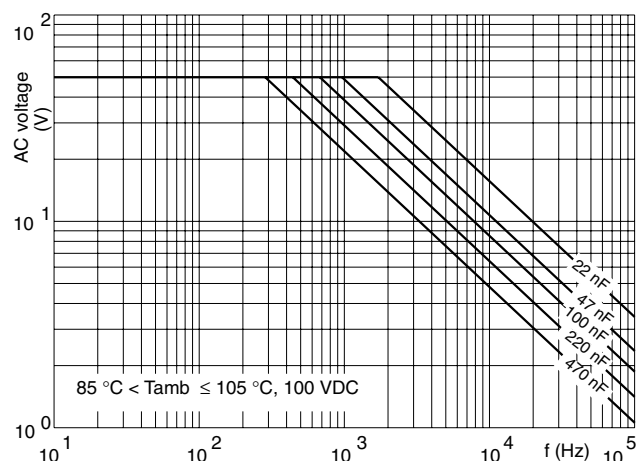
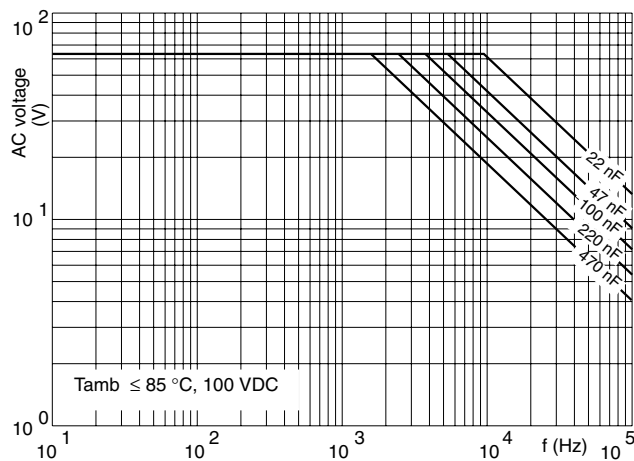
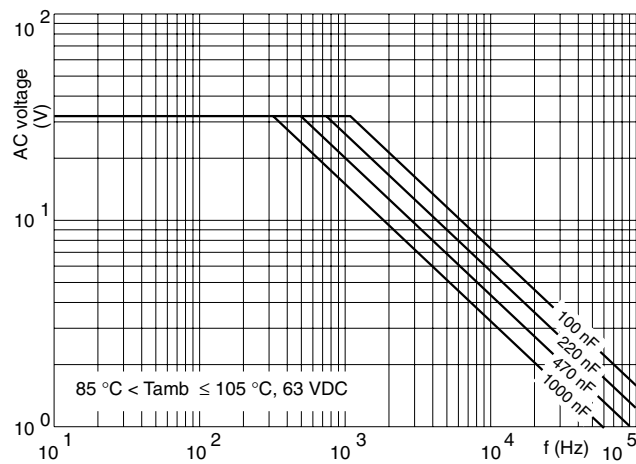
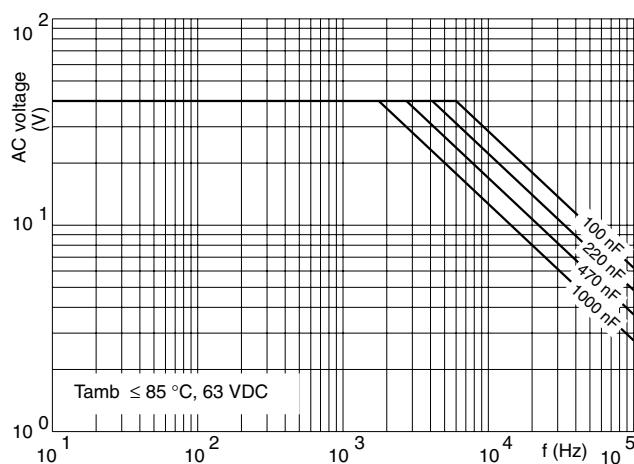
C (μF)	DIMENSIONS w × h × l (mm)	MASS (g)	CATALOG NUMBER 2222 371 AND PACKAGING							
			LOOSE IN BOX				AMMOPACK			REEL
			l _t = 4.0 +1.0/-0.5 mm		short leads	long leads	H = 18.5 mm; P ₀ = 12.7 mm			
			C-tol = ±10%	C-tol = ±5%			C-tol = ±10%	C-tol = ±5%		
			last 5 digits of catalog number		SPQ	SPQ	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 0.022 0.027 0.033	2.5 × 6.5 × 10.0	0.3	21183 21223 21273 21333	22183 22223 22273 22333	1000	1000	68183 68223 68273 68333	69183 69223 69273 69333	2000	2000
0.039 0.047	2.5 × 6.5 × 10.0	0.3	21393 21473	22393 22473	1000	1000	68393 68473	69393 69473	2000	2000
0.056 0.068 0.082 0.1	3.0 × 8.0 × 10.0	0.4	21563 21683 21823 21104	22563 22683 22823 22104	1000	1000	68563 68683 68823 68104	69563 69683 69823 69104	1500	1500
0.12 0.15 0.18 0.22	4.0 × 9.0 × 10.0	0.5	21124 21154 21184 21224	22124 22154 22184 22224	1000	1000	68124 68154 68184 68224	69124 69154 69184 69224	1000	1500
0.27 0.33 0.39 0.47	5.0 × 10.5 × 10.0	0.7	21274 21334 21394 21474	22274 22334 22394 22474	1000	1000	68274 68334 68394 68474	69274 69334 69394 69474	1000	1000

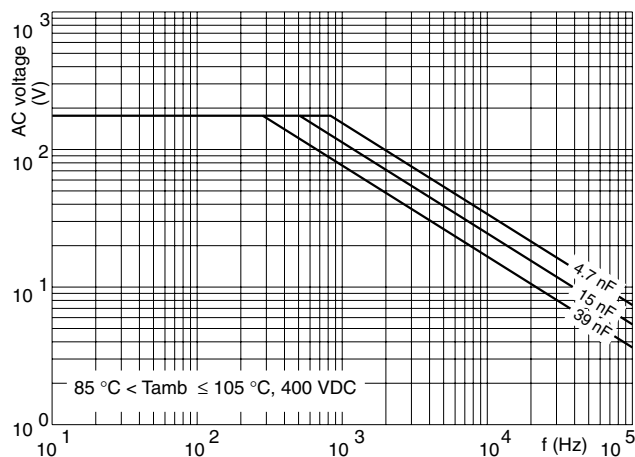
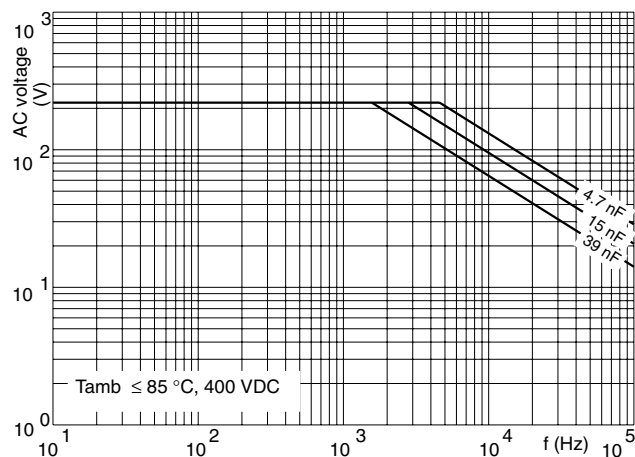
$U_{Rdc} = 250 \text{ V}$; $U_{Rac} = 160 \text{ V}$

C (μ F)	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		SPQ	SPQ
			C-tol = ±10%	C-tol = ±5%	SPQ	SPQ	C-tol = ±10%	C-tol = ±5%		
			last 5 digits of catalog number				last 5 digits of catalog number			
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

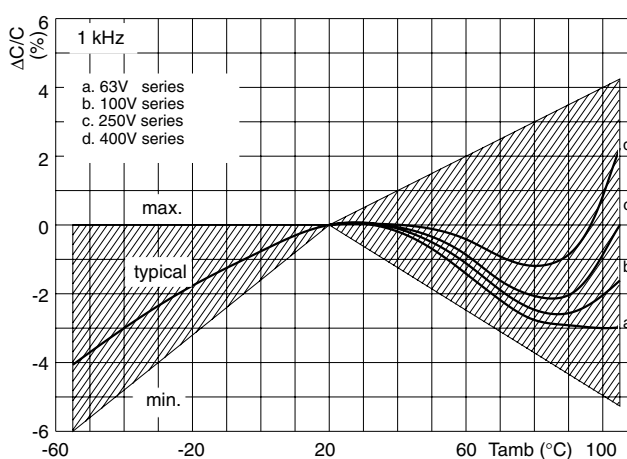
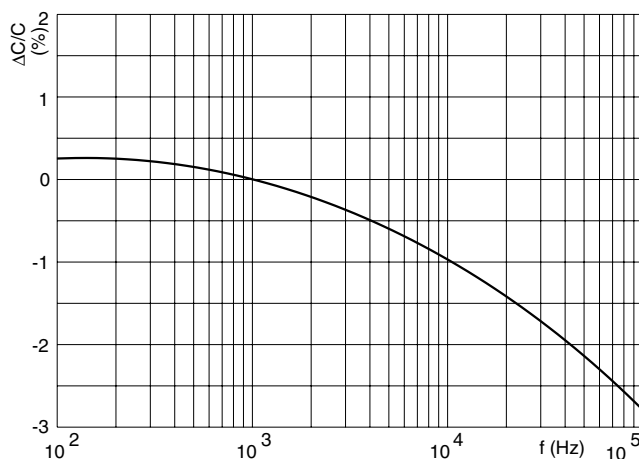
 $U_{Rdc} = 400 \text{ V}$; $U_{Rac} = 220 \text{ V}$

C (μ F)	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 0.0047 0.0056 0.0068	2.5 × 6.5 × 10.0	0.3	51392 51472 51562 51682	52392 52472 52562 52682	1000	1000	88392 88472 88562 88682	89392 89472 89562 89682	2000	2000
0.0082 0.01	3.0 × 8.0 × 10.0	0.4	51822 51103	52822 52103	1000	1000	88822 88103	89822 89103	1500	1500
0.012 0.015	4.0 × 9.0 × 10.0	0.5	51123 51153	52123 52153	1000	1000	88123 88153	89123 89153	1000	1500
0.018 0.022 0.027 0.033 0.039	5.0 × 10.5 × 10.0	0.7	51183 51223 51273 51333 51393	52183 52223 52273 52333 52393	1000	1000	88183 88223 88273 88333 88393	89183 89223 89273 89333 89393	1000	1000

**MAXIMUM RMS VOLTAGE (SINEWAVE) AS A FUNCTION OF FREQUENCY**



CAPACITANCE



IMPEDANCE

