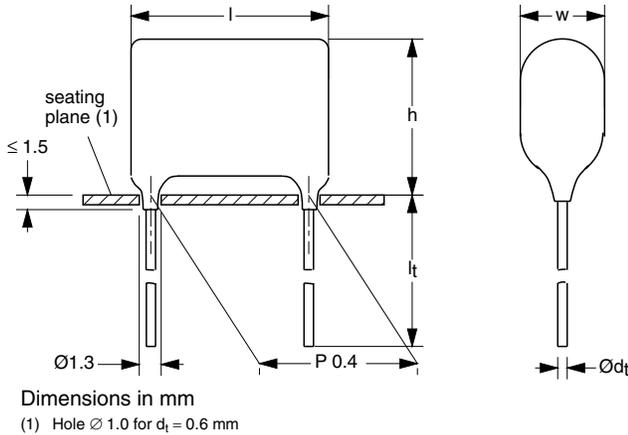


# Metallized Polyester Film Capacitors

## MKT Radial Epoxy Lacquered Type


**FEATURES**

- Available taped on reel and loose in box
- Lead (Pb)-free product
- RoHS-compliant product


**RoHS**  
COMPLIANT

**CAPACITANCE TOLERANCE**
 $\pm 10\%$ ;  $\pm 5\%$ 
**RATED (DC) VOLTAGE**

63 V; 100 V; 250 V; 400 V; 630 V

**RATED (AC) VOLTAGE**

40 V; 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)

**DETAIL SPECIFICATION**

For more detailed data and test requirements see "Type detail specification HQN-384-02/101"

**APPLICATIONS**

Blocking and coupling. Bypass and energy reservoir

**MARKING**

C-value; tolerance; rated voltage

**DIELECTRIC**

Polyester film

**ELECTRODES**

Vacuum deposited aluminium

**COATING**

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

**CONSTRUCTION**

Wound mono construction

**LEADS**

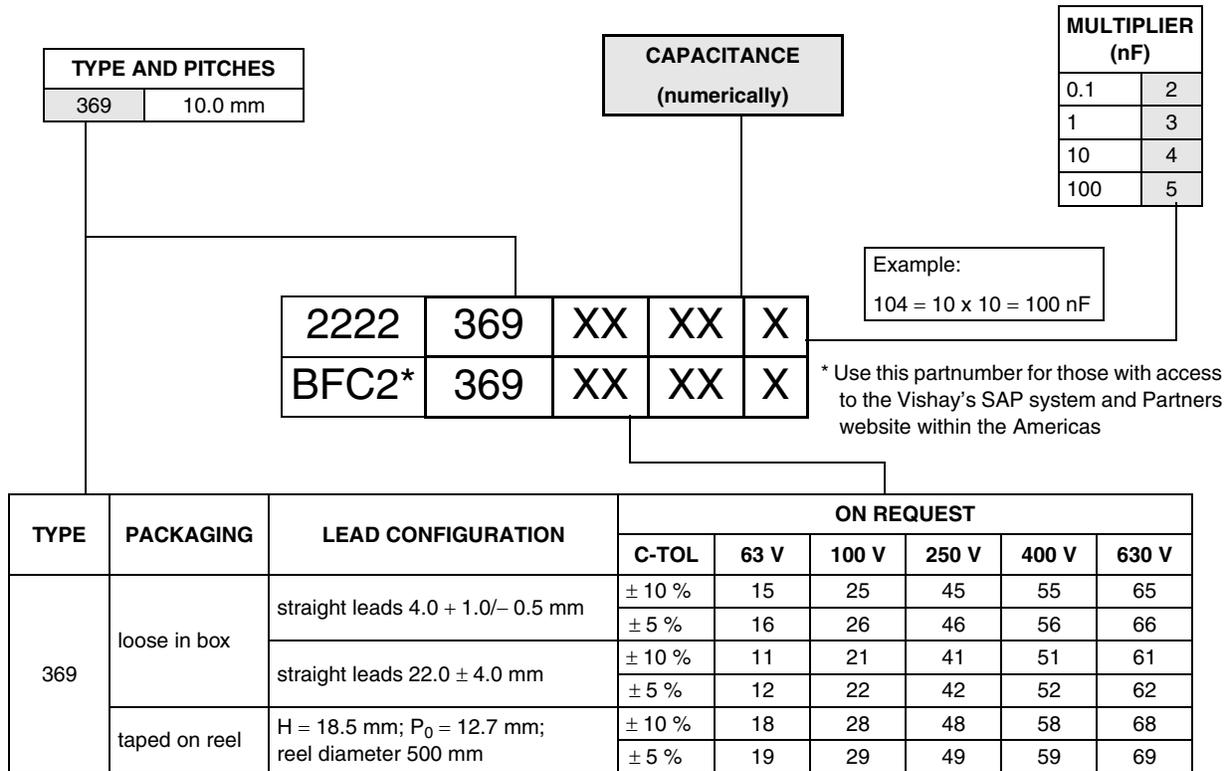
Tinned wire

**CAPACITANCE RANGE (E12 SERIES)**

 0.001 to 1.0  $\mu$ F



## COMPOSITION OF CATALOG NUMBER



## SPECIFIC REFERENCE DATA

DESCRIPTION	VALUE				
	at 1 kHz	at 10 kHz	at 100 kHz		
Tangent of loss angle:					
C ≤ 0.47 μF	≤ 75 × 10 <sup>-4</sup>	≤ 130 × 10 <sup>-4</sup>	≤ 300 × 10 <sup>-4</sup>		
0.47 μF < C ≤ 1.0 μF	≤ 75 × 10 <sup>-4</sup>	≤ 130 × 10 <sup>-4</sup>	≤ 225 × 10 <sup>-4</sup>		
C ≥ 0.1 μF	≤ 75 × 10 <sup>-4</sup>	≤ 130 × 10 <sup>-4</sup>	≤ 300 × 10 <sup>-4</sup>		
Rated voltage pulse slope (dU/dt) <sub>R</sub>	at 63 V (DC)	at 100 V (DC)	at 250 V (DC)	at 400 V (DC)	at 630 V (DC)
	30 V/μs	28 V/μs	70 V/μs	110 V/μs	70 V/μs
R between leads, for C ≤ 0.33 μF:					
at 10 V; 1 minute	> 15000 MΩ				
at 100 V; 1 minute		> 15000 MΩ	> 30000 MΩ	> 30000 MΩ	
at 500 V; 1 minute					> 30000 MΩ
RC between leads, for C > 0.33 μF:					
at 10 V; 1 minute	> 5000 s				
at 500 V; 1 minute					> 10000 s
R between interconnecting leads and casing:					
at 10 V; 1 minute	> 30000 MΩ				
at 100 V; 1 minute		> 30000 MΩ	> 30000 MΩ	> 30000 MΩ	
at 500 V; 1 minute					> 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	1008 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	1260 V; 1 minute



**U<sub>Rdc</sub> = 63 V; U<sub>Rac</sub> = 40 V**

C ( $\mu$ F)	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 369 ..... AND PACKAGING			
			LOOSE IN BOX			REEL
			$l_t = 4.0 + 1.0/- 0.5$ mm		$l_t = 22.0 \pm 4.0$ mm	
			C-tol = $\pm 10$ %	SPQ	SPQ	SPQ
last 5 digits of catalog number						
<b>Pitch = 10.0 <math>\pm</math> 0.4 mm; <math>d_t = 0.60 \pm 0.06</math> mm</b>						
0.22	4.2 $\times$ 9.3 $\times$ 12.5	0.4	15224	2000	1000	1300
0.27	3.8 $\times$ 9.0 $\times$ 12.5	0.4	15274	2000	1000	1300
0.33	4.1 $\times$ 9.3 $\times$ 12.5	0.4	15334	2000	1000	1300
0.39	4.0 $\times$ 9.2 $\times$ 12.5	0.4	15394	2000	1000	1300
0.47	4.3 $\times$ 9.5 $\times$ 12.5	0.5	15474	2000	1000	1200
0.56	4.7 $\times$ 9.8 $\times$ 12.5	0.5	15564	2000	1000	1200
0.68	5.1 $\times$ 10.2 $\times$ 12.5	0.5	15684	2000	1000	1100
0.82	5.5 $\times$ 10.7 $\times$ 12.5	0.6	15824	2000	1000	1000
1	6.0 $\times$ 11.1 $\times$ 12.5	0.7	15105	2000	1000	900

**U<sub>Rdc</sub> = 100 V; U<sub>Rac</sub> = 63 V**

C ( $\mu$ F)	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 369 ..... AND PACKAGING			
			LOOSE IN BOX			REEL
			$l_t = 4.0 + 1.0/- 0.5$ mm		$l_t = 22.0 \pm 4.0$ mm	
			C-tol = $\pm 10$ %	SPQ	SPQ	SPQ
last 5 digits of catalog number						
<b>Pitch = 10.0 <math>\pm</math> 0.4 mm; <math>d_t = 0.60 \pm 0.06</math> mm</b>						
0.056	4.0 $\times$ 9.1 $\times$ 12.5	0.4	25563	2000	1000	1500
0.068			25683			
0.082	3.7 $\times$ 8.8 $\times$ 12.5	0.4	25823	2000	1000	1500
0.1	4.0 $\times$ 9.0 $\times$ 12.5	0.4	25104	2000	1000	1500
0.12	4.3 $\times$ 9.3 $\times$ 12.5	0.4	25124	2000	1000	1500
0.15	3.9 $\times$ 8.9 $\times$ 12.5	0.4	25154	2000	1000	1500
0.18	4.2 $\times$ 9.2 $\times$ 12.5	0.5	25184	2000	1000	1300
0.22	4.5 $\times$ 9.4 $\times$ 12.5	0.5	25224	2000	1000	1200

**U<sub>Rdc</sub> = 250 V; U<sub>Rac</sub> = 160 V**

C ( $\mu$ F)	DIMENSIONS $w_{max} \times h_{max} \times l_{max}$ (mm)	MASS (g)	CATALOG NUMBER 2222 369 ..... AND PACKAGING			
			LOOSE IN BOX			REEL
			$l_t = 4.0 + 1.0/- 0.5$ mm		$l_t = 22.0 \pm 4.0$ mm	
			C-tol = $\pm 10$ %	SPQ	SPQ	SPQ
last 5 digits of catalog number						
<b>Pitch = 10.0 <math>\pm</math> 0.4 mm; <math>d_t = 0.60 \pm 0.06</math> mm</b>						
0.027	4.2 $\times$ 8.7 $\times$ 12.5	0.4	45273	2000	1000	1500
0.033	4.6 $\times$ 8.8 $\times$ 12.5	0.5	45333	2000	1000	1300
0.039	4.0 $\times$ 8.8 $\times$ 12.5	0.4	45393	2000	1000	1500
0.047	4.5 $\times$ 9.0 $\times$ 12.5	0.5	45473	2000	1000	1500
0.056	4.6 $\times$ 8.8 $\times$ 12.5	0.5	45563	2000	1000	1300
0.068	4.6 $\times$ 9.2 $\times$ 12.5	0.5	45683	2000	1000	1300
0.082	4.4 $\times$ 9.4 $\times$ 12.5	0.5	45823	2000	1000	1200
0.1	4.7 $\times$ 9.7 $\times$ 12.5	0.5	45104	2000	1000	1200



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

C ( $\mu\text{F}$ )	DIMENSIONS $w_{\text{max}} \times h_{\text{max}} \times l_{\text{max}}$ (mm)	MASS (g)	CATALOG NUMBER 2222 369 ..... AND PACKAGING			
			LOOSE IN BOX			REEL
			$l_t = 4.0 + 1.0/- 0.5\text{ mm}$		$l_t = 22.0 \pm 4.0\text{ mm}$	
			C-tol = $\pm 10\%$	SPQ	SPQ	SPQ
last 5 digits of catalog number						
<b>Pitch = <math>10.0 \pm 0.4\text{ mm}</math>; <math>d_t = 0.60 \pm 0.06\text{ mm}</math></b>						
0.001	4.5 × 8.7 × 12.5	0.5	55102	2000	1000	1500
0.0012	4.5 × 9.0 × 12.5	0.5	55122	2000	1000	1500
0.0015	4.5 × 8.8 × 12.5	0.5	55152	2000	1000	1500
0.0018	4.5 × 8.7 × 12.5	0.5	55182	2000	1000	1500
0.0022	4.0 × 8.6 × 12.5	0.5	55222	2000	1000	1500
0.0027	4.3 × 8.9 × 12.5	0.5	55272	2000	1000	1500
0.0033	4.6 × 9.1 × 12.5	0.5	55332	2000	1000	1500
0.0039	4.0 × 8.7 × 12.5	0.5	55392	2000	1000	1500
0.0047	4.1 × 8.8 × 12.5	0.5	55472	2000	1000	1500
0.0056	4.6 × 9.1 × 12.5	0.5	55562	2000	1000	1500
0.0068			55682			
0.0082			55822			
0.01			55103			
0.012	4.0 × 8.7 × 12.5	0.5	55123	2000	1000	1500
0.015	4.1 × 8.8 × 12.5	0.5	55153	2000	1000	1500
0.018	4.4 × 8.8 × 12.5	0.5	55183	2000	1000	1300
0.022	4.2 × 8.8 × 12.5	0.5	55223	2000	1000	1500
0.027	4.2 × 9.1 × 12.5	0.5	55273	2000	1000	1300
0.033	4.6 × 9.4 × 12.5	0.5	55333	2000	1000	1300

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

C ( $\mu\text{F}$ )	DIMENSIONS $w_{\text{max}} \times h_{\text{max}} \times l_{\text{max}}$ (mm)	MASS (g)	CATALOG NUMBER 2222 369 ..... AND PACKAGING			
			LOOSE IN BOX			REEL
			$l_t = 4.0 + 1.0/- 0.5\text{ mm}$		$l_t = 22.0 \pm 4.0\text{ mm}$	
			C-tol = $\pm 10\%$	SPQ	SPQ	SPQ
last 5 digits of catalog number						
<b>Pitch = <math>10.0 \pm 0.4\text{ mm}</math>; <math>d_t = 0.60 \pm 0.06\text{ mm}</math></b>						
0.01	4.1 × 8.7 × 12.5	0.4	65103	2000	1000	1300
0.012	4.4 × 8.9 × 12.5	0.5	65123	2000	1000	1200
0.015	4.9 × 9.2 × 12.5	0.5	65153	2000	1000	1100
0.018	5.3 × 9.5 × 12.5	0.6	65183	2000	1000	1000
0.022	5.9 × 9.9 × 12.5	0.7	65223	2000	1000	900



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