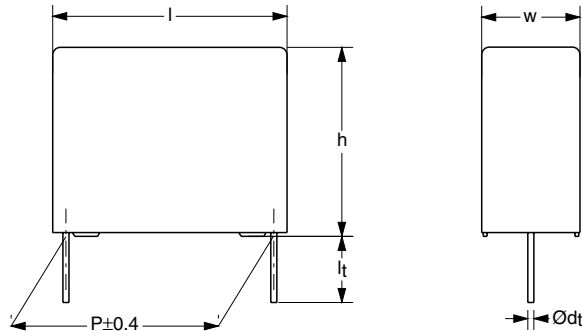


AC and Pulse Metallized Polypropylene Film Capacitors KP/MMKP Radial Potted Type



Dimensions in mm

APPLICATIONS

Where high currents and steep pulses occur. Power supplies

MARKING

C-value; tolerance; rated voltage; manufacturer's type designation; code for dielectric material; manufacturer's emblem; code for factory of origin; year and week of manufacture

DIELECTRIC

Polypropylene film

ELECTRODES

Metallized film and aluminium foil

ENCAPSULATION

Flame retardant plastic case and epoxy resin (UL-class 94 V-0)

CONSTRUCTION

Internal serial construction

LEADS

Tinned wire

CAPACITANCE RANGE (E24 SERIES)

0.0047 to 0.27 μ F

FEATURES

15 to 27.5 mm pitch. Supplied loose and taped on reel

Lead (Pb)-free product

RoHS-compliant product

CAPACITANCE TOLERANCE

$\pm 5\%$; $\pm 3.5\%$

RATED (DC) VOLTAGE

630 V; 1000 V

RATED (AC) VOLTAGE

300 V; 400 V

RATED PEAK-TO-PEAK VOLTAGE

850 V; 1100 V

CLIMATIC CATEGORY

55/100/56

RATED TEMPERATURE

85 °C

MAXIMUM APPLICATION TEMPERATURE

100 °C

REFERENCE SPECIFICATIONS

IEC 60384-17

PERFORMANCE GRADE

for $C > 4.7$ nF: grade 1 (long life)

for $C \leq 4.7$ nF: grade 2

STABILITY GRADE

Grade 2

DETAIL SPECIFICATION

For more detailed data and test requirements see "Type detail specification HQN-384-17/101"



RoHS
COMPLIANT

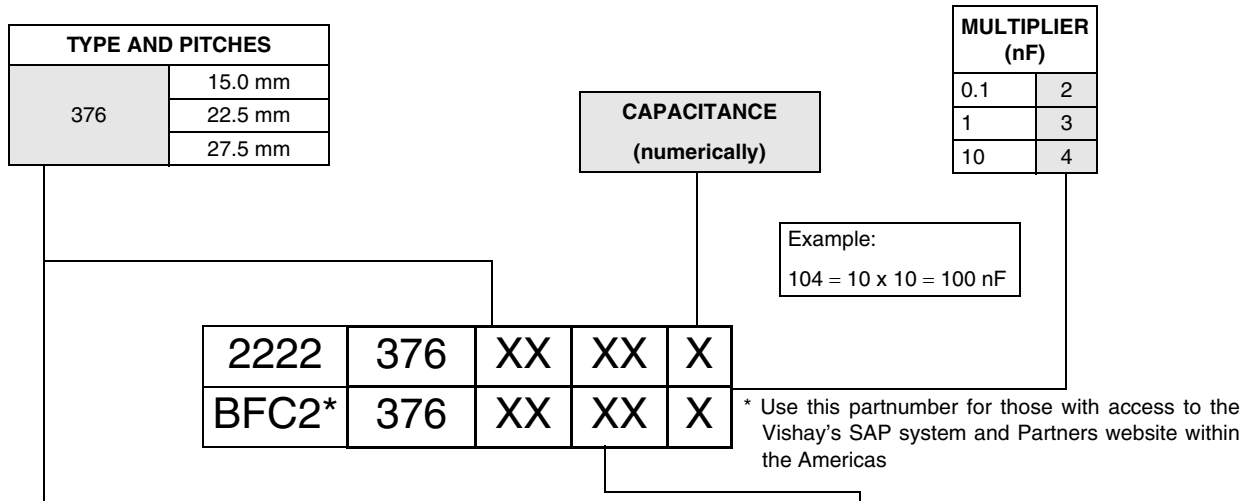
KP/MMKP 376

Vishay BCcomponents

AC and Pulse Metallized Polypropylene
Film Capacitors KP/MMKP Radial Potted Type



COMPOSITION OF CATALOG NUMBER



TYPE	PACKAGING	LEAD CONFIGURATION	ON REQUEST		
			C-TOL	630 V	1000 V
376	loose in box	lead length 5.0 ± 1.0 mm	± 5 %	62	72
			± 3.5 %	63	73
		lead length 3.5 ± 0.3 mm	± 5 %	68	78
			± 3.5 %	69	79
	taped on reel	H = 18.5 mm; P ₀ = 12.7 mm; reel diameter 500 mm	± 5 %	65	75
			± 3.5 %	66	76

SPECIFIC REFERENCE DATA (630 VDC)

DESCRIPTION	VALUE	
Tangent of loss angle: P = 15.0 mm P = 22.5 mm P = 27.5 mm	at 10 kHz	at 100 kHz
	$\leq 3 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
	$\leq 3 \times 10^{-4}$	$\leq 15 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) _R : P = 15.0 mm P = 22.5 mm P = 27.5 mm	4000 V/μs	
	1400 V/μs	
	900 V/μs	
R between leads at 500 V; 1 minute	> 100000 MΩ	
R between interconnected leads and case; 500 V; 1 minute	> 100000 MΩ	
Ionization (AC) voltage (typical value) at 50 pC peak discharge	> 400 V	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s	1008 V; 1 minute	
Withstanding (DC)voltage between leads and case	2840 V; 1 minute	



AC and Pulse Metallized Polypropylene
Film Capacitors KP/MMKP Radial Potted Type

KP/MMKP 376

Vishay BCcomponents

$U_{Rdc} = 630 \text{ V}$; $U_{Rac} = 300 \text{ V}$; $U_{p-p} = 850 \text{ V}$

C (μF)	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 376 AND PACKAGING		
			LOOSE IN BOX		REEL
			$l_t = 5.0 \pm 1.0 \text{ mm}$	ALL LEADS	
			C-tol = $\pm 5 \%$	SPQ	SPQ
LAST 5 DIGITS OF CATALOG NUMBER					
Pitch = $15.0 \pm 0.4 \text{ mm}$; $d_t = 0.60 \pm 0.06 \text{ mm}$					
0.0068 0.0075 0.0082 0.0091	5.0 × 11.0 × 17.5	1.1	62682	1000	1100
			62752		
			62822		
			62912		
0.01 0.011 0.012 0.013	6.0 × 12.0 × 17.5	1.5	62103	1000	900
			62113		
			62123		
			62133		
Pitch = $15.0 \pm 0.4 \text{ mm}$; $d_t = 0.80 \pm 0.08 \text{ mm}$					
0.015 0.016 0.018	7.0 × 13.5 × 17.5	2.0	62153	1000	800
			62163		
			62183		
0.02 0.022	8.5 × 15.0 × 17.5	2.6	62203	1000	650
			62223		
Pitch = $22.5 \pm 0.4 \text{ mm}$; $d_t = 0.80 \pm 0.08 \text{ mm}$					
0.024 0.027 0.03	6.0 × 15.5 × 26.0	2.8	62243	300	600
			62273		
			62303		
0.033 0.036 0.039	7.0 × 16.5 × 26.0	3.5	62333	200	550
			62363		
			62393		
0.043 0.047 0.051 0.056	8.5 × 18.0 × 26.0	4.5	62433	200	450
		4.5	62473		
		4.5	62513		
		5.1	62563		
Pitch = $27.5 \pm 0.4 \text{ mm}$; $d_t = 0.80 \pm 0.08 \text{ mm}$					
0.062 0.068 0.075	9.0 × 19.0 × 31.0	6.2	62623	100	
			62683		
			62753		
0.082 0.091 0.1 0.11	11.0 × 21.0 × 31.0	8.3	62823	100	
			62913		
			62104		
			62114		
0.12 0.13 0.15 0.16	13.0 × 23.0 × 31.0	10.8	62124	100	
			62134		
			62154		
			62164		
0.18 0.2	15.0 × 25.0 × 31.0	13.0	62184	100	
			62204		
0.22 0.24 0.27	18.0 × 28.0 × 31.0	19.0	62224	100	
			62244		
			62274		



SPECIFIC REFERENCE DATA (630 VDC)

DESCRIPTION	VALUE	
	at 10 kHz	at 100 kHz
Tangent of loss angle:		
P = 15.0 mm	$\leq 3 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
P = 22.5 mm	$\leq 3 \times 10^{-4}$	$\leq 10 \times 10^{-4}$
P = 27.5 mm	$\leq 3 \times 10^{-4}$	$\leq 15 \times 10^{-4}$
Rated voltage pulse slope (dU/dt) _R :		
P = 15.0 mm	7000 V/μs	
P = 22.5 mm	2500 V/μs	
P = 27.5 mm	1600 V/μs	
R between leads at 500 V; 1 minute	> 100000 MΩ	
R between interconnected leads and case; 500 V; 1 minute	> 100000 MΩ	
Ionization (AC) voltage (typical value) at 50 pC peak discharge	> 500 V	
Withstanding (DC) voltage (cut off current 10 mA); rise time 100 V/s for C ≤ 47 nF for C > 47 nF	1600 V; 1 minute [1, 6 - (0, 0364 · √C - 47)] × 1000V ; 1 minute	
Withstanding (DC)voltage between leads and case	2840 V; 1 minute	

U_{Rdc} = 1000 V; U_{Rac} = 400 V/U_{p-p} = 1100 V

C (μF)	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 376 AND PACKAGING		
			LOOSE IN BOX		REEL
			l _t = 5.0 ± 1.0 mm	ALL LEADS	
			C-tol = ± 5 %	SPQ	SPQ
LAST 5 DIGITS OF CATALOG NUMBER					
Pitch = 15.0 ± 0.4 mm; d_t = 0.60 ± 0.06 mm					
0.0047	5.0 × 11.0 × 17.5	1.1	72472	1000	1100
0.0051			72512		
0.0056			72562		
0.0062	6.0 × 12.0 × 17.5	1.5	72622	1000	900
0.0068			72682		
0.0075			72752		
0.0082			72822		
Pitch = 15.0 ± 0.4 mm; d_t = 0.80 ± 0.08 mm					
0.0091	7.0 × 13.5 × 17.5	2.0	72912	1000	800
0.01			72103		
0.011			72113		
0.012			72123		
Pitch = 22.5 ± 0.4 mm; d_t = 0.80 ± 0.08 mm					
0.013	6.0 × 15.5 × 26.0	2.8	72133	300	600
0.015	7.0 × 16.5 × 26.0	3.5	72153	200	550
0.016			72163		
0.018			72183		



C (μ F)	DIMENSIONS W × H × L (mm)	MASS (g)	CATALOG NUMBER 2222 376 AND PACKAGING		
			LOOSE IN BOX		REEL
			$l_t = 5.0 \pm 1.0$ mm	ALL LEADS	
			C-tol = ± 5 %	SPQ	SPQ
LAST 5 DIGITS OF CATALOG NUMBER					
0.02 0.022 0.024 0.027 0.03 0.033 0.036	8.5 × 18.0 × 26.0	4.5	72203 72223 72243 72273 72303 72333 72363	200	450
0.039	10.0 × 19.5 × 26.0	5.4	72393	200	350
Pitch = 27.5 ± 0.4 mm; $d_t = 0.80 \pm 0.08$ mm					
0.043 0.047 0.051	9.0 × 19.0 × 31.0	6.2	72433 72473 72513	100	
0.056 0.062 0.068 0.075	11.0 × 21.0 × 31.0	8.3	72563 72623 72683 72753	100	
0.082 0.091 0.1	13.0 × 23.0 × 31.0	10.8	72823 72913 72104	100	
0.11 0.12 0.13 0.15	15.0 × 25.0 × 31.0	13.0	72114 72124 72134 72154	100	
0.16 0.18	18.0 × 28.0 × 31.0	19.0	72164 72184	100	



Disclaimer

All product specifications and data are subject to change without notice.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product.

Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay.

The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

Product names and markings noted herein may be trademarks of their respective owners.