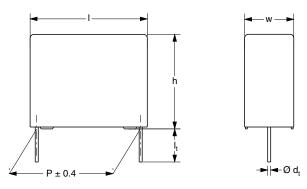




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Vishay BCcomponents

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 aluminum 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)

 $0.0047 \mu F$ to $0.27 \mu F$

FEATURES

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

Material categorization:

for definitions of compliance please see www.vishay.com/doc?99912

Pb-free RoHS COMPLIANT HALOGEN

FREE GREEN

CAPACITANCE TOLERANCE

± 5 %; ± 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

Grade 1 (long life)

STABILITY GRADE

Grade 2

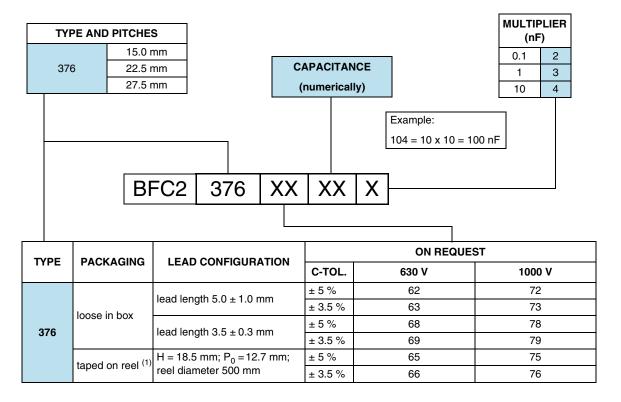
DETAIL SPECIFICATION

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



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COMPOSITION OF CATALOG NUMBER



Note

SPECIFIC REFERENCE DATA (630 VDC)

DESCRIPTION	V	ALUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz	
P = 15.0 mm	≤ 5 x 10 ⁻⁴	≤ 10 x 10 ⁻⁴	
P = 22.5 mm	\leq 6 x 10 ⁻⁴	≤ 15 x 10 ⁻⁴	
P = 27.5 mm	$\leq 7 \times 10^{-4}$ $\leq 20 \times 10^{-4}$		
Rated voltage pulse slope (dU/dt) _R :			
P = 15.0 mm	400	00 V/μs	
P = 22.5 mm	1400 V/μs		
P = 27.5 mm	900 V/µs		
R between leads at 500 V; 1 min	> 100 000 MΩ		
R between interconnected leads and case; 500 V; 1 min	> 100 000 MΩ		
Ionization (AC) voltage (typical value) at 50 pC peak discharge	> 400 V		
Withstanding (DC) voltage (cut off current 10 mA) (1); rise time 1000 V/s	1008 V; 1 min		
Withstanding (DC) voltage between leads and case	2840 V; 1 min		

Note

⁽¹⁾ For detailed tape specification refer to "Packaging Information": www.vishay.com/doc?28139

⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



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$U_{RDC} = 630 \text{ V}; U_{RAC} = 300 \text{ V}; U_{P-P} = 850 \text{ V}$

			CATALOG NUMBER BFC2 376 AND PACKAGING			
C (µF)			LOOSE IN BOX		REEL (1)	
	DIMENSIONS W x H x L	MASS	I _t = 5.0 ± 1.0 mm	ALL LEADS	H = 18.5 mm	
	(mm)	(g) ⁽²⁾	C-tol. = ± 5 %		$P_0 = 12.7 \text{ mm}$	
	. ,		LAST 5 DIGITS OF CATALOG NUMBER	SPQ	SPQ	
Pitch = 15.0 ± 0.	4 mm; d _t = 0.60 ± 0.06 mm					
0.0068			62682			
0.0075	5.0 x 11.0 x 17.5	1.1	62752	1000	1100	
0.0082	5.0 X 11.0 X 17.5	5.0 X 11.0 X 17.5	'.'	62822	1000	1100
0.0091			62912			
0.010			62103		000	
0.011	6.0 x 12.0 x 17.5	1.5	62113	1000		
0.012	6.0 X 12.0 X 17.5	1.5	62123	1000	900	
0.013			62133			
Pitch = 15.0 ± 0	4 mm; d _t = 0.80 ± 0.08 mm					
0.015			62153			
0.016	7.0 x 13.5 x 17.5	2.0	62163	1000	800	
0.018			62183			
0.020			62203	1000		
0.022	8.5 x 15.0 x 17.5	2.6	62223	1000	650	
Pitch = 22.5 0 ±	0.4 mm; d _t = 0.80 ± 0.08 mm					
0.024			62243			
0.027	6.0 x 15.5 x 26.0	2.8	62273	300	600	
0.030			62303			
0.033			62333			
0.036	7.0 x 16.5 x 26.0	3.5	62363	200	550	
0.039			62393			
0.043		4.5	62433			
0.047		4.5	62473			
0.051	8.5 x 18.0 x 26.0	4.5	62513	200	450	
0.056		5.1	62563			
Pitch = 27.5 ± 0	.4 mm; d _t = 0.80 ± 0.08 mm					
0.062	•		62623			
0.068	9.0 x 19.0 x 31.0	6.2	62683	100		
0.075			62753			
0.082			62823			
0.091			62913			
0.10	11.0 x 21.0 x 31.0	8.3	62104	100		
0.11			62114			
0.12			62124			
0.13			62134			
0.15	13.0 x 23.0 x 31.0	10.8	62154	100		
0.16			62164			
0.18			62184			
0.20	15.0 x 25.0 x 31.0	13.0	62204	100		
0.22			62224			
0.24	18.0 x 28.0 x 31.0	19.0	62244	100		
0.27			62274	. 55		
U.L.			OLL! T			

Notes

[•] SPQ = Standard Packing Quantity

 $^{^{(1)}}$ H = in-tape height; P_0 = sprocket hole distance; for detailed specifications refer to packaging information

⁽²⁾ Weight for short lead product only



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SPECIFIC REFERENCE DATA (1000 VDC)

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DESCRIPTION	VA	LUE	
Tangent of loss angle:	at 10 kHz	at 100 kHz	
P = 15.0 mm	≤ 5 x 10 ⁻⁴	≤ 10 x 10 ⁻⁴	
P = 22.5 mm	≤ 6 x 10 ⁻⁴	≤ 15 x 10 ⁻⁴	
P = 27.5 mm	$\leq 8 \times 10^{-4}$	≤ 20 x 10 ⁻⁴	
Rated voltage pulse slope (dU/dt) _R :			
P = 15.0 mm	7000	Ο V/μs	
P = 22.5 mm	2500 V/μs		
P = 27.5 mm	1600 V/µs		
R between leads at 500 V; 1 min	> 100 000 MΩ		
R between interconnected leads and case; 500 V; 1 min	> 100 000 MΩ		
Ionization (AC) voltage (typical value) at 50 pC peak discharge	> 500 V		
Withstanding (DC) voltage (cut off current 10 mA) (1); rise time 1000 V/s			
for C ≤ 47 nF	1600 V; 1 min		
for C > 47 nF	$[1, 6 - (0, 0364 \cdot \sqrt{C - 47})] \times 1000 \text{ V}; 1 \text{ min}$		
Withstanding (DC) voltage between leads and case	2840 V; 1 min		

Note

$U_{RDC} = 1000 \text{ V}; U_{RAC} = 400 \text{ V}; U_{P-P} = 1100 \text{ V}$

			CATALOG NUMBER BFC2 376 AND PACKAGING		
C (μF)			LOOSE IN B	ox	REEL (1)
	DIMENSIONS W x H x L	MASS	l _t = 5.0 ± 1.0 mm	ALL LEADS	H = 18.5 mm P ₀ = 12.7 mm
	(mm)	(g) ⁽²⁾	C-tol. = ± 5 %		
	` '		LAST 5 DIGITS OF CATALOG NUMBER	SPQ	SPQ
Pitch = 15.0 ± 0.4	mm; $d_t = 0.60 \pm 0.06$ mm				
0.0047			72472		
0.0051	5.0 x 11.0 x 17.5	1.1	72512	1000	1100
0.0056			72562		
0.0062			72622		
0.0068	0.0 10.0 17.5	4.5	72682	1000	000
0.0075	6.0 x 12.0 x 17.5	1.5	72752	1000	900
0.0082			72822		
Pitch = 15.0 ± 0.4	mm; d _t = 0.80 ± 0.08 mm				
0.0091			72912		
0.010	70 105 175		72103	1000	000
0.011	7.0 x 13.5 x 17.5	2.0	72113	1000	800
0.012			72123		
Pitch = 22.5 ± 0.4	mm; d _t = 0.80 ± 0.08 mm			•	
0.013	6.0 x 15.5 x 26.0	2.8	72133	300	600
0.015			72153		
0.016	7.0 x 16.5 x 26.0	3.5	72163	200	550
0.018			72183		
0.020			72203		
0.022			72223		
0.024			72243		
0.027	8.5 x 18.0 x 26.0	4.5	72273	200	450
0.03			72303		
0.033			72333		
0.036			72363		
0.039	10.0 x 19.5 x 26.0	5.4	72393	200	350

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⁽¹⁾ See "Voltage Proof Test for Metalized Film Capacitors": www.vishay.com/doc?28169



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			CATALOG NUMBER BFC2 376 AND PACKAGING		
C (μF)			LOOSE IN B	LOOSE IN BOX	
	DIMENSIONS W x H x L	MASS	l _t = 5.0 ± 1.0 mm	ALL LEADS	REEL ⁽¹⁾ H = 18.5 mm P ₀ = 12.7 mm
	(mm)	(g) ⁽²⁾	C-tol. = ± 5 %	SPQ	
	, ,		LAST 5 DIGITS OF CATALOG NUMBER		SPQ
Pitch = 27.5 ±	0.4 mm; d _t = 0.80 ± 0.08 mm				
0.043			72433		
0.047	9.0 x 19.0 x 31.0	6.2	72473	100	
0.051			72513		
0.056			72563		
0.062	11.0 x 21.0 x 31.0	0.0	72623	100	
0.068	11.0 x 21.0 x 31.0	8.3	72683		
0.075			72753		
0.082			72823		
0.091	13.0 x 23.0 x 31.0	10.8	72913	100	
0.10			72104		
0.11			72114		
0.12	15.0 05.0 01.0	10.0	72124	100	
0.13	15.0 x 25.0 x 31.0	13.0	72134	100	
0.15			72154		
0.16	10.0 00.0 01.0	10.0	72164	100	1
0.18	18.0 x 28.0 x 31.0	19.0	72184	100	

Notes

- SPQ = Standard Packing Quantity
- (1) H = in-tape height; $P_0 = \text{sprocket hole distance}$; for detailed specifications refer to packaging information
- (2) Weight for short lead product only



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